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THE COAST GUARD'S INTEGRATED DEEPWATER SYSTEM

(110–4)

HEARING

BEFORE THE

SUBCOMMITTEE ON
COAST GUARD AND MARITIME TRANSPORTATION

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

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January 25, 2007

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Coast Guard and Maritime Transportation

FROM: Staff, Subcommittee on Coast Guard and Maritime Transportation

SUBJECT: Oversight hearing on the Deepwater Implementation Program

PURPOSE OF HEARING

The Subcommittee will meet on Wednesday, January 30th, 2007, at 11:00 a.m. in room 2167 Rayburn House Office Building to receive testimony regarding the Coast Guard's Integrated Deepwater System program (Deepwater).

BACKGROUND

Background on the Deepwater Project:

In the Mid-1990's the Coast Guard recognized that many of their offshore operational assets (aircraft and cutters) were reaching the end of their operational life. Some of their cutters dated to the 1940's.

The Coast Guard developed a program to replace all of these assets in a single procurement program. This includes everything from patrol boats and high endurance cutters to helicopters and C-130 aircraft. The Coast Guard's concept was to give a contractor the mission requirements of the Coast Guard – and have the contractor provide the assets necessary to carry out those missions. It could result in a change in the mix of cutters and aircraft. It was not envisioned as a 1:1 replacement.

To begin the project, the Coast Guard paid $15 million per year for 3 years to each of 3 different and competing teams to develop proposals to replace all Coast Guard cutters and aircraft that operate more than 50 miles offshore.

After 3 years, only one consortia, headed by Lockheed Martin and Northrup Grumman, were considered responsive to the contract proposal. This team is called "Integrated Coast Guard System" (ICGS). In June 2002 the Coast Guard signed the Deepwater contract with ICGS.

Integrated Deepwater System

The Coast Guard's Integrated Deepwater System program (Deepwater) is intended to replace or modernize approximately 90 ships and 200 aircraft used in the Coast Guard's deepwater missions; these missions generally occur more than 50 miles offshore and typically require long transits to operating areas, forward deployment of forces, and extended on-scene presence. The Coast Guard's major missions are carried out in the deepwater zone, including drug and migrant interdiction operations, search and rescue, homeland security, and fisheries law enforcement. Importantly, the Coast Guard's existing ("legacy") fleet of vessels and aircraft are nearing or have already reached the end of their service lives, are technologically limited, and are expensive to operate because of relatively high crew requirements. The Deepwater program includes the cost of maintaining the assets, as well as replacing or modernizing them, and with each year that passes, the category of maintenance of legacy assets consumes a larger share of the money allocated for Deepwater. Consequently, finishing the replacement part of the program sooner rather than later would be more cost effective over time.

The contract provided for a fleet of new ships, aircraft and improved command and control systems that will enhance the Coast Guard's capability to perform their varied traditional and homeland security missions. Also, it included an amount for operating and maintaining this new system of assets. The original Deepwater procurement schedule anticipated the delivery of all assets within 20 years; however, the contract with ICGS was authorized to be extended up to 30 years to allow the contractor to continue implementing the program. The contract has a five-year base period with five additional options of up to 60 months each. On May 19, 2006, the first option was exercised for an additional 43-months. As a result, ICGS will continue to operate the Deepwater program at least until January 2011.

In addition, the original Deepwater plan was based on a 20-year projected funding stream of $500 million (in 1998 dollars) per year beginning in fiscal year 2003. In addition to the annual $500 million acquisition cost, there is approximately $25 million (in 1998 dollars) in government program fees required to administer a project of this magnitude on an annual recurring basis. The program has not received, nor in some years has the Administration requested, the funds originally estimated to be necessary to complete the program in 20 years and therefore, the project could not be completed on the original 20-year schedule. Also, Administration budget requests have not factored in inflation and program management fees. In addition, the Coast Guard has greater maritime homeland security operational requirements than when the original program was designed, and as discussed above, maintenance and repair costs are also increasing because of rapidly deteriorating legacy assets.

Revised Deepwater Implementation Plan

The original Deepwater build out plan was developed before September 11, 2001. Since that time, the Coast Guard was transferred to the Department of Homeland Security (DHS) and has assumed the lead federal responsibility for maritime homeland security, in addition to the Service's traditional missions. The Coast Guard determined that modifications to the design and production of key assets were necessary to meet evolving homeland security demands and the requirements of carrying out the Service's many missions in a post 9/11 environment.

On May 31, 2005, the Coast Guard submitted a revised Deepwater Implementation Plan to the House Appropriations Subcommittee on Homeland Security which included both a 20-year and a 25-year plan. The House Appropriations Committee directed DHS and the Coast Guard to select a single revised implementation plan in accordance with the fiscal year 2006 budget request.

On July 21, 2005, the Coast Guard submitted a 25-year Revised Deepwater Implementation Plan. Further, in February 2006, the Coast Guard submitted an updated plan to align with its fiscal year 2007 budget submission. The new plan changes the balance of upgraded legacy assets versus new assets, alters the delivery schedules, and increases the costs to $24 billion, $7 billion more than earlier estimates. The increase in costs reflect the expanded homeland security responsibilities and cover such items as greater weaponry, improved communications systems, and greater operating capabilities. However, this 25-year program is again dependent on receiving a projected amount of funding each year.

The revised plan calls for major changes to the assets that will be part of the Deepwater program. Under the revised plan, the Coast Guard will retain and upgrade the Service's fleet of HH-60J helicopters. The Coast Guard will also retain 22 upgraded and renovated HC-130H long range aircraft (for surveillance, search, and airlift needs) instead of decreasing the current 27 aircraft to 6 under the original plan. The original plan called for a replacement of all cutters and patrol boats. The revised plan generally spreads out delivery of each class of vessels over a longer number of years. Also, the revised plan includes 9 additional 25-foot short-range boats and 9 fewer 35-foot long-range boats.

A summary of additional changes to the Deepwater program under the revised baseline follows. The Plan:

- provides for interoperable command, control, communications, computer, intelligence, surveillance and reconnaissance (C4ISR) systems across all Deepwater assets and interoperable with other DHS entities, DOD assets, and local firm responders.

- provides for the deployment of enhanced maritime security capabilities on Deepwater vessels including:

    - chemical, biological and radiological detection and defense systems on all cutters greater than 147 feet in length;

- o larger flight decks on the National Security Cutter (NSC) and Offshore Patrol Cutter (OSC) to accommodate all variations of USCG, DHS and DOD HH-60 helicopters onboard the vessels;
- o enhanced remote-operated weapon systems aboard Deepwater vessels; and
- o enhanced capability to remain on scene and operate in weapons-of-mass-destruction scenarios.

- provides enhanced airborne use of force and vertical insertion capabilities for Deepwater helicopters.

The revised Deepwater plan suggests that the Coast Guard may procure a fewer number of each individual asset due to the enhanced capabilities that would be added to each platform.

Declining Legacy Assets

As part of the original Deepwater program, the Coast Guard included funding to sustain legacy assets until the time when those assets were scheduled to be replaced with assets that were acquired under the program. However, the Coast Guard has suffered a rapid deterioration of legacy assets in recent years. As a result, funding for the Deepwater program has been diverted from the already slowed asset replacement schedule to maintain these increasing numbers of failing legacy assets. This, coupled with shortfalls in appropriated funding levels and increasing maritime homeland security operations, has accelerated the impacts of this downward spiral, increased costs to sustain the old assets, and reduced funds available for new assets.

The aging inventory of patrol boats, aircraft, helicopters, cutters, and systems has generated growing concerns over the Coast Guard's ability to effectively and safely perform all of its assigned missions. The Coast Guard's fleet of 110-foot Patrol Boats has suffered numerous hull breaches that have required the vessels to undergo emergency repairs while in dry dock. The Service's fleet of High and Medium Endurance Cutters routinely miss operations due to failing sub-systems, and instances of in-flight engine power failures aboard HH-65 helicopters are alarming and dangerous. The HH-65's are now being reengined – an additional unanticipated program expense. The Coast Guard has described a declining spiral phenomenon that has resulted in deferred modernization of aging assets, reduced readiness, rising maintenance needs, and increased total ownership costs. Recapitalization funds are spent keeping old assets' operating, which only defers modernization starting the cycle all over again.

110/123 foot Patrol Boat problem:

Part of the Deepwater plan proposed by ICGS was to lengthen the existing 110 foot patrol boats by 13 feet, which they thought would improve the sea-keeping properties of the vessel; allow a deployable boat to be launched over the stern rather than over the side, and provide for updated electronic and communications systems to be installed. The patrol boats are 15 years old – and they had a planned useful life of 15 years.

ICGS hired Bollinger Shipyard in Louisiana to do the work. Bollinger built the patrol boats originally. Shortly after the first patrol boat was delivered, they discovered cracks in the hull. Other patrol boats were in the process of being extended. In 2005 the Coast Guard ordered ICGS to stop the extension and modernization program on the 110 foot patrol boats -- at that point 8 patrol boats had been extended. ICGS and the Coast Guard tried to fix some of the engineering problems with the 8 boats so they could be used. After the repairs were made, the Coast Guard put them in restricted service – limiting the area and sea-state in which they could operate. On November 30, 2006, the Commandant ordered the 8 patrol boats to be tied up – they were too dangerous to operate for their normal duties. To date, the Coast Guard and ICGS have not identified the cause of the problem or why their computer models did not predict the problems that are occurring. Basically, the stern of the boat is flexing. This drives the propeller shaft down at the point where it meets the engine. They have lowered the engine and transmission as low as possible – but it is no longer possible to keep it in alignment as the boat flexes. The Coast Guard is not going to have ICGS do any more work on these 8 boats. However, they may have Coast Guard engineers try to develop a proposal for alterations that would address the problems.

When the Coast Guard stopped the conversion of additional patrol boats in 2006, they charged ICGS with designing a new patrol boat – on an accelerated basis. They chose to use "composite materials" – which are more expensive to build – but which they hoped would decrease long-term maintenance costs and drydocking and increase the useful life of the cutter. After it was designed, a ship model was built, and the model was tested at the Navy's testing center at Carderock. The new patrol boat design had all types of problems – such as when it made a sharp turn – the propellers came out of the water. The Coast Guard told the contractor to terminate any further design work on a new design for a patrol boat.

To date the Coast Guard has spent approximately $94 million dollars to:

- Lengthen the original 110 foot patrol boats
- Repair the 8 patrol boats that were altered
- Design a composite patrol boat – that failed tank tests at the and model testing.

The current 110 foot patrol boats are having an increasing rate of problems that are decreasing patrol hours. Therefore, the Coast Guard published a solicitation to buy a design for a new patrol boat – they hope to buy an existing, proven, design. They are currently evaluating the responses to this solicitation.

The Coast Guard's present plan is to:

- Build approximately 12 patrol boats (now called the Fast Response Cutters (FRC-B)) using an international design that they buy. They hope to have these vessels operational in 2010.
- Have ICGS restart designing a new patrol boat (FRC-A) using composite materials. They would purchase approximately 46 of the composite patrol boats.

National Security Cutter:

In December 2006, the *New York Times* published an article on the Deepwater program that stated that the new National Security Cutter (NSC) (formerly called High Endurance Cutters) has "structural weaknesses that some Coast Guard engineers believe may threaten its safety and limits its life span, unless costly repairs are made." The contract with ICGS states that a cutter should have a 30 year life-span.

The Coast Guard believes that these engineering concerns are based on different assumptions regarding structural weaknesses in the welding and cutting techniques as well as assumptions about the amount of time the NSC will operate in the rough marine environment of the North Pacific Ocean. It is not that the vessels won't be able to operate for 30 years – but that they may require more maintenance if structural cracks appear during that period.

Operating in the North Pacific adds additional strain to a ship due to the rough weather. The more a vessel operates in that environment, the more structural fatigue the ship must endure. The Coast Guard believes that some of these cutters will operate much of the year the North Pacific – and therefore have a greater rate of structural fatigue than the rate assumed by ICGS.

Regarding the construction techniques used by ICGS, and their subsidiary Northrup Grumman Shipyard in Pascagoula, MS, the Coast Guard uses 2 examples.

- Welding techniques – Coast Guard engineers prefer a welding technique in which an individual follows up after a welder and hits the weld with a ball-penne hammer. They said that this strengthens the weld. Ingalls Shipyard does not use this welding technique when building ships for the Navy at that shipyard and did not do it when building the first 2 NSCs. The Coast Guard is concerned that this could increase chance of having cracking in the weld over the 30-year lifespan of the cutter.

- Holes in structural members of ship – When Ingalls cuts a hole in a structural support member of a ship (i.e. to run plumbing or electrical systems) they cut a square hole. Coast Guard engineers believe that a square hole increases the risk of having a stress fracture at one of the 4 corners of that square hole over the 30 year life of the cutter. The Coast Guard believes that the hold should have rounded corners. Again, Ingalls shipyard has made square holes when building Navy ships.

ICGS has agreed to make these changes in NSC hull #3 which hasn't been built yet (at an added cost of approximately $15 million). The Coast Guard is evaluating the cost of having NSC hulls # 1 and 2 modified – and depending upon the cost of the modification – may make some of these changes now. If the weld or square hole is in a fairly inaccessible place – they may choose to just pay more attention to the location during maintenance inspections over the life of the vessel.

National Security Cutter Cost:

The cost of the National Security Cutter (NSC) (the largest of the Coast Guard cutters being built under the Deepwater program) has grown significantly since the contract was signed in 2002. In June of 2002, the contracted cost for the first 2 NSCs was $516.8 million. The current projected cost for these 2 cutters is $960 million.

The Coast Guard states that the cost increases are as follows:

- $261 million in increased costs due to post-9-11 changes and other government requirements not in the June 2002 contract price (such as a new Aircraft handling system, flight deck changes, intelligence collection systems, increased spare parts, and combat management systems).
- $49.2 million for inflation from 2002 to 2006.
- $123 million for increased costs due to Hurricane Katrina (the ships are being built at Northrop Grumman Shipyards in Pascagoula, MS).

WITNESS

PANEL I: Admiral Thad W. Allen
Commandant
United States Coast Guard

PANEL II: Dr. Leo S. Mackay, Jr.
President
Integrated Coast Guard Systems

Mr. Phillip Teel
President
Northrup Grumman Ship Systems

COAST GUARD'S INTEGRATED DEEPWATER SYSTEM

Tuesday, January 30, 2007,

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, WASHINGTON, DC.

The subcommittee met, pursuant to call, at 11:00 a.m., in room 2167, Rayburn House Office Building, the Honorable Elijah E. Cummings [Chairman of the subcommittee] presiding.

Mr. CUMMINGS. This hearing will come to order.

First, I want to thank all of you for being here. I want to take this opportunity to welcome all the members of the Subcommittee on Coast Guard and Maritime Transportation to our first meeting.

I am deeply honored to have been selected by Chairman Jim Oberstar and my colleagues on the Transportation and Infrastructure Committee to chair this very distinguished Subcommittee. I know that most of our Subcommittee members have a long tenure with the Subcommittee and with the maritime industry, and I truly look forward to working with Ranking Member LaTourette and with each member of the Subcommittee to accomplish our ambitious agenda for the 110th Congress.

Before we begin today's hearing, let me speak briefly about that agenda.

Our Subcommittee will balance oversight of the Coast Guard with our effort to support and strengthen our national maritime industry, and to ensure that maritime transportation is more closely integrated into what must be a truly multimodal transportation network in this Country.

The Coast Guard is a critical part of our homeland security system and, as was demonstrated by the terrible aftermath of Hurricane Katrina, a critical part of our Nation's emergency response capability. I intend to be an advocate for the service and for all of the men and women who are putting their lives on the line everyday in defense of our great Nation.

Our Subcommittee will ensure that the Coast Guard is an effective steward of taxpayers' resources. And we begin that effort with today's hearing on the troubled deepwater procurement.

Importantly, however, we will also closely examine whether the Coast Guard has adequate resources to enable it to implement its significant homeland security responsibilities while also fulfilling its other critical missions, including drug interdiction, search and rescue, and maritime safety oversight.

I appreciate the leadership of Commandant Allen and his dedication to the effectiveness and excellence, and I look forward to working closely with him.

Since assuming the chairmanship of this Subcommittee, I have had many invaluable opportunities to meet with many different members of the maritime community to begin discussions with them about the issues they face, including security concerns, the maritime security program, short sea shipping, and the Jones Act. I appreciate the welcome I have received from the maritime community and our Subcommittee looks forward to working closely with labor, management, and all actors in the community to craft practical solutions to our shared challenges.

To that end, we will also work to foster pragmatic dialog between the members of the commercial maritime community and the United States Coast Guard to ensure that each group understands what the other needs to succeed in what should be their complementary pursuits.

The security of U.S. ports and the cargo transported through them will be a major priority for this Subcommittee. The House of Representatives has already passed H.R. 1, which not only implemented the recommendations of the 9/11 Commission, but exceeded these recommendations by phasing in requirements that will lead to the scanning of all cargo bound for United States ports. The Subcommittee on Coast Guard and Maritime Transportation will work closely with the Committee on Homeland Security, ably led by Chairman Bennie Thompson, to examine the gaps that remain in port security and to fill these gaps in ways that will protect our Nation from emerging threats while not unduly slowing the flow of commerce through our ports.

Obviously, this is an ambitious agenda, and we begin today with a hearing on the Coast Guards Deepwater procurement program.

Deepwater is a program of procurements projected to cost $24 billion dollars and currently expected to take 25 years to complete. The procurements encompass the rehabilitation or new construction of 91 cutters, 124 small craft, surface craft, and 244 new or converted aircraft, including both helicopters and fixed-wing airplanes.

This is the most complex procurement the Coast Guard has ever undertaken, and it is made even more complex by the Coast Guard's decision to employ a private sector systems integrated team comprised of Lockheed Martin and Northrop Grumman, rather than fulfilling that function with its own personnel.

Obviously, the Deepwater procurement process has had significant and highly publicized problems, including a failed effort to rehabilitate and modernize eight 110-foot legacy cutters and problems with the initial design of the fast response cutter that required the design process to be halted.

The seriousness of the concerns about Deepwater have, however, now been raised to a whole new level. The Department of Homeland Security's Office of Inspector General has issued a report criticizing almost every aspect of the procurement of the National Security Cutter, the most expensive asset to be acquired under the Deepwater program. The IG found that the NSC will likely not meet the performance standards specified by the Deepwater con-

tract because its construction was guided by a flawed design. The IG indicates that the senior leadership of the Coast Guard and of the Integrated Coast Guard Systems team was warned about the design flaws by numerous studies, including studies by the Coast Guard and the United States Navy, yet refused to make design corrections or to slow the development of the cutter to respond to these concerns.

In other words, DHS's IG's report would suggest that the Coast Guard and its contractors have knowingly and willfully spent close to $1 billion, a figure that is likely to rise, to build a flawed ship, and that as a result of this decision the United States taxpayer is likely to now have to pay for repairs on brand new vessels which may nonetheless still not serve their full anticipated service life.

The IG is unequivocal in stating that the design failures plaguing the NSC occurred specifically because the Coast Guard yielded too much authority for the NSC program to the integrated team. Further, the IG claims that the Coast Guard was resistant to its investigation and that it has failed to properly document the decisions taken during the development of the NSC.

This is one of the most troubling Inspector General reports I have read during my 11 year tenure as a member of the Congress of the United States.

The purpose of our hearing today is to understand the nature and the causes of the problems that have been encountered in the Deepwater procurement program, and to hear from the Coast Guard and from the two firms serving as systems integrated—Northrop Grumman and Lockheed Martin—the specific steps that each party will be taking to correct this procurement process.

The DHS's IG's report, coupled with the previous failure of the 120-foot patrol boat, calls into serious question whether we can trust the Coast Guard and its contractors to take the steps necessary to produce reliable assets that meet all quality standards.

Be sure that our Subcommittee will require accountability of the Coast Guard and of Northrop Grumman and Lockheed Martin. Our Subcommittee will not allow taxpayer money to continue to be wasted on failing projects.

I have read the testimony that our witnesses have provided. I appreciate the detail of some of the testimony and hope that our witnesses will use this opportunity to begin to respond to the findings of the Homeland Security Department Inspector General's report.

If the IG's findings are accurate, they demand that fundamental changes be implemented in the Deepwater procurement. In particular, they suggest that the Coast Guard must quickly move to hold the contractors implementing Deepwater to a higher technical standard.

I look forward to hearing from each of today's witnesses the specific corrective actions that will be taken going forward to establish systems capable of producing effective designs and managing reliable production processes for every asset to be rehabilitated or constructed through Deepwater.

As I previously said to Admiral Allen, it is also particularly important that the Coast Guard demonstrate it is capable of exercising effective control over Deepwater. Ultimate responsibility of this procurement, and for the procurement model under implemen-

tation, rests with the Coast Guard, and I look forward to hearing how the Coast Guard will meet this awesome responsibility.

And to the members of the Committee, I have also talked to the Commandant and made it clear to him, and we have agreed, that he will come before us again in 120 days so that we can review the progress that he will testify to today.

And with that I yield to my distinguished good friend, the Ranking Member, Congressman LaTourette, for his opening statement.

Mr. LATOURETTE. Mr. Chairman, thank you very much and, first of all, I want to congratulate you on being named as the chairman of this important Subcommittee, and we look very much forward to working with you and the majority members in the 110th Congress.

From our side, I would say that on the Republican side of the ball on this Subcommittee, although this is a new posting for me, we have a wealth of talent in that former chairman of the full committee, Mr. Young, is a member; the former past chairman of this Subcommittee for six years, Mr. LoBiondo, is a member; in a previous Congress, the chairman of the Coast Guard Maritime Committee, before it merged with the Transportation and Infrastructure Committee, Mr. Coble, is a member; and we also want to welcome Mr. Poe, as well.

As I indicated, Chairman Cummings, we look forward to working with you to assist the Coast Guard to maintain the resources and authorities necessary to support all of the service's traditional and maritime security missions. One of the most important responsibilities of this Subcommittee is to carry out meaningful oversight over all facets of the Coast Guard and the maritime transportation system.

There is no more important issue facing the Coast Guard now than the delays and setbacks that are jeopardizing the success of the Integrated Deepwater System program. Deepwater was originally designed to provide the Coast Guard with a system of systems that would be composed of an optimal mix of assets designed to accomplish all of the Coast Guard's offshore missions. The plan called for the near complete replacement of the Coast Guard's legacy fleet with an integrated fleet of new cutters, small boats, and aircraft that would be equipped with enhanced capabilities.

We are now five years in to the original Deepwater contract, and we continue to hear about a stream of new and serious problems with several of the assets that were designed and are being constructed throughout the program. The Coast Guard, under the direction of this Subcommittee, has already halted the project to lengthen the 110-foot patrol boat class due to serious structural deficiencies in the new 123-foot patrol boat's design. As a result, the Coast Guard has suspended operations on the eight vessels that were converted.

The loss of these eight vessels, combined with the ongoing deterioration of the legacy 110-foot class, is reducing the Coast Guard's readiness levels and could potentially prevent the Coast Guard from achieving mission success.

Additionally, the Coast Guard has found problems with the design of the fast response cutter which will eventually replace the 110-foot patrol boat fleet. The Coast Guard is now in the process

of searching for another design that can be quickly constructed to supplement the existing 110s while the FRC design is modified. The 110s are the workhorses of the Coast Guard. We must replace these vessels as quickly as possible, while making sure that the legacy vessels remain safe and fully capable until the replacement vessels are available.

Just yesterday, as Chairman Cummings indicated, the Inspector General of the Department of Homeland Security released a troubling report on the development of the National Security Cutter under Deepwater. The report states that the NSC as currently designed will not meet the performance specifications that were proscribed by the Coast Guard in the original Deepwater contract. The report notes that the Coast Guard is not in agreement with several of the report's findings, and I hope that at today's hearing we will hear more about the problems that the Coast Guard has encountered with this asset and others, and what corrections and adjustments the Coast Guard intends to take.

I am extremely concerned by the report's conclusions that Deepwater assets do not meet the Coast Guard's required standards; even more concerned that the Coast Guard seems to be lowering its standards to accept these assets, rather than demanding that the program's integrator produce assets at the level that are called for in the original contract.

At the same time, I understand that the Coast Guard needs to have some degree of flexibility regarding the replacement vessel for the 110-foot patrol boat, and I encourage the Coast Guard and the program integrator to design and acquire a cost-effective patrol boat as soon as possible. The loss of more than 50 mission days a year is clearly unacceptable.

The Deepwater program and the assets that will be required under Deepwater are critical to the Coast Guard future mission success. The Coast Guard must take a more active supervisory role in the review of asset design and construction, and the award of contracts and subcontracts to prevent the occurrence of even more delays and problems in the future.

We are at a critical junction if the Deepwater program is to succeed. I hope that this and successive hearings will help all parties get this program back on track. The men and women of the Coast Guard carry out brave and selfless service to our Nation each and every day. In my home State of Ohio, the Coast Guard safeguards the lives of merchant mariners and recreational boaters, maintains safe and efficient maritime commerce on our lakes and rivers, and secures our ports and shore side facilities from maritime attack. We need to make sure that the Deepwater program is carried out in a way that the best, most capable equipment are acquired to allow these Coast Guardsmen to carry out their important missions.

I want to thank the witnesses for appearing this morning. I look forward to their testimony.

And I thank you, Mr. Chairman, for yielding.

Mr. CUMMINGS. I want to thank you, Mr. LaTourette.

I yield now to the gentleman from Mississippi, Mr. Taylor.

Mr. TAYLOR. Thank you, Mr. Chairman.

Commandant, thank you for being here. Commandant, let me begin by again thanking you and all the men and women of the Coast Guard for the great job you did during and after Hurricane Katrina. Obviously, a number of us have some serious problems with this program, with the 110-foot program, on the other side with the LCS program, and it does seem to be a problem that has spread throughout the industry that we need to get a handle on.

I am often hearing that people, off-the-cuff, say, well, this is a first of a fleet problem and, therefore, you can expect it. Maybe if you are going to build 50 ships of one kind, like we did with the DDG–51s. But when you all are building eight and your first two have serious flaws, something is wrong. And all of the formulas that I am looking at, and all the formulas that Congress has presented, both from the Coast Guard and from the Navy, the only way we get to the number of ships that we need is for that ship to be functional and fully capable for 30 years for the life of that ship.

So I guess I am troubled more than most when I see reports that within, the Coast Guard organization, they were telling us early on that these ships were not going to last for 30 years, that possibly within 3 years we would have serious structural problems and that the Coast Guard, in effect, moved the goal post from 230 days of patrolling a year down to 180.

Now, I would hope that you would come to this Committee with some solutions. And I would hope that one of the things we will look at is some form of unified shipbuilding command utilizing the expertise of the Navy, so that we are not duplicating it within the Department of Homeland Security and the Department of Defense, and, above all, I am seeing the same thing with LCS. There is a quote in here where someone says that self-certification is in effect no certification. I believe that to be true. The programs we are counting on the contractors to self-certify have let us down now on the 110, on this program, on the LCS, and we have got to fix that. So I want to hear what you have to say on this.

But, again, thank you for what you did in Hurricane Katrina, what all the Coast Guardsmen did. But like everyone else on this panel, we hate to see money wasted. We hate to see resources that ought to be in the inventory tied up at the dock, as in the case of the 110s. And we want to work with you to find some solutions on that.

Thank you very much, Mr. Chairman.

Mr. CUMMINGS. Thank you very much, Mr. Taylor.

I am very pleased that the Ranking Member of the Transportation Committee is with us. I now yield to Mr. Mica. And thank you very much for being with us.

Mr. MICA. Well, thank you. I am pleased to join you today. And congratulations to you Mr. Cummings. You and I have worked as chair and ranking member before and had great cooperation. He has done some incredible things to represent his area, Baltimore, and I have been up there with him; put tremendous personal effort into the well being of the citizens of that community, and I look forward to working with you now as I take over the Republican side of the Committee.

And congratulations to Mr. LaTourette. I don't think he could have a better colleague take the helm of a very critical assignment, and some of that we are going to hear about today. But Steve LaTourette is undoubtedly one of the most qualified members of our side of the aisle and I asked him to take on this responsibility.

I didn't realize some of the trouble that we have had with some of these programs dealing with the Coast Guard. The first thing I learned, the Deepwater program, the Coast Guard's program to recapitalize its aging fleet of vessels, aircraft and support systems, was actually in deep trouble, and there has been a number of hearings, I understand eight over the past three years, and I am sure Mr. LaTourette and the Chairman of the Subcommittee will continue their work to make certain that we get these programs back on track.

First, I also want to join others in expressing my support for the men and women of the Coast Guard. They do an incredible job; first line of defense and guardian of the seas. I think everybody was so proud of the work they did—again I have to repeat it—with Katrina, just an incredible record of success and effort. We thank you for that.

I am concerned about some of the things I have heard just in the past few weeks, taking over, again, the Republican side of the Transportation Committee. We had the deaths of two divers aboard the polar icebreaker HEALY. The Admiral has reported to me on that. Of course, I was unfortunate to have the family of one of those lost, a young lady in service to the Coast Guard, from my district. We need to make certain that we have in place measures to ensure that that will never happen again, and I have been assured that, and I know that Admiral Allen will take care to make certain that, again, those errors are not repeated.

New Coast Guard assets, however, must be equipped with systems and capabilities to carry out all of the Coast Guard's important missions. The success of Deepwater is absolutely critical, and I am supportive of the program, but I am concerned about the failure that I too learned of the 110-foot patrol boat conversion project and the strain that it is putting on asset capabilities in my own home State of Florida. I was briefed there are some eight vessels I guess sidelined. These are workhorses of our fleet and it has decreased our capability to deal with critical missions. The loss of these vessels diminishes the force projection capabilities in Florida and also jeopardizes the Coast Guard missions to interdict both illegal narcotics and undocumented illegals before they reach the United States.

I am also especially concerned about how a forced reduction would impact the Coast Guard's capability to handle mass migration or disruption. We anticipate the death of the Cuban dictator and other events that may proceed. I have discussed this with Admiral Allen. Tomorrow I will do a closed door briefing with the Admiral, a closed door briefing with members of the Florida delegation, invite members of this Subcommittee to participate so that we can hear your plans in case we do get slammed or hit by, again, the disruption from the impending death of the Cuban dictator.

So for the reasons I have stated, I continue to be supportive of this Subcommittee's work, will do anything I can to work with the

Chair, the Ranking Member, and all members of the Subcommittee and Committee to make certain that we have the best Coast Guard, they have the best equipment, and we are able to complete any mission or challenge. And with that, I thank you and yield back.

Mr. CUMMINGS. Mr. Mica, thank you.

Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

As part of the Deepwater program, three Coast Guard H–65 helicopters located in the Pacific Northwest have undergone successful engine overhauls. Five more in the Pacific Northwest will undergo the same overhaul. One of these overhauled helicopters participated in the successful rescue on the Olympic peninsula that would not have been possible without that Deepwater investment.

Unfortunately, these kinds of success stories in the Deepwater program seem to be too few and too far between, subsumed by the tidal wave of bad news coming out of the program itself. Problems with procurement, contract management and oversight lead to cost overruns, lead to structural deficiencies in maritime assets and, therefore, warranted attention. To many, the Deepwater program seems to be, well, in deep water. For the sake of taxpayers, we must get to the bottom of these troubles. The Deepwater program is our Country's first line of defense to securing our shores.

I hope to get out of this hearing today an understanding of how the Coast Guard intends to fix the problems with Deepwater. Our intent is to ask tough questions and get candid answers. I have serious concerns over the ballooning price tag of implementing Deepwater and expect answers as to how the Coast Guard plans to control these costs. I also expect an answer as to why the first two of eight National Security Cutters were built after the Coast Guard's chief engineer found the structural design to have significant flaws.

I look forward to taking a closer look at Deepwater and how to fix its problems. We in Congress owe it to those who elected us to ensure their money is being spent wisely and that this important program is implemented effectively, and the Coast Guard can expect our help in ensuring that that does happen.

So I look forward to today's testimony Mr. Chairman. Thank you for my time, and I yield back.

Mr. CUMMINGS. Thank you very much.

Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman. Mr. Chairman, I too want to congratulate you and the distinguished gentleman from Ohio as you all lead this very important Subcommittee.

Admiral Allen, good to have you back on the Hill.

Some of my congressional colleagues, Mr. Chairman, call me one of the vocal cheerleaders of the Coast Guard. I may not be a head cheerleader, but I remain on the cheerleading squad.

I am very high on the Coast Guard and I am very high on you, Admiral, personally. I think the Coast Guard is in good hands with you and your able staff at the helm. There are two sides to every story, and the issue before us is no exception. I look forward to hearing from you Admiral.

And, Mr. Chairman, you may have mentioned this in your opening statement, but I assume that we will hear from the IG at some appropriate time?

Mr. CUMMINGS. Yes. We wanted to have the IG here today, but there were some conflicts. So, yes, we will have the IG here hopefully within the next few weeks.

Mr. COBLE. I thank you.

In closing, I will reiterate what has been said by others. Naturally, we are concerned if there has been recklessness, for want of a better word, regarding the expenditure. I am sure we will get to the bottom of that. But I repeat, Admiral, I appreciate very much what you and the men and women of the Coast Guard do, and I will continue to be a cheerleader.

And with that, Mr. Chairman, I yield back.

Mr. CUMMINGS. Thank you very much.

Mr. Baird.

Mr. BAIRD. I have a number of questions. In case I don't get to them, let me just put the marker down that I am interested in what the Coast Guard plans to do, in the interim, to fill the gap that is going to be created by the problems with the 123s, and, also, I have sort of a core question of are the same people who presided over the errors that we are going to be learning about today those who are going to be making the decisions about how to fill the replacements? Because I have grave concerns about their competence and reasoning to do so. And I am sorry to say that, but I think the evidence may suggest that if the same people are going to fix the problem that created the problem, we ought to look at an alternative.

I yield back.

Mr. CUMMINGS. I am very pleased to yield to the former chairman of this Subcommittee, Mr. LoBiondo.

Mr. LOBIONDO. Thank you, Mr. Chairman. Congratulations to you. I am looking forward to the hearing.

I want to echo Mr. Taylor's comments. I don't know how to begin to express how troubled and disappointed I am with all the news that is coming out, where we have repeatedly been assured that the worst is behind us, and it seems like it just doesn't end. So, Admiral Allen, you have a big challenge, and I look forward to hearing your testimony.

Mr. CUMMINGS. Thank you very much.

Mr. Higgins? I am sorry, Mr. Bishop.

Mr. BISHOP. Thank you, Mr. Chairman.

I too will probably not be here to ask questions, but I, like I am sure all of my colleagues on this panel, are deeply, deeply concerned about how Deepwater has evolved thus far, and I guess I would ask that we be assured or that you provide us with some degree of confidence that the process that led us to this point is a process that will not be carried forward from this point on. I mean, when I look and recognize that we have spent over $100 million and all we really have to show for it, if I understand it correctly, are eight boats that we can no longer use and a design for a patrol boat that is unworkable, and then when I think about what that $100 million could be used for elsewhere in this Country—how many kids we can help get a college degree, how many units of

housing we could build, how many seniors we could assist—it is just simply unacceptable.

So I very much hope—and I live in a coastal region and the Coast Guard in our region is magnificent. I have nothing but the highest regard for the service that the Coast Guard provides to boaters in our region. But I very much hope that the excellence that they demonstrate in how they perform their daily responsibilities will also manifest itself in how we move forward with this Deepwater project.

Thank you, Mr. Chairman. I yield back.

Mr. CUMMINGS. I want to thank you very much, Mr. Bishop.

Now, Mr. Poe.

Mr. POE. Mr. Chairman, thank you very much, and congratulations again.

I represent Southeast Texas, and the Sabine Neches Riverway is the primary source of commerce. As you know, the Port of Beaumont ships about one-third of the military cargo that goes to Iraq and Afghanistan out of that little bitty port, number one port of deployment in the United States for that military cargo. Of course, we had a hurricane that most Americans have forgotten about, Hurricane Rita. Came right up to Sabine Neches Riverway, wiped out one town; Sabine Pass doesn't exist anymore. And certainly concerned about the widening and deepening of that channel. Patrolled by the Coast Guard; they do an excellent job.

One concern on a different note that we will talk about eventually is the numbers of people in the Coast Guard, because half the Coast Guard that is assigned to that area are reservists on active duty, have been on active duty for a long time, and they are from all over the Country; they are even from Minnesota. So when we get through the communication problem with those folks, they do an excellent job

But I am concerned about all the things that have been mentioned by all the other Committee members and look forward to the testimony. But I do want to publicly thank the Coast Guard for the excellent work they do under all the hardship circumstances that they have down there in Southeast Texas.

And thank you, Mr. Chairman.

Mr. CUMMINGS. I want to thank you, Mr. Poe.

Now we will turn to Admiral Allen.

And, Admiral Allen, I just want to make it very clear that I said to our Committee yesterday in an organizational meeting that we want to act in a bipartisan manner. I think that you have heard basically a common theme, and that is, one, we want to trust and we want to make sure that the Coast Guard, and anybody or any organization doing anything for the Government of the United States of America, that those dollars are spent effectively and efficiently.

I will tell you, in my little brief introduction of you, that I have the utmost confidence in you and the Coast Guard. I saw you—the first time I met you was down in Katrina, and I admire you for what you have done. As to the men and the women of the Coast Guard, you know, this Committee thanks every one of them, because I know, I have seen what they do with regard to drug inter-

diction, putting their lives on the line everyday. I have seen many of the wonderful things they have accomplished.

And basically what we are getting to here, and the reason why I am saying this is because I am trying to make sure you tell us what we are trying to get to. We want to make sure that when they go out to sea and do the jobs that we expect them to do, particularly in this post–9/11 era, that they have the very best equipment that we can find. And that is what is important to us. And I know that in my conversations with you—and thank you very much for our several conversations, and you have made it clear that you are a no nonsense person. I know that you are. So now we want to hear solutions; where we go, how were the mistakes made before and how do we correct those so that they don't happen again.

But I say this last but not least, that the Coast Guard can't wait for the best equipment and the American people can't wait. So we want to see if we can get solutions, move this process along, and demand accountability and trust.

Before I go to you, I am so pleased to have the Chairman of our Committee to come by, Jim Oberstar. Many of us call him the guru of transportation, and I have given him another name, the guru of the Coast Guard. And he has just been just a tremendous chairman. I am so glad that you had a moment to stop by. Thank you, Mr. Chairman. I now yield to you.

Mr. OBERSTAR. Thank you very much. I will take only a moment.

Congratulations, Mr. Cummings, on assuming the chairmanship of the Coast Guard Subcommittee. You have had a long relationship with the Coast Guard through the Port of Baltimore and your vigilance over the Chesapeake Bay is a long appreciation by your constituents, as I have seen from our visits there.

I want to welcome Mr. LaTourette, who previously chaired the Railroad Subcommittee and did a splendid job there on behalf of rail passengers and freight rail interests and rail safety. I welcome you to a new assignment, that of the Coast Guard.

Admiral Allen, welcome. You have, as you proved during Katrina, been a stand-up Admiral, a stand-up public servant. You were sent into an extraordinarily difficult situation and handled it with great skill and reflected great credit on the Coast Guard, on yourself, and on the Executive Branch of Government at a time when people were despairing that any help would be forthcoming. And you took personal charge of the live fire issue on the Great Lakes; sent Admiral Crawley out to undertake hearings which he conducted himself in each of the locations where the live fire exercise was scheduled, and he suspended those activities.

Time and again, my appreciation of the Coast Guard, as Chairman Cummings said, is unbounded. But the Deepwater program is a black moment for the Coast Guard. It is a dark chapter in an otherwise brilliant service to the public. But it is not unprecedented. The FAA was in the same situation in the 1980's, as the Federal Aviation Administration was moving to vast modernization of the air traffic control system and engaged in contracts with private sector and design, engineering, and deployment of air traffic control technologies that were way beyond the state of the art.

And what we found was that the FAA did not understand how to manage multibillion dollar contracts. We couldn't tell where the

FAA left off and the contractor began, and vice versa. The FAA was self-certifying. That is not acceptable. The Coast Guard was allowing the industry to self-certify. That is not acceptable. And I think you understand that.

And I appreciate this very thick document, which I read over the weekend. It is the work of the Inspector General of the Department of Homeland Security. I think, as Chairman Cummings said, we want to hear where the Coast Guard is headed now. And I think I understand the problems, how it got out of hand, but I want to hear from you how you plan to address it.

As in the case of the FAA, when Mr. Hinson became administrator of FAA and brought in the GSA to review their contractual situation, brought in Navy contractors, that is, Navy contract supervisors for the Department of the Navy, who were overseeing multibillion dollar contractors, what they found was that if FAA had simply followed the rules of procurement of GSA, not the new rules that they were looking for, they would have saved money, they would have produced a better product, they would have done it close to time. And I think we will find that is the same situation with the Coast Guard.

So let us proceed Mr. Chairman.

Welcome, again, Admiral Allen. I thank all of our members for being here.

Mr. CUMMINGS. Thank you very much, Mr. Chairman.

Admiral Allen.

TESTIMONY OF ADMIRAL THAD W. ALLEN, COMMANDANT, UNITED STATES COAST GUARD

Admiral ALLEN. Thank you, sir. It is a pleasure to be here today Mr. Chairman, Mr. LaTourette, Ranking Member. Chairman Oberstar, it is always a pleasure. And the members of the Committee. I thank you for your past leadership, our collaboration, and your support here today, and your very valid questions regarding what is going on in Deepwater with the Coast Guard.

I think, quite clearly, we have all demonstrated, in the comments made previously and in mine here, that Deepwater is critically important to the Coast Guard in sustaining future readiness to put the right tools in the hands of our people, as has been stated. I have no higher purpose, as the Commandant, than to put those tools into the hands of our people and to do it efficiently, effectively, and mindful of the stewardship responsibilities we have.

Deepwater is essential to the Coast Guard's future. In many ways it is the Coast Guard's future. We have to get it right. And getting it right means several things, and what I would like to talk about is three major topics. Then I would like to go to the specific platforms and answer any questions you may have about that.

Mr. Chairman, I have a statement for the record. I would like to submit that and then open with an oral statement. Thank you.

Mr. CUMMINGS. With no objection, it will be submitted. Thanks.

Admiral ALLEN. First, internally, the Coast Guard must create the right organizational structure. And beyond organizational structure, we must create the right culture to reconcile competing interests that are in the best interests of the Coast Guard and the

Nation. We are doing that. We have been doing that since last year.

Formerly as Chief of Staff, and now as the Commandant, I directed a series of top-to-bottom studies. One of those studies will create a single acquisition organization to improve the management of human capital, professionalize program management, and align us with the new service-wide mission service organization. What this will do, it will take the technical authority that is providing oversight regarding standards, the program management of the acquisition, and put them to work for the same Admiral so adjudication of conflict will be less of a problem or will be no problem at all.

I have also clarified and strengthened the role of the Assistant Commandant for Engineering and Logistics, and you will commonly see that person referred to in the report as the technical authority. I clearly designated the Assistant Commandant for Engineering and Logistics as the technical authority several months ago and, after consultant with the IG, I have just issued a directive which states the technical authority is—and this is a quote from the directive—"the authority responsibility and accountability to establish, monitor, and approve technical standards, tools, and processes related to acquisition." There is no ambiguity about the technical authority in the Coast Guard, who it is, where the accountability resides, and what his tasking is.

Second, we must collaborate effectively with our industry partners and, where appropriate, provide direction that preserves the Government's interests and the performance required of our cutters and planes. We are doing that as well.

Since assuming my duties as Commandant, I have met or talked with both Mr. Stevens of Lockheed Martin and Mr. Sugar of Northrop Grumman on several occasions. We held a meeting on the 19th of January which was frank, open, and in many ways very insightful. We have put together a joint team that will provide recommendations to assure how we can best align and optimize the relationship in the next award time, and define those responsibilities of the Government and the contractor and where responsibility lies.

Mr. Chairman, we understand the Coast Guard's role. I understand my responsibility and the terms of acquisition for the Coast Guard and where the Government's interest needs to be protected, and that resides with me, sir.

Third, we must maintain cordial, productive relationships with oversight bodies. They have legitimate roles in this endeavor. We are doing that. And to the extent that we can provide, or improve on, guidance to our people, we will do that as well.

This morning, the testimony that I submitted for the record, Mr. Chairman, was sent to every member of the Coast Guard, along with an email from me, and I will quote one paragraph from my all-hands message this morning. "External scrutiny from the Inspector General and other overseers will raise questions on the Deepwater acquisition throughout its life. As public servants, we are not only subject to their oversight, but it is a central feature of the appropriations and authorization process. I welcome external review, as it enables us to improve our processes, become more ef-

fective stewards of taxpayer dollars, and better serve the American public."

I have made it unequivocal where we stand in regards to our dealings with the IG to my people in the Coast Guard. I have met with the Inspector General and the Deputy Secretary to talk about the issues contained in the report. And let me be clear here, because there are technical issues we will have to resolve. To the extent there is any ambiguity regarding our position on the NSC IG audit, let me clearly state here we concur and have implemented five of the six recommendations made. Regarding the sixth recommendation, we have deferred to the Department of Homeland Security to establish a policy regarding how the IG interacts with the various components.

Now, having said that, there are technical issues related to how contracts are interpreted that we have to work out with the IG. I have committed to the Inspector General to issue a report within 90 days that lays out our plan to move ahead. We are both in agreement that the National Security Cutter must have a 30 year service life to best serve the men and women of the Coast Guard and carry out the missions to which we are assigned.

As was noted by one of the members, Deepwater has provided new valuable capability of the Coast Guard in the form of new fixed wing aircraft, re-engined helicopters, and significant upgrades for our legacy cutters, one of which I rode over the holidays in Winward Pass. Our people are happy with the products. However, we acknowledge the issue with the NSC, the 123 conversions and FRC.

I am prepared to talk about each one of these, but I will wait for your questions to answer on the specific platforms. Thank you, sir.

Mr. CUMMINGS. Thank you very much. Let me start off where you left off when you were talking about the FRC, the Fast Response Cutter. Admiral, as you probably know, last year this Committee directed the Coast Guard to competitively compete the construction of that Fast Response Cutter among all United States shipyards. Are you willing to do that?

Admiral ALLEN. Yes, sir. The acquisition is actually divided into two parts, a solicitation for a design and a construction of what we would call a parent craft, and then a communications integration piece that will allow it to be interoperable with the other assets that are out there. Those solicitations have been made through ICGS. There is complete open competition. It will be built in the United States and, when that contract is awarded, it will be openly competed.

Mr. CUMMINGS. Now, you know, I am sure you read the IG report, have you not?

Admiral ALLEN. Yes, sir.

Mr. CUMMINGS. And you told us the things that you want to do to—and, by the way, we appreciate the fact that you have looked at that report and, of the six recommendations, you are going to, I think you said, carry through with five of them; Homeland Security will deal with the other one. But, you know, so that we don't go through this again, and as I have told you many times, one of the things we are most concerned about is trust and accountability.

How do you explain the repeated failures in the procurement of ships under this program, the Deepwater program?

Admiral ALLEN. I think you almost have to look at each individual platform, between the National Security Cutter, the 123 conversion, and then the FRC. They happened at different stages of the life cycle of this procurement and some of these decisions that we are talking about were actually made two to three years ago. And while we in the Coast Guard had visibility of them and knew about such things as there was a fatigue life issue with the National Security Cutter, and while we briefed staff, I think very clearly there should have been a more specific focused communication to our overseers in Congress to make sure that you were absolutely aware of it, because it wasn't our intent to withhold the information.

That said, I think, regarding the National Security Cutter, early issues within our technical community that normally would have been vetted at integrated product team meetings failed to resolve conflicting views and competing positions on the structural life of the ship. I think what bothered us at the time was we didn't have a way inside the Coast Guard to get that thing raised to the highest level and get a decision made and get on with it. Because of that there was a lot of study, discussion, let's check it one more time, and, quite frankly, there was some computer modeling that was not available when we built ships before that was done to help us in that decision making.

By the time all that was in front of the decision makers in the Coast Guard, we were at a point in the National Security Cutter production where to stop production and redesign the ship at that point would have caused an irrecoverable loss in schedule and costs associated with that. And while it is not documented maybe as well as it should be on paper that is auditable by the IG, the decision of the Coast Guard leadership at that time was to deal with the structural problems moving forward and retrofit the first and second NSCs rather than to stop production, given the schedule and costs associated with that, sir.

Mr. CUMMINGS. Now, looking back at that decision, I mean, I know this is kind of Monday morning quarterbacking, but would you agree with that decision? That is, what you just said. Would you have agreed with the decision that they made with regard to the NSC?

Admiral ALLEN. I think, quite clearly, it is arguable either way. Sitting where we were at, with a program of record, funding, and a workforce ready to start assembling the modules down at Pascagoula, with the long lead time materials already acquired and the detailed design done, that is a lot of work headed towards a ship that would have to be stopped and started again. I think, arguably, that is not a bad business decision to make.

I will tell you this, though, and the IG would tell you too, that the business case is not apparent, is not analyzed, nor is it in writing where it is traceable or auditable, so there doesn't appear to be a basis on which the decision was made. Absent that, one could infer that the responsibility was abdicated to accept what the contractor provided. I think there was informed decision-making; I don't think it was well documented.

Mr. CUMMINGS. Now, with regard to the cutter, and you go back to the point—you made three points in your opening statement of things that you wanted to address a little differently. I am just wondering how do—if we reach an impasse like that again, how does—I guess it would have to come within your first two points. How does what you are trying to do now, how would that resolve that issue? Because, again, you are talking about time, you are talking about apparently opinions that differ, and you are talking about vessels that don't do what we expect them to do.

Admiral ALLEN. Yes, sir.

Mr. CUMMINGS. That is a big problem.

Admiral ALLEN. In our attempt to put management focus on the preparation of proposals for the Deepwater Project, we created a new organizational entity in the Coast Guard, the actual Deepwater Program Office itself, and put a flag officer in charge of it with an SES as the deputy. When we did that, we did that separate from our engineering technical staff, and then our operational people that owned the requirements for what we were trying to buy. Automatically, you have a triangle there, and when you have three different positions trying to adjudicate that, unless you have procedures and an organizational culture of collaboration to make that happen, it is not going to be easy to find a central point of consensus if there is a disagreement. We had some of those early on. One of them was about the fatigue life of the NSC.

The organizational structure that I am putting in place in the Coast Guard, that will be in place in the next few months, will take the technical authority, the contracting organization and the program manager and put them in the same organization, working for the same Admiral who I can hold accountable for that performance. And, in fact, the guy who is going to do that is sitting right behind me, Rear Admiral Ron Rabago, who is a former Coast Guard CO at the yard and a former cutterman himself, naval engineer and sailor, sir.

Mr. CUMMINGS. Thank you very much.

Mr. LaTourette.

Mr. LATOURETTE. Thank you very much, Mr. Chairman.

Admiral, the IG report has received wide circulation; it was delivered to the Hill on Friday and I was saddened to read about it in the newspaper over the weekend, before you had the opportunity to come here and address us. But I took from at least the published accounts and other things that perhaps the Coast Guard is not in agreement with some of the findings of the Inspector General, and I would like to focus first on the National Security Cutter and ask you a few questions that were referenced, again, in printed accounts and in the IG's report.

Can you share with us what the original performance requirement regarding days of sea and days underway was for the National Security Cutter?

Admiral ALLEN. Yes, sir. I think this is the pivotal issue between the Inspector General and the Coast Guard right now, because I think almost everything else is resolvable. And this is something we are just going to have to make sure we have an agreement on and come back to you all and tell you this. This is the nub of the issue.

Our current policy for deploying cutters limits them to 185 days away from home port. We don't do that because the ship can't do it, we do that because it is not fair to our people or the perstempo, if you will, for the same reasons there are deployment limits on forces overseas in Iraq.

Under the Deepwater concept, we intend to use four crews for three vessels and multicrew the vessels. That will allow us to achieve 230 days away from home port.

Now, there is a difference between days away from home port and usable days at sea, if you will, and let me explain that, if I could. Even under 185 day limit that we have right now, if you consider a boat leaving Alameda or Seattle and we have to transit to the Bering Sea or the middle of the Pacific, you may end up using considerable days in transit. So when you actually get out to the operating environment, you may yield only 130 or 140 days a year, including port calls and where you might have to go for maintenance.

So our intent was, in establishing 230 days away from home port as a standard, that we would yield between 170 or 180 days. Now, what we are dealing with the IG about currently is whether or not the standard is should the ship be designed to be in the operating environment for 230 days, subjected to wave stress, and so forth, or should it be designed to operate between 170 and 180 days in those operating environments, which is where we think it will be in terms of how much you strengthen the vessel.

And, as you know, there are no shock absorbers on ships; they have natural flex and you have to build in the resistance to flexing and bending in the service life of the ship to be able to withstand it, and you are actually building in shock absorbers for the cutter. We are basing that on 170 to 180 day standard. The IG would assert the contract says 230 days. It is an issue of contract interpretation. We believe the contract clearly states 230 days away from home port, 170 to 180 mission days.

We get into semantical loops around underway, days away from home port. This needs to be clarified completely and reported back to everybody, sir.

Mr. LATOURETTE. Well, Admiral, then, are you representing to the Subcommittee that the NSC is currently designed, or with the modifications that the Coast Guard has proposed, meets the specifications in the Deepwater contract?

Admiral ALLEN. Our position is to meet the specification of the Deepwater contract for the 30 year service life, the ships could presume to be operating between 170 and 180 days in the mission area, and that is defined as whether you are out in the Pacific or the Atlantic. That produces a certain amount of historical wave action and stresses on the ship that can be modeled by a computer. The difference is do you model 30 years at 170 or 180 days, or 30 years at 230 days, and that takes a much strengthened and a much stiffer ship to be able to handle that, and a much more heavy and expensive ship. You are almost buying more performance than you need to accommodate transits and days away from home port.

Mr. LATOURETTE. Another portion of the Inspector General's report that dealt with the National Security Cutter represents that as early as December 2002 there were technical experts within the

Coast Guard that were raising concerns about the design of the NSC, and there was also a memo in March of 2004 from the Assistant Commandant for Systems that urges the Coast Guard's Deepwater Program management delay the start of construction until some of those concerns could be resolved.

As Chairman Cummings has sort of echoed in his opening remarks, I think we should look at how we are going to go forward, but in order to go forward, I think we do have to examine what has transpired. Can you share with us how the Coast Guard handled the concerns of the Assistant Commandant and, secondly, why the Coast Guard authorized construction on the NSC to begin before those technical concerns had been resolved?

Admiral ALLEN. Let me preface my remarks by just stating that this was a decision that was made—some of these decisions were made two, three, and four years ago, and I am characterizing leadership at the time. I was there and heard some things, was privy to it, it may not be exact, but basically, as I stated to Chairman Cummings, the potential irrevocable loss of schedule days and costs associated with that at a certain point start to reach the cost of retrofitting when you are building the first hull in the class of a ship.

The decision taken by Coast Guard management, whether you agree with it or not, the decision that was taken was that they would continue to take a look at the structural issues that were raised in the memo, and to the extent that retrofitting was needed, that would be done on the first and second hulls after delivery so as not to break production and incur costs and schedule delays there.

I think the IG would tell you there should have been a business case analysis that traded those off so you knew what you were doing against the other. One of the problems w e have in dealing with the IG is that is not documented anywhere on paper that is traceable or auditable, and one of the things we have talked to the IG about going forward is creating better documentations of decisions, rationale for senior leaders, taking action, and then making that visible and transparent.

Mr. LATOURETTE. And, Admiral, the last question that I would have for you on this subject is one of the selling points of having this integrated system and then having the integrators go out and look for the best product was that if the product didn't meet the specifications, didn't comply with the contracts, there was the ability to go back on the integrator. We now have two examples, one the conversion of the 123-foot boats, and they are sitting, they are not usable based upon some structural deficiencies; and there is a $302 million request for equitable adjustment on the NSC.

Can you tell us—again, I think almost every member of the Subcommittee talked about the need to watch the public purse. Can you tell us what action the Coast Guard is taking to recoup those wastes costs from the system integrator?

Admiral ALLEN. I will do that. Let me again preface it with just a comment that this puts me in somewhat of a conflicted position, as I talked to the Chairman about. We are trying to produce vessels and put them in the hands of our people. That takes a certain amount of collaboration and getting on with business, if you will, and how you are going to solve problems. That becomes difficult to

do if you think everything you lay on the table in a meeting may be subject to discovery in a potential lawsuit. And these are serious discussions that I need to have with the COs of both corporations going forward, and these are the kinds of discussions we are having.

What I am choosing to do is making sure that we lock down requirements, we understand where we are going, especially with the NSC, the future of the 123s and the Fast Response Cutter; there will be a bridging hull for that. There will probably come a day when we need to adjudicate where responsibility lies for the value received by the Government. I am not sure there is enough information right now that would lead us to do that, but I can't let that stand in the way of making the decisions and building the cutters.

I will tell you this, as I have told you before, I am accountable to make sure if there is value due to the Government that was not received, to act in the manner that preserves the Government's interest, and I will do that working with the other stakeholders.

Mr. LATOURETTE. I appreciate that very much. As you know, the integrator recently received a 43 month contract extension for the work that they have done, and it is my understanding, on the scores that were assessed to determine how good a job they were doing, they ranged between 60 and 76 percent, which, from my perspective, is not so good. And I would just opine, unsolicited, that the integrator owes it to the American taxpayer to fulfill the contracts according to the specification. And as it was sold to the Congress that there was recourse, I would hope that that recourse would be taken swiftly in accordance with the other concerns that you have.

Thank you, Chairman.

Mr. CUMMINGS. Thank you very much.

Mr. Taylor.

Mr. TAYLOR. Thank you, Mr. Chairman.

Commandant, again, thank you for the great work the Coast Guard did after Katrina. And I have to say that because it leads into my disappointment in this program, in the 110 program, and, conversely but not unrelated, to the LCS program, which is built by a lot of the same people. And I am seeing a pattern here.

In the 110 program you have eight vessels that were fully capable before they went to the shipyard; now you have got eight pieces of junk sitting at the dock maybe good for a river patrol boat if we give it to Columbia or somebody, but that you can't take out to sea. Is that fairly accurate?

Admiral ALLEN. We are under———

Mr. TAYLOR. And no one is at fault. The shipyard says they didn't do it. Everyone says it is somebody else's problems. Well, the taxpayers are stuck with the bill and the Coast Guard got what were eight capable ships sitting at the dock that are useless.

Then we have this. We have the Assistant Commandant saying, in 2002, that he had—a man who has got all sorts of masters degrees, a naval architect, naval engineer saying something is wrong here, we need to fix it before we build the ship, and apparently nobody is listening.

In the case of the LCS we have got a ship that is 70 percent complete but now at twice the original cost.

So, again, the timing is not good for the Coast Guard, but two-thirds of those problems are in your shop. And in one case you have an insider, a highly capable insider of your organization saying we have got a problem, let's fix it now.

Now, let's take it a step further. We are saying, well, we will fix it a little bit later. Well, my recollection is that you were going to retire 378s as each one of these comes online. So as we give that 378 away to a third world country or we scrap it, that capability is gone. You have now got to bring the first two cutters back in to get fixed. Well, you have just lost one-eighth of your capability every time you tap one of those ships.

So why wasn't the decision made early on to listen to the Assistant Commandant and, secondly, to fix those things when we had the opportunity? Again, I thought I heard you say—and I am going to give you an opportunity to correct me, but I thought I heard you say, well, we really can live with the 180 days a year. With all due respect, if Hurricane Katrina taught us anything, it is we have got to prepare for the worst.

And we really can't count on having all eight cutters. We could have a Cole-like incident where someone blows up one of the eight and you are counting on seven to do the work of eight. If you are tying up two, you are now counting on five to do the work of eight. I just don't buy that, Commandant. Good gosh, the one thing you beat into my head, or your predecessors beat into my head a long time ago, was prepare for the worst, and you are not doing that; you are sugar-coating it, and it troubles me. And I think we need to get this fixed right now.

The second thing is we have some programmatic problems, both here and in the Navy, where apparently all sorts of money can get wasted, ships can get delayed, things can get screwed up and no one is responsible. So I am asking for your guidance. As the senior officer in the United States Coast Guard, what are your recommendations to fix that this doesn't continue?

Admiral ALLEN. Yes, sir. As I indicated earlier, there is a structural and a cultural issue to this. The memo that was written and the information was passed in 2003 and 2004 went out of one Assistant Commandant's office into another. Under the new acquisition structure that is being provided right now, that technical authority, the contracting officer, and the program manager for the acquisition work for the same Admiral, accountable to me, and we will not have that happen again.

I am explaining what happened two or three years ago and the implications of those decisions. Right or wrong, the decisions were taken and the window was closed. I control what I control now in the organization that I run, and I have made it pretty clear to the Committee how I am going to stand my watch, and the watch will be that we will resolve those issues at the lowest level possible. If they cannot be resolved, I expect them to walk in my door and tell me about it. That is part of the ethics and the ethos of the Coast Guard that people expect, and that is how I am going to run my outfit.

Mr. TAYLOR. Commandant, the Assistant Commandant who waved the flags that something was wrong, where is he now, is he still on active duty?

Admiral ALLEN. He is retired. He is Rear Admiral Errol Brown. In fact—I am sorry, he is recalled to active duty. He is leading the top-to-bottom review of the Coast Guard Academy that I convened.

Mr. TAYLOR. If I may, he ought to be leading this program, with all due respect. Apparently he is the one who caught it; no one listened to him, and I, quite frankly, think you placed him in the wrong place over at the Academy.

Admiral ALLEN. He retired. I brought him back for a special job. He is not in the Coast Guard any longer. He agreed to come back from retirement to do this special task force for me, to take a look at the Coast Guard Academy and issues up there.

The engineers that are sitting behind me have been tasked to do the same type of thing that he did and that speak truth to power and walk in my door and tell me that, sir.

Mr. TAYLOR. Who on active duty now would have gotten these memos and either ignored them or rejected them?

Admiral ALLEN. The Chief of Engineering, the Program Executive Office, the Commandant and the Vice Commandant are all retired.

Mr. TAYLOR. Thank you, Mr. Chairman.

Mr. CUMMINGS. Just before we go to Mr. Coble.

Let me just ask you this, just following up on something Mr. Taylor said. Is it better to have greater strength than less strength as far as the ships are concerned?

Admiral ALLEN. I would like to address that.

Mr. CUMMINGS. I know it is more expensive, but I think Mr. Taylor makes a very good point. I mean, we are post–9/11. We have got all kinds of problems. I am just wondering, when we see where we are now, would it have been better to have—would it be better to have greater strength and err on the side of strength, as opposed to not having the strength.

Admiral ALLEN. I can't state strongly enough that this is not an issue of suboptimizing performance of this hull. It is understanding that we are going to increase the days away from home port to yield greater mission effectiveness in the operating areas where we operate. We do not get 180 days a year out of the cutters we have now; it is more down like around 130 or 140. So there is a significant increase in capability. That is the reason we are only purchasing 8 rather than 12. But it is premised on the fact that we will multiple crew them and we will get 230 days away from home port out of every cutter. So the yield remains the same; we get better mission performance because they are more effective.

Now, the loss—I think where Mr. Taylor was going, if they are laid up for retrofit afterwards, you are going to lose days there. The fact of the matter is the plan, as developed, when the decisions were made, were due to the retrofits as part of normally scheduled yard periods so there would not be a loss of days associated with the retrofits.

Mr. CUMMINGS. Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman.

Admiral, as I said previously, good to have you back on the Hill. The gentleman from Ohio put his oars in waters that I was going to pursue, and that is the 110-foot cutters which were deemed not seaworthy, and then the composite patrol boat which failed tank

and model tests. My question, Admiral, was going to be—and I think Mr. LaTourette addressed it—the possibility—and this may be a premature question—the possibility of recouping some of those costs. If you think that is a viable course to pursue, I hope you will do it. You probably can't address that with certainty now, but I think it is a fair question, albeit a premature question.

Admiral ALLEN. Well, I think it is premature for the National Security Cutter and the FRC. I think it is on point for the 123s, should we not return them to service, sir.

Mr. COBLE. Admiral, there is a gap between the number of patrol boat and marine patrol aircraft hours the Coast Guard needs to complete its mission and the number that will be actually available due to problems with integration. What will Deepwater do to address the patrol boat symbol for Nash aircraft hour gap, A, and what is being done in the interim to address these concerns?

Admiral ALLEN. Well, let me give you a quick answer to the aircraft side, because I really would like to focus on the surface side, if I could, sir.

We recently took delivery of our first new surveillance aircraft, CASA 235; arrived over the holidays, it is down in Elizabeth City. We have that production line up and running, and it is our goal to accelerate the delivery of those aircraft, because they are the replacements for our Falcons, as you know, and that will provide us the initial bridging into the maritime patrol aircraft hours gap.

The more problematic gap was the one that existed for patrol boats, before we had the problem of laying up the eight 123s. So we have a problem of trying to achieve the patrol boat gap, but we also have the problem of trying to mitigate the loss of the 123s. If I could, I would like to give you a couple of things that we are doing there.

Mr. COBLE. That would be fine.

Admiral ALLEN. Tactically, in the near term, we are going to take the eight crews from the 123s that were laid up and we are going to double crew 110-foot cutters. That is a new operating concept of the future; we have done it with 179-foot patrol craft and we are doing it with other cutters. So we will recoup probably about 11,000 hours by double-crewing the existing 110s with the crews off the 123s and use their operating money to operate those ships longer.

Near term, if there is an issue tactically with a mission surge or something like that, we have the capability to redirect our medium endurance cutters; we have coastal patrol boats. We actually have, from time to time, in special operations have used our large buoy tenders, and that is what we would intend to do.

There is some good news here, though. The good news is that after discussions with my counterpart, Mike Mullen, Chief of Naval Operations, he has agreed to extend the loan of the WPC–179s to the Coast Guard for five more years. They were scheduled to go out of the inventory in 2008, which would have exacerbated the capability shortfall. Based on our close relationship and his desire to help us in what is obviously a pretty tough time for us, we are going to enter into negotiations and redraft a memo of understanding to all us to keep those vessels, which I am eternally grateful to Mike Mullen for.

In the meantime, we need to move at best speed to get a replacement FRC out there as soon as we can. As I said earlier, we are going to openly compete that hull, and we hope to have that thing on contract very shortly.

Mr. COBLE. Thank you, Admiral. I think I have time for one more question. You and I previously discussed Rescue 21 some months ago, Admiral, and you told me at that time you were working with General Dynamics to deploy the program, and I understand that it has been implemented in the east region of the Gulf Coast and around Seattle, and moving toward full rate production. How effective is the program?

Admiral ALLEN. I would call the program stabilized, moving at a full rate production. We got passed on the technical issues related to software integrated; we have worked out most of the technical bugs, if you will. We are ready to roll. We need to get these systems out there because they bring great value to the Country. Right after we installed them in St. Pete, we had two spectacular saves there. They are up and operating in the Port Angeles and Puget Sound region now.

The biggest concern I have—and I meet with the CEO of General Dynamics two or three times a year also, just as I am with the Deepwater CEOs—is the unpredictability of when you go in to put a tower up, environmental issues associated and just the physical difficulties of getting a tower in. The technology is there, we just need to produce it. We are moving as fast as we can. I believe this program is stabilized.

Mr. COBLE. Thank you, Admiral.

I yield back, Mr. Chairman.

Mr. CUMMINGS. Thank you very much.

As we go on to Mr. Oberstar, let me just ask you this. What is the—you know, I guess the NSCs cost what, about $450 million?

Admiral ALLEN. That is a very good question Mr. Chairman. Depending on the changes that are agreed upon for the structural issues, the full implementation of post–9/11 changes. We still need to come to closure on and definitize some of the aspects of those changes. The original contract price was a little over—we started with a little over $200 million. That has crept up because of 9/11 requirements, damage caused by Katrina. One of the things we owe you as soon as we get the final answer to the fatigue issue is to come back and finalize that estimate and give it to you, sir.

Mr. CUMMINGS. Well, what I was trying to get to, I was just thinking if we are spending $450 million or less on a vessel, do we have any kind of warranty? I mean, I am just curious. In other words, a warranty against cracks for, say, 30 years, is that something unreasonable? And I know you have said to Mr. LaTourette and to other members—because I am just trying to make sure we get to the bottom line here—that you have got your legal team looking at some things and you are concerned about litigation, and I understand all of that. But I guess I am trying to get to, I mean, if we buy a car, you usually get a warranty. Well, it seems to me that—I mean, is there anything that says, with regard to the integrated system, the team, do they say we guarantee that you are going to have 30 years without cracks?

Admiral ALLEN. It is a layered system, sir, and what I would like to do, if I can answer for the record and give you a detailed explanation, because there are issues regarding system performance, in other words, what the entire system, once it is networked together, is supposed to be capable of. But as you produce each platform, there are specifications that that platform is supposed to achieve as part of the system. There are warranty issues at some level; when you get to the higher level it is actually performance against the specification that is in the contract. I would be happy to lay it out in a tiered level, but it is a multitier system.[Information follows:]

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Using a layered approach, the Deepwater Program oversees the quality performance of Deepwater acquired ships, planes, and electronic systems assets using a Quality Management Program. Warranties are a part of the Quality Management Program and apply, if required, after the asset, system or sub-system is delivered.

Warranties in Government contracts are similar to warranties in the commercial realm. Generally warranties are promises made by a seller of goods as part of the sales contract that promises that the manufactured item will meet certain qualities for a set period of time. Warranties then are defined by limits in time and scope of coverage. Warranties are effective tools for ensuring that the Government obtains conforming goods, but the Government incurs a cost for an item that is covered by a warranty. The longer the warranty period and the broader the coverage, the more the Government must pay for the warranty. Extended warranty periods can, in fact, act more as insurance policies or risk mitigation measures. Since Government policy is to self-insure, extended warranty periods are rarely used.

The Quality Management Program is responsible for ensuring the Integrated Coast Guard Systems (ICGS) operation meets contracted requirements and contracted standards. Quality and Assurance personnel, including Coast Guard members, perform oversight functions to verify that ICGS, ICGS subcontractors, and other relevant suppliers are complying with contracted specifications. The ISO 9001, Quality Management System standards were required as part of the Deepwater contract with ICGS. One goal of the oversight is to ensure defects are identified early, followed by root cause analysis, preventive action planning, and improvement verification.

The Quality Management Program layers are:

- System Layer oversees the system design conforming to the approved enterprise architecture detailing performance requirements to the assets and component sub-systems.
- Asset and component subsystem quality compliance layer is overseen by a team of government personnel from the Coast Guard and DOD, primarily the Navy, who are usually located at the production site. Two key production sites are the Maritime Domain Awareness Center (MDAC) in Moorestown, NJ, where design and limited production work for the electronic systems is ongoing; and the Northrop Grumman Ship System facility in Pascagoula, MS where production design and assembly for the National Security Cutter are located.
    - Select sub-contractor facilities are also visited and, if necessary, the Coast Guard assign son-site personnel.
- Government conducted testing and evaluation (T & E) which is conducted on all contracted assets and electronic systems before the item is accepted and final payment is authorized.
- Warranties are guaranteed by ICGS for one year from the date of acceptance for all supplies furnished under the contract to be free from defects in material and workmanship, and to conform to all contract requirements. Warranties

> apply to all Coast Guard unique supplies and include commercial warranties granted by the original equipment manufacturer (OEM) in the event that the warranty is longer than one year.

The Warranty Clause contained in the base period Deepwater contract was required as part of the Transportation Acquisition Regulations (48 CFR 1246.703) at the time the contract was signed. The Request for Proposal for the Deepwater Award Term 1 also contains a Warranty Clause similar to the base period. The Department of Homeland Security Acquisition Regulations (HSAR 3046.790) requires the use of warranties by the Coast Guard in the procurement of major systems valued at $10M or higher. The Secretary of Homeland Security may waive the requirement for a warranty in the interest of national defense or if the warranty would not be cost beneficial.

The GAO has reported on warranties in a report titled 'Weapons Acquisition – Warranty Law Should Be Repealed' 1996, which examines the usefulness of warranties in weapons systems procured by the DOD. The report concluded that warranties in weapons systems acquisition does not provide a cost benefit for the government. In this situation, the Deepwater Program shares many of the attributes of a large weapons systems acquisition. The government is often the sole buyer of a product and cannot share the insurance costs with other users, therefore absorbing the risk of failure on its own. GAO discovered that warranties aid motivated not necessarily contractors to improve their products and that Quality Assurance programs were more effective, which is how the Coast Guard Deepwater Program is approaching the quality performance dimension. Additionally, the GAO went so far as to recommend that the warranty law be repealed.

Mr. CUMMINGS. I would like for you to get that to us, and I was just wondering if there is something that can be done, as you all continue to work out your differences, whether we can have something that sort of—I mean, if it is now sufficient now, I mean, that might be part of your discussions, that is all.

Admiral ALLEN. Yes, sir. Lessons learned. I understand.

Mr. CUMMINGS. Mr. Oberstar.

Mr. OBERSTAR. Thank you, Mr. Chairman.

Admiral, this contract is a performance requirements contract, correct? In light of what you know now, and the experience that you have had with this, would you do it the same way again? You didn't do this, you didn't order this contract, but it was done. Would the Coast Guard do this again?

Admiral ALLEN. I will give you a two part answer to that, sir. I think we should do it this way. I think we need to learn how to do it better in the future. I think performance-based contracting and a systems approach is the way to go, but if you are going to do that you need to understand how you ought to be organized in terms of competency, capacity, and capability to be able to manage a contract like that with a systems integrator. I think we were not as integrated on the Coast Guard side. I think the concept is sound.

But to go to the second answer, I think, moving forward—and I am going to turn my hat around as a former chairman of the Joint Requirements Council of the Department for three years—the Coast Guard and the Department of Homeland Security have to become competent in managing complex system integrator contracts. We do not have a Naval Sea Systems Command and we do not have a Wright-Pat Air Force Base. We do not have those huge system integration type capacities inside the Department, nor will we ever get it. I think it is incumbent on the Coast Guard to learn from Deepwater. I think it is incumbent on the Coast Guard to learn from SBI. It is incumbent on the Department to learn from both acquisitions how to do this, because it has to be a basic competency of the Coast Guard and the Department going forward, sir.

Mr. OBERSTAR. The latter is correct. The Coast Guard needs to know better how to handle major contracts, just as the FAA stumbled badly in the late 1980's and early 1990's and then got turned around when David Ansen, Administrator of FAA, brought in outside counsel, if you will, from the Navy, from GSA, to help FAA produce better good documents, do better oversight, better contract management, and be more specific in their specifications.

Admiral ALLEN. Yes, sir.

Mr. OBERSTAR. Now, performance contract, the European—French, German, Dutch, Belgian, Italian—transportation ministries build highways and bridges the same way, with a performance; want the road to be of so many lanes, want it to carry so much traffic, want it to have a 50-year life span. You build it to meet those specifications and you warrant it. So the contractor is obligated.

We do highway design and bridge design, engineering construction, bidding very differently in the United States. AASHTO, the American Association of State Highway Transportation Officials, has a manual that has very clear specifications for what the

subbase should look like, what the base should be, what the content of the concrete and the concrete bed and the content of the asphalt in an asphalt bed should be, and the contractor is held to a bid document that meets those specifications. It has worked well. We should have better standards for highway construction.

I wonder whether this performance-based contracting really is, as you said, the best way to go, especially if you have language in the bid document that allows the contract, as the IG report says, to self-certify compliance with standards. Would you do that again?

Admiral ALLEN. Probably not, sir. And I will give you this example.

Mr. OBERSTAR. I hope you say will not.

Admiral ALLEN. Yes, sir. We are about ready to complete the FRC, as I said. That will be ABS class, sir.

Mr. OBERSTAR. All right. Because we had this little sort of difference of views with the Coast Guard a few years ago about self-certification of vessels subject to Coast Guard certification. If the Coast Guard certified a vessel, and then it had a problem and the Coast Guard then went out and inspected the failure, it is inspecting its own certification; you need an independent party like the NTSB to come in and review. We had quite a discussion with your predecessor over several months about that matter, and finally resolved that the NTSB should have a role in inspection of vessel failures where a Coast Guard had been certification agent.

So in this situation, to allow a contractor to cut square holes and the Coast Guard knows from experience that those openings are subject to stress at the corners and subject to failure, and then allow the contractor to say, well, but that is OK. And then if you come in and say, well, it is not all right and we want this change, they are subject to a change order and you are paying for that change order.

Admiral ALLEN. Yes, sir. Roger, loud and clear. One of the things we have to adjudicate going forward in the Deepwater contract, especially the NSC contract—and we have had conversations about this—is standards. There are several different types of engineering standards out there which you can build to. There are traditional standards which naval combatants are built to, but we are now informed by new ways to model construction through something called finite element analysis, where you can actually load ships over their life cycle and kind of be able to predict where those stresses are at.

We have never had those tools available when we built large cutters before, for instance, when the 378s were being built. And some of the interaction between the contractor and the Coast Guard right now is the intersection of existing shipbuilding standards and specifications that are used for naval combatants and some of these new tools that are coming in to check the risk and what the stresses will do over the life of a cutter. These have to be brought into the process, sir.

Mr. OBERSTAR. Under the changes that you specified at the outset, you said that the Coast Guard will have authority over—I forget exactly your words—and accountability and approval of authority to do work. But the contract remains in effect, doesn't it? So even with your proposal, will your proposed adaptations to the IG

report include authority for the Coast Guard to override the integrated contractor and not have to pay for change orders?

Admiral ALLEN. On the first part, the technical authority and who makes that decision is now clear, and the Coast Guard is the Chief Engineer of the Coast Guard reporting to me to be able to make the determination of whether or not it is in conformance with the standards. After that it becomes an issue of contract law, how the contract is written and whether performance is required.

So as you stated earlier, as we move forward we are going to have to understand how these contracts need to be structured to make sure that, when there is ambiguity about performance, we can assign responsibility and accountability. As we move into the next award term, the award term criteria are going to be very important, and we won't finalize those until the work group that has been established by the two COs and myself is reported back to us.

Mr. OBERSTAR. So you will change that language and retain authority for the Coast Guard to make approvals, and not allow contractor to self-certify?

Admiral ALLEN. Where we need to implement the procedures that allow the technical authority to do his job, we will do that, sir. It is going to be—the contract is really a series of contracts, as you know; different contract line items and DTOs. As we move forward, we will move business practices into place that will ensure that we can guarantee performance, sir.

Mr. OBERSTAR. But for the existing contract, your order does not change the language of the contract.

Admiral ALLEN. Well, as I said earlier, I think there are issues with the NSC and the 123s that we are going to have to figure out. After conversations with the Chief Executive Officers, we need to put everything on the table, see where we are at, and then we will move from there, sir. I roger your concern.

Mr. OBERSTAR. I think it would be beneficial for us to invite the Coast Guard back, Mr. Chairman and Mr. Ranking Member, when you have a new approach, a new contracting document to share that with us in open session.

Admiral ALLEN. Yes, sir. I have offered to come back in 120 days.

Mr. OBERSTAR. Welcome external review, and that is very much in keeping with Admiral Allen, and I think we will want to see what changes you propose in future contracting authority for the Coast Guard so that there is not repetition of this major stumble.

Mr. CUMMINGS. Would the Chairman yield? Mr. Chairman, before you got here, I had said that in my conversations with the Admiral, he has agreed to come back in 120 days to address some of these issues then, because I felt that we really needed to stay on top of this.

Mr. OBERSTAR. Thank you.

Mr. CUMMINGS. And he has agreed, I mean graciously agreed, with no hesitation, and we do appreciate that.

Mr. OBERSTAR. Thank you. Thank you, Mr. Chairman, for initiating that. I regret that I have to step out of these hearings; a lot of other things.

Mr. CUMMINGS. Thank you very much, Mr. Chairman.

Mr. LoBiondo?

Mr. LOBIONDO. Thank you, Mr. Chairman.

Admiral, the IG has raised some serious concerns about the ability of the service to resolve disputes, such as those with the National Security Cutter through the integrated product teams. Do you feel that the integrated product teams are working? And what assurances can you give us that the Coast Guard's concerns are being heard and properly addressed?

Admiral ALLEN. They clearly didn't work as they should have early on; otherwise, these issues, when they were failed to be properly addressed, at least by our representatives from the technical community, created a lot of cultural divide, I would say, inside the Coast Guard. I made it very clear to everybody working for me right now that that is not going to happen again. To the extent that the IPT process is the way we are going to manage these issues at the deck plate level, there has to be open collaboration, and if for some reason there is a disagreement, it must be immediately raised for adjudication, and it has got to be raised high enough where flag officers with responsibility are held accountable for that. I have had that conversation with my staff and they all know that, sir.

Mr. LOBIONDO. And can you give the Committee any assurances, where red flags are waved to you that impact our ability to decide, that that information will be shared with the Committee?

Admiral ALLEN. Absolutely sir. I think especially you are well aware of when tough things happen, they don't get better with age, and most all of you get a direct call from me when something doesn't happen, sir, and I will continue to do that.

Mr. LOBIONDO. Both the IG and the GAO have raised serious concerns about the service's ability to manage and properly oversee the program due to lack of personnel and lack of personnel competency, I believe, as they put it. What do you intend to do to deal with this issue and how will it affect the Deepwater procurement schedule?

Admiral ALLEN. A couple of things, sir. By creating the new acquisition organization that I mentioned earlier, we will take all of the, for instance, all the 1102 series contracting officers will all be managed within the same organizational framework. Rather than having stovepipe competing contracting shops, if you will, there will be a contracting shop where everybody is managed from a human resource standpoint by the same flag officer. It is part of a much larger blueprint for acquisition reform that I am carrying out inside the Coast Guard that I started actually back before the change of command, when I was Chief of Staff. This will align us with the Department of Homeland Security and align us with best practices. We have been consulting with the Defense Acquisition University on how we should be properly structured, given the feedback we got from oversight groups from Deepwater, and I am prepared to submit for the record that blueprint for acquisition reform to the Committee that will provide in detail the steps that I have been talking about here today.

Mr. LOBIONDO. Thank you.

Mr. CUMMINGS. Thank you very much.

Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

There was a question earlier about the cost of the cutters, and I just want to clarify something as far as that, Admiral Allen. The IG's report indicates that the original cost for the first two were about $517 million, and then with post–9/11 changes and other items, inflation, the cost of the first two would be about $775 million. And then, according to the IG, the request for equitable adjustment was about $302 million. Assuming that number is right, we are looking at, for the first two cutters, a cost of around $500 million or so each. Is that accurate, is that what you think?

Admiral ALLEN. I would say that is an estimate on the high side, subject to definitization of task orders that are out there and where we are going with the request for equitable adjustment. A lot of that leads back to the work groups that are established right now to resolve how we are going to deal with the fatigue standards on the ships, how much retrofitting will be done; and there are tradeoffs in there. So I would say the potential is that figure. Where it actually will end up, what the request for equitable adjustment will be and exact cost of retrofitting to achieve the fatigue life of the ship, we are still in the process of determining that, and I would be happy to provide you a more detailed answer for the record and at 120 days come back and give you an update.

Mr. LARSEN. OK.

I have further questions. My yellow light has come on. I haven't been at this for five minutes. So if someone wants to keep my accurate time, I would appreciate it.

Mr. CUMMINGS. No problem. We have got you.

Mr. LARSEN. With regards to the FRC, you are moving possibly towards a replacement patrol boat, the FRC-B class, as you call it in your testimony, expecting RFPs for design no later than March 1st. Who will assess those RFPs?

Admiral ALLEN. The solicitation will be made through Integrated Coast Guard Systems. They will receive two types of proposals, one is for a technical proposal on the hull itself, the other one will be a comms integration package. Northrop Grumman is dealing with the hull part of it; the systems integration package will be dealt with by Lockheed Martin. But, again, we will have visibility on that.

Mr. LARSEN. Who will make the decision, then, on the RFPs?

Admiral ALLEN. They will make a proposal to us and it will be up to us whether to accept or reject it, and as I stated earlier, we will make sure there is competition and that———

Mr. LARSEN. Are either of the integrators involved with putting together an RFP?

Admiral ALLEN. They are our instrumentality of doing that. Northrop Grumman is working on the hull side of it and Lockheed Martin is working on the comms side.

Mr. LARSEN. I'm sorry, are they putting together their own proposal?

Admiral ALLEN. It is being openly competed. I don't have the exact entities who are competing . I can get back and get you an answer to that.

[The information received follows:]

INSERT PAGE 77, LINE 1683

The Coast Guard is expecting a proposal from Integrated Coast Guard Systems (ICGS) no later than 29 March 2007 for completing a Parent Craft Contract Design for the Fast Response Cutter Replacement Patrol Boat (FRC-B Class). This proposal is being developed with full and open competition. After contract award of the parent craft design, a subsequent proposal for the parent craft detailed design and production to build the FRC B will also be developed by ICGS using full and open competition. A Coast Guard contracting officer will review ICGS' subcontract selection process and either consent to the proposed subcontracts or withhold consent based upon the provisions of Federal Acquisition Regulations Subpart 44.2 Consent to Subcontracts.

Mr. LARSEN. Thanks. With regards to Chairman Oberstar's questions about self-certification, it seemed from your answer that you left open the possibility that self-certification would still be possible in the future in contract changes for the next term.

Admiral ALLEN. I believe I corrected my answer, sir. I understand the issue there. For instance, moving forward on ship construction and design, we will have ABS involvement, for example, for the construction of the FRC. We understand certification is required, and we will do that moving forward.

Mr. LARSEN. With regards to your reorganization on the acquisition with—is it Admiral Blore?

Admiral ALLEN. Yes.

Mr. LARSEN. Will that acquisition organization be responsible, then, for the decisions made on procurement? You said at one point that you wanted to push decisions down to the lowest level. Is that the lowest level within the Coast Guard or is that the lowest level within the organization, which would include the system integrators?

Admiral ALLEN. Under the new organizational structure that is in the acquisition reform blueprint that I will submit to the Committee, Admiral Blore will become the Chief Acquisition Officer of the Coast Guard; all acquisitions, not just Deepwater. Work for him will be Admiral Rabago, who is sitting behind me, who will focus just on the Deepwater portion. We are bringing him in because of his expertise in naval engineering and architecture, the fact that he is former CO of the Coast Guard Yard.

Mr. LARSEN. Right. So in terms of pushing decisions for Deepwater, in answer to an earlier question you mentioned pushing some decisions about Deepwater acquisition down to the lowest level. Are those decisions at the lowest level within the Coast Guard or at the lowest level within the organization for Deepwater, which would include the integrators? I am assuming the integrators on your organizational chart are nearer the bottom and then there is a connection up into the Coast Guard organization.

What I am getting at is part of the problems I am reading in the IG report have to do with the issues of technical authority, who is making these decisions; and some of those decisions were not made by—the Coast Guard was not as involved as the IG believed it should have been in some of these decisions.

Admiral ALLEN. Right. And what the technical authority will do, it will establish standards, and if those standards aren't met, he will make the decision whether or not they are being met, and he will play a much more aggressive role. I am not sure that that role was as well defined or adhered to back when those decisions were made in 2003, 2004. In addition, we are contemplating changes inside Coast Guard Headquarters with a technical authority and the Chief Acquisition Officer, Admiral Blore will work for the same three star Admiral. That is where I mentioned earlier the single point accountability for reconciling technical authority and acquisition and program management.

Mr. LARSEN. OK.

Mr. Chairman, I probably have used my legal five minutes.

Mr. CUMMINGS. You did.

Mr. LARSEN. Thank you.

Mr. CUMMINGS. Mr. Baird.

Mr. BAIRD. Admiral, thank you for your testimony today and for your service. It is a difficult position you are in today, and we appreciate. You are as committed as we are, I know, to making sure your crews have the equipment they need and that the taxpayers' money is well served.

I am particularly interested in the issue of filling the gap here. You talk about aggressively examining the purchase of four 87-foot patrol boats. Have you made decisions on that, what would be purchased and how?

Admiral ALLEN. Well, there are a number of options. One of the reasons we were looking at 87-foot coastal patrol boats is they are in production, there are contract vehicles out there. The biggest issue we have right now is a source of funds and how that might move, given the appropriation structure and all that kind of stuff. The answer is to throw everything we have got at the problem. So you need that, you need the extension of the loan of the WPC–179s from the Navy, which we have been successful in negotiating. So it is kind of an all-hands-on-deck evolution.

Mr. BAIRD. Right, and I respect that is what you have got to do. What is the time frame for delivery of the 87-footers, do you know?

Admiral ALLEN. Well, they are already in production. If you will, I will answer you for the record, but I think it is fairly quickly, I think we are talking like 12 to 18 months.

[The information received follows:]

INSERT PAGE 81, LINE 1770

The Coast Guard anticipates delivery of the first of four 87' Coastal Patrol Boat (CPB) 14 months after exercising the contract option, with delivery of the remaining three CPBs occurring every 56 days thereafter. All CPBs will undergo two additional months of post-delivery work before they become operational.

The contract option period is March 1, 2007 through April 30, 2007 with the target award date being March 31, 2007. Exercising the contract option is contingent upon the CG identifying a funding source.

Mr. BAIRD. OK, I would like to chat with you about that.

Admiral ALLEN. But if I could adjust that for the record, I would appreciate it.

Mr. BAIRD. Separately, if I might, I would like to chat with you and your staff about the capacity of those 87-footers and their longevity and performance vis-a-vis other alternatives that are available in the marketplace.

Admiral ALLEN. Happy to do that. I would also say that, in conjunction with the Navy and funded by the Navy, we are procuring 87-foot coastal patrol boats for force protection duties that we are doing with the Navy.

Mr. BAIRD. I would like to chat with you about that broad issue, if I might. Maybe we can find a time to do that.

Admiral ALLEN. Happy to do that, sir.

Mr. BAIRD. Who will decide—one of the questions I have, I think we talked about your staff. We recognize that you weren't in your current position when some of these contracts were made, but you are dealing with contractors, and the contractors must have people who made what I think are decisions that have dramatically, if not defrauded, certainly cost the taxpayers money. Are you going to make sure that the contractors you are dealing with are not employing the same people in the same capacity as future decisions are made?

Admiral ALLEN. Well, as you might well imagine, it is not my purview to meddle in the internal affairs of private sector organizations, who they hire and fire.

Mr. BAIRD. I am not sure it is not, Admiral. I tell you what, if I was hiring a contractor who came over to my house and he was going to fix my bathroom, and he had a plumber tear the bathroom apart and not put it back together and he said don't sweat it, Mr. Baird, I will send the same guy over to fix it, I would say the heck you will.

Admiral ALLEN. Well, having said that, I have a responsibility to work with the CEOs and put enough discipline into the system where we what we want out of it. How that plays out inside the contractor's shop is for their senior management to work on. I am trying to start at the highest level with the leadership that I have with the two CEOs and create a new paradigm on how we are going to work on accountability on both sides of the organization, sir.

Mr. BAIRD. I appreciate that, sir.

Mr. Chairman, I don't know that I will be here when the respective businesses testify, but I certainly hope this Committee will ask them to speak to this Committee about how they plan to correct this.

Let me go back to my example. Are there any consequences? I mean, how much do we guestimate the taxpayer is out? How much money has been wasted here?

Admiral ALLEN. I would hazard a guess on the 123s only because if we don't return them to service, the amount of money that was obligated under Deepwater contract is little less than $100 million; there are probably some other costs there. The NSC has yet to be adjudicated and, quite frankly, the NSC hasn't been operated yet and we don't know how the fatigue life is going to work on that.

We have every reason to believe the ship is going to operate as intended.

So the only smoking gun, if you will, right now is if there is no value accrued for the investment made in the 123s and we don't return them to service, we would have to look at that.

Mr. BAIRD. And what amount might that be?

Admiral ALLEN. The acquisition value right now is a little under $100 million.

Mr. BAIRD. Is there any consequence to the folks who are responsible for this?

Admiral ALLEN. Well, I think you have to establish the details, what decisions were made, what information was known, and I have set up basically the equivalent of an internal audit to take a look at how the decision was made on the acceptance of the 123 extension at the time that we accepted the proposal from Deepwater. That information will be developed and anything that comes out, I will be completely transparent and will be made available to the Committee.

Mr. BAIRD. My question would be is there a way that the public can get their money back.

Admiral ALLEN. Well, I think you have to figure out how the decisions were made and where accountability lies, and then things will have to take their course, sir.

Mr. BAIRD. OK. The IG's report has basically a statement about—I will just read it out loud: "The impediments we experienced in obtaining access to personnel information and documentation associated with the NSC acquisition are unacceptable in light of the statutory mandates of our office," etc., etc. Basically it sounds like the IG was trying to investigate this to get at the bottom of it and they just ran into roadblock after roadblock after roadblock. What is being done to prevent that? These folks have a statutory mandate to look out for the well being of the taxpayers. What is being done to make sure they can do their job?

Admiral ALLEN. Yes, sir. That is the one item that I referred to early on that was referred to the Department for a Department-wide policy. I meet weekly in a group called The Gang of 7, it is all the component commanders in the Coast Guard, if you will, meeting with the Deputy. We have recommended to the Deputy and the Secretary that they standardize guidance from the Department on how each one of the components should interact with the IG so we don't have different rules. And, quite frankly, you have commanding officers of units out there and IG auditors will arrive.

We need to make sure everybody understands what is the responsibility of the unit, what is the responsibility of the auditors, notification of how we want to do that. In some cases we are trying to facilitate the gathering of information for them. In some cases they interpret that to be controls being placed on their access. And what I want is absolute clarity so we don't have a problem again in the future, sir.

Mr. BAIRD. I appreciate that. If I just close with when we get back to this 87-foot. When I chat with you, I hope that, one of my problems is that people who have focused on the current design of the 87-footers may have been also involved with the decision-making that has led to the failures we have seen thus far.

So I hope we can take an open-ended approach and look more at alternatives that are out there, specifications in terms of performance, not just saying let's just go with the existing vessels. We may be able to find a better vessel for less money, more available and more tested in the real world already. And I hope to chat with you and yield back my time. Thank you, Admiral.

Mr. CUMMINGS. Mr. Baird, it is my understanding that the IG is currently working on a report with regard to the 123s, and I expect that we will have that before the Admiral returns to us in 120 days.

What we are going to do now, to the members of the Committee, we are going to go to a limited round. Not everyone has questions. We will got Mr. LaTourette, then we will go to Mr. Taylor, and then I will close it out, unless somebody else has something.

Mr. LATOURETTE. Thank you very much, Mr. Chairman.

Admiral, briefly, when you are done, we are going to talk to the representatives from the integrators, and I just want to get your response to this before we begin. We have been talking about whether or not items meet the specifications in the contract and whether there are engineering difficulties. I want to talk about the issue of competition. Do you know the percentage of contracts that are let by the integrator to either Northrop Grumman, Lockheed Martin, or their subsidiaries, what percentage of the Deepwater contracts are being performed by those folks?

And then the second part of that question, so I don't overburden the Chairman, is just an issue that you and I talked about earlier on the subject of competition. You mentioned, in response to a question or in your remarks, the delivery of the first CASA 235. And on the issue of competition I think I advised you that a vendor came into my office and claims that you are paying $44 million for this CASA 235 and that they can deliver it for $21 million at the platform. And all the upgrades to make it compatible, I mean, certainly don't cost another $21 million.

So, one, if you know, what percentage of contracts go to Northrop Grumman, Lockheed Martin, and/or their subsidiaries; and, secondly, just on the CASA 235, could you put my mind to rest why that person's observation is not an accurate one?

Admiral ALLEN. Yes, sir. We have data. It is extensive data, so I wouldn't try to answer for the record, if that is OK, but there is extensive competition. Integrated Coast Guard Systems is required to provide that data to us. They deal with hundreds of vendors around the Country and we would be glad to make that available for the record, sir, including what work was directed to either Lockheed or Northrop Grumman. That is all transparent, sir.

[The information received follows:]

INSERT PAGE 87 , LINE 1937

The table below outlines the total obligations to ICGS and the distribution from ICGS to their first-tier subcontractors who are Lockheed Martin (LM) and Northrop Grumman Ship Systems (NGSS). These obligations through 2006 fall under the initial contract period awarded to ICGS. This is consistent with how obligations were forecasted to occur during the base award term.

Based on that background, the Government Accountability Office (GAO), in its Report (GAO-04-380) dated March 2004, concluded that: "Competition is a key component for controlling costs in the Deepwater program and a guiding principle for DHS's major acquisitions. The benefits of competition may be viewed as sufficient in the contract's early years because, for the initial 5- year contract period, prices proposed by ICGS for equipment and software were based on competitions held among various subcontractors."

Obligations to ICGS as of 12/31/2006 (in Thousands of $)	Amount		%
LM "In House" Contracts	$792,553		37
Subcontracts to LM Affiliates	$58,348		
Subcontracts to Other Companies	$655,270		29
Total "Flow Down" to Lockheed Martin (LM)		$1,506,171	
NGSS "In House" Contracts	$534,913		24
Subcontracts to NGSS Affiliates	$26,024		
Subcontracts to Other Companies	$212,487		9
Total "Flow Down" to Northrop Grumman Ship Systems (NGSS)		$773,424	
ICGS General &Administrative		$31,165	1
Total		$2,310,760	

Mr. LATOURETTE. I would appreciate that.

Admiral ALLEN. Regarding the CASA, when we are buying airframes, we have a lot of different competitors that come in and want to do business with us. The problem is we are not always comparing apples to apples and not every airframe is the same airframe, even though they appear to be the same model. Based on avionics package and what you are buying with that base model, and what we intend to do with it in terms of missionization, they may or may not be the same. What I would like to do is give you a side-by-side comparison and we can send that over to you, sir

[The information received follows:]

INSERT PAGE 88, LINE 1948

The final cost of either the CASA-235 or the Fully Missionized Coast Guard Maritime Patrol Aircraft CASA-235 (military designation HC-144A) is dependent upon a number of factors such as the economic ordering quantity, inflation and the exchange rate. The Coast Guard version was designed to meet a comprehensive Deepwater Performance Specification. The below table is based on government estimates for FY2007.

Item	Description	CASA-235 Unit Cost	Comments
1	Pre-delivery production aircraft	$ 24.1	Base price of the CASA CN-235 (referred to above as a "commercial off-the-assembly line CASA 235."
2	Coast Guard - unique upgrades	$ 10.8	Major modifications that differentiate the Coast Guard MPA CN-235 from the basic aircraft in item 1 include: upgraded cockpit displays, mult-mode radar (MMR), electro-optical infrared (EO/IR) sensor, a static-line parachute system (Aerial Delivery System or ADS) capable of deploying rescue equipment, MA-3 kit (life rafts), P1G (survival kit), radio can, observer bubble windows, escape hatch, upgraded wiring (switch out of Kapton wiring), a quick-change "roll-on-roll-off" (RO-RO) system, satellite communications and upgraded radios.
3	Coast Guard MPA CN-235 delivered from Seville, Spain	$ 34.9	SUBTOTAL
4	Missionization (Mission System Pallets)	$ 8.1	Missionization includes the installation and integration of the mission pallet. Additional capabilities provided by the pallet include the aircraft identification system (AIS), INMARSAT – voice and data, MILSATCOM data transmission, High Frequency Radio data transmission, CGC2 (track fusion, case file management, interface with COP, Etc.), Radar ISAR and SAR, and ESM/SEI.
5	Missionized Aircraft	$ 43.0	SUBTOTAL
6	Government furnished equipment	$ 0.4	
7	MPA Delivered to USCG	$ 43.4	The aircraft is now complete and capable of performing all assigned Coast Guard missions.

Mr. LATOURETTE. I appreciate that.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much, Mr. LaTourette.

Mr. Taylor.

Mr. TAYLOR. Thank you, Mr. Chairman.

Commandant, I would like to bring your attention to page 79 of the audit and the diagram up on the wall.

Admiral ALLEN. Yes, sir.

Mr. TAYLOR. They are identifying in that things that they presume will fail in less than the 30-year design life of the ship, and in some instances less than 15 years. Now, the ones that are circled, at least two of them, appear to be on deck, so, given my limited experience, probably not that hard to fix. What troubles me, though, is the shaded areas down in the bilges of the ship, which by everyone's account is the hardest place to work, whether you have got to go back and add some stiffeners. You know, once you finish a ship, you have got paint, piping, electrical wires, you may have fuel down there that you have to remove before you can do any welding, degassing.

And it goes back to the question when it was brought to your attention, in March of 2002, that we had problems, it would have been so much more efficient to have corrected these things before all of those sequential elements took place after that, the paint, the piping, the plumbing, the electrical wires, the insulation, the antifouling paint. Getting to those spaces had to get more difficult every day as more things are added to the ship. Again, I scratch my head and wonder as to why, given the opportunity, the Coast Guard didn't correct it in a timely manner.

Admiral ALLEN. Sir, I can only restate at the time irrevocable loss of schedule and the cost risk associated with that, whether it was quantified and auditable or not, was the rationale for moving forward.

Mr. TAYLOR. But doesn't the cost go———

Admiral ALLEN. All I can tell you is that was the decision.

Mr. TAYLOR. But doesn't the cost go up when the difficulty goes up? And the difficulty goes up as each compartment above it is sealed.

Admiral ALLEN. Well, what I would like to do is come back to you, if I can, because what we are doing right now, we are having the active discussion between our technical representatives and ICGS about exactly how those reinforcements would be worked. I don't know as far as whether or not there are interferences or anything else, and we could give you a more technical answer for that, and we would really like to do that, sir.

Mr. TAYLOR. Well, Commandant, again to the point, I want to see you build these cutters. I want to see the Navy build the LCS. I want the 110s converted and put back to sea. But all of these things occurring at the same time tells me that we have serious problems both within the Navy, within the Coast Guard, and somewhere in the industrial base, and no one ever says I screwed up. And that mind-set has got to change, because we are wasting hundreds of millions of the taxpayers' dollars, we are delaying ships, and if you take the attitude of, well, we will just use them for 15 years, it is a disposable ship, as the parent of somebody who may

be manning one of those ships, I have got to say does that mean you have the same attitude that we have disposable crews? Disposable crews are not an option.

Admiral ALLEN. Sir, I am not going to sit here and tell you that we shouldn't have identified that earlier and taken action to resolve it before we got to the issuance of the DTO for production. That would have been the best way to do that. That is not the right way to run an acquisition in the future. That is not the way we will do it in the future, sir.

Mr. TAYLOR. Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you.

Admiral, I want to thank you too, and I want to ask you about a question unrelated to what we have talked about here today, on another matter. You recently released a report regarding the deaths in August of 2006 of two Coast Guard divers assigned to the Cutter HEALY. In essence, the report found that the deaths were preventable and resulted from failures at all levels of the service. The report further found that the dive program on the HEALY was not adequately managed and, further, that the overall management structure and policies of the Coast Guard's dive program are inadequate to properly guide and manage the program.

As I understand it, the Coast Guard assumed responsibility for dive safety inspections and other aspects of the dive program in the 1990's from the Navy, which had previously performed those duties. The findings of the accident report suggested that this program, the dive program, grew faster than the Coast Guard's ability or willingness to manage it properly. This is particularly troubling given that the dive program is so central to the Coast Guard's missions.

Are there any other programs that you feel have grown faster than the Coast Guard's ability to adequately and safely manage them, particularly in the post–9/11 environment?

Admiral ALLEN. Mr. Chairman, that is a very wise question. It mirrors a conversation that we had just two weeks ago, after the HEALY notifications were made. My senior management team and I were sitting around Headquarters and we said where is the next corner where, for some reason, grew too fast, somewhere lost it in the tyranny of the present that we need to be looking at around the Coast Guard. And, actually, I have asked all my Assistant Commandants to go around and do an assessment of where we may have issues out there where we could predict ahead of time if we were cognizant of the fact that we were starting to have a juniority problem because we were trying to grow too fast or we had maybe taken our eye off the ball, sir.

I think you are absolutely right. I can't give you a specific program right now. There are some areas regarding human capital that I am concerned about competencies and capabilities, but I have got a team looking at how we are going to do HR to support the new organization. I would be happy to give you some thoughts in the future on that, sir.

Mr. CUMMINGS. And just on one other note, Admiral. As I sat here and I listened to you answering these questions, I must tell you that there is a book that I am reading, it is entitled "The Speed of Trust," and it talks about how when you trust a person, how eas-

ily things move along. And I must tell you that I think because this Committee has a tremendous trust in you, that we are able to move forward and believe strongly that you are going to do the right thing at the helm. And I just want you to know that we appreciate that. That is very, very significant.

And so that we will be very clear, when you come back in 120 days, what can we expect to hear from you? Now, I know that you have said a number of things already and we will get those to you, but the things off the top of your head, what can we expect in that 120 days?

Admiral ALLEN. Well, sir, the first thing you can expect is I have committed to the IG to give him a report in 90 days on how we are going to respond to the recommendations. So at 120 days there should be a check on the metric there; what does the IG say, what does the Coast Guard do about it, and what does the IG say about that. And we intend to be transparent and accountable regarding that.

The second thing is we will have much more clarity on a few things going on: one, regarding where we are going with the Fast Response Cutter; what has happened with the technical evaluation of the 123-foot conversion; the IG report will be issued on the C4SR for the 123 programs. There are a number of things where we can come back and say since then this has happened and it is a good barometer of where we are going with this program. And we will continue to implement the reorganization that I talked about and, again, we will submit for the record the acquisition reform blueprint to you, sir.

Mr. CUMMINGS. If there are no other questions, then thank you very much.

We will move to the second panel.

We are very pleased to have Dr. Leo Mackay, President of Integrated Coast Guard Systems, and Mr. Phillip Teel, President of Northrop Grumman Ship Systems.

Gentlemen, welcome and thank you for being with us.

Mr. Mackay.

TESTIMONY OF PHILLIP TEEL, PRESIDENT, NORTHROP GRUMMAN SHIP SYSTEMS; LEO S. MACKAY, JR., PRESIDENT, INTEGRATED COAST GUARD SYSTEMS

Mr. MACKAY. Thank you, Mr. Chairman and Mr. Ranking Member. Congratulations on your ascensions to your new positions. I look forward to working with you and the members of this Committee.

Thank you for the opportunity to explain the progress that we are achieving on the Coast Guard's Integrated Deepwater System program. Speaking for the men and women of Lockheed Martin, we are very proud to be associated with this critical program.

The Deepwater program is modernizing the Coast Guard by recapitalizing aging assets, providing new assets, and expanding capabilities. Lockheed Martin is responsible for four Deepwater areas: first, aviation, which includes refurbishment of existing assets like the HH65C helicopters and the HC–130H aircraft; production of new assets such as the missionized C130J aircraft, the HC144 maritime patrol aircraft—the CASA, as the Commandant

mentioned it—and the vertical takeoff and landing unmanned aerial vehicles; as well as management of service contracts such as the A109 HITRON helicopters stationed in Florida.

Second, we are responsible for the command and control network and, third, for logistics, by which I mean the processes and systems to support fielded assets. Fourthly, we are responsible for systems integration and engineering to make sure all the assets can best work together as a team.

We work within the Integrated Coast Guard Systems LLC, our joint venture with Northrop Grumman, our industry partner, to ensure that communication systems and logistic systems are properly coordinated with the programs, ships, and ship systems.

The purpose of the ICGS joint venture is to provide for rapid allocation of work between the two companies, while at the same time achieving collaboration and cooperation. Today, when I refer to ICGS or separately to Lockheed Martin, this should be construed to mean the role of Lockheed Martin as part of ICGS. It is important to note that ICGS, in and of itself, is not a systems integrator, it depends on Lockheed Martin and Northrop Grumman to fulfill their specified taskings.

Nor is it a replacement for Coast Guard decision-making. All designs and improvements are based on system engineering trade studies, analyses, and technical considerations. All major acquisition decisions are reviewed and approved by Coast Guard senior leadership. Together, Lockheed Martin and Northrop Grumman are utilizing more than 600 suppliers in 42 States, plus the District of Columbia, and we maintain an active database of more than 3,000 potential suppliers.

Deepwater is delivering both new and upgraded fixed wing and rotary wing aircraft, new communications systems that are making a significant contribution to improve mission performance, and the logistics systems necessary to support fielded assets. We understand the Deepwater system will continue to evolve, as it has since its beginning. It is important to maintain emphasis on the implementation of the Deepwater systemwide command and control network.

C4ISR, an acronym that stands for Command and Control, Computers, Communications, Intelligence, Surveillance and Reconnaissance, is the network "glue" that permits various assets, including ships, aircraft, and shore stations, to work together to achieve a common purpose. The C4ISR domain is of particular importance as modern civil and commercial and military systems are dependent on the value delivered by the integrating power of the network. This is the core responsibility of Lockheed Martin in the Deepwater program, and has already made measurable progress with the rescue, enforcement, and interdiction activities of the Coast Guard on the high seas.

Lockheed Martin is accomplishing high rates of software reuse, as well as system commonality and interoperability by the rigorous application of proven system engineering processes and capabilities. The National Security Cutter, for example, uses 75 percent of the U.S. Navy's Open Architecture Command and Decision System. The Command and Control System for both Maritime Patrol Aircraft employs more than 50 percent of the functionality of the

Navy's P–3 Anti-Surface Warfare Improvement Program. The Operations Center consoles on the National Security Cutter utilize more than 70 percent of the design of the Navy's UYQ–70 display systems and, overall, 65 percent of Deepwater software is reused from government and commercial sources.

This reuse of available software and systems is the key to commonality. Every one of the Coast Guard's 12 high-endurance and 27 medium-endurance cutters have received two separate command and control system upgrades, giving the fleet markedly improved capability to seize drugs, interdict migrants, and save lives.

As for the shore sites, there are 12 total under contract to receive upgrades. This will facilitate Coast Guard interoperability with civil agencies—this application of off-the-shelf software permits Deepwater to take advantage of the rapid changes in commercial marketplace and investments which commercial firms make, to leverage those for the Coast Guard.

As the Commandant mentioned, the first medium-range surveillance patrol aircraft, the HC–144, was transferred to the Coast Guard on December 20th, 2006 and is now undergoing missionization, which will be completed in April. The second aircraft was accepted by the Government on January 25th, just a few days ago.

At the same time, we are working to complete the re-engining and upgrading of HH65 helicopters. We have completed 65 of 95 helicopters to date, and this project was part of the original Deepwater program plan. At the direction of the Coast Guard, it was accelerated due to safety flight issues.

Lockheed Martin and American Eurocopter are working with the Coast Guard aircraft and supply center, and are now producing upgraded helicopters, the HH65 Charlies, that can fly faster, twice as far, and with twice the payload.

A service contract for the HITRON helicopters based in Jacksonville, Florida has been renewed for a fourth year. The eight helicopters are equipped with airborne use of force and have had a significant impact on the list of drug interdictions. The squadron, in fact, celebrated its hundredth successful interdiction last May.

Our performance in industry has been closely supervised by the Coast Guard, with additional oversight from the Department of Homeland Security, this Congress, the GAO, and the Inspector General's Office. Each of the multiple reviews has provided constructive recommendations as requirements continue to evolve. The results so far indicate that Deepwater has made a difference in the effectiveness of the Coast Guard with regard to the numbers of drug seizures, migrant interdictions, and lives saved. Our overarching goal is to produce more capability for the operating forces of the Coast Guard and to produce those sooner.

Thank you again for the opportunity to present and to explain the progress we are achieving in the Deepwater program. I look forward to answering your questions.

Mr. CUMMINGS. Thank you very much, Mr. Mackay.

Mr. Teel?

Mr. TEEL. Good afternoon Chairman.

Mr. CUMMINGS. Good afternoon.

Mr. TEEL. Ranking Member LaTourette and the other Subcommittee members, I want to thank you for the opportunity to be here. On behalf of Northrop Grumman and all the men and women there who have built ships for over 70 years, I want to thank you for your support of the Deepwater program and of your long-term support of the Coast Guard.

My written testimony and my summary remarks that I am about to make are intended to provide you with updated information regarding the 123, the Fast Response Cutter, and the design and surface life of the National Security Cutter.

First I want to address the patrol boats. The 110 patrol boats have seen extensive duty, as we have talked about today, through their service lives over the last 20 years. The 123 conversion was intended as an interim measure to extend the life and enhance the capabilities of that aging patrol fleet until the new vessels, the FRCs, were available to replace it. The conversion work was performed under subcontract of Northrop Grumman by Bollinger Shipyards, the original builder of the 110s. The conversion project underwent an extensive design and review process with the contractor and Coast Guard and American Bureau of Shipbuilding. The due diligence was done.

Six months after delivery of the first converted vessel, the Matagorda crew discovered buckling in her hull and on her deck. This discovery occurred immediately following a high speed transit in rough seas to avoid Hurricane Ivan. Coast Guard and Northrop Grumman analyzed the situation. We concluded that a workmanship condition arising from the original 110 construction, not the conversion, was the primary cause of buckling, and repairs were made.

In March 2005, six months later, another converted 123 experienced hull deformation. The deformation was different from the first. Like the first, all previous structural analysis had not predicted this failure. At this time, six converted vessels had been converted and two were in process. The Coast Guard and the contractors each performed additional, more detailed structural analysis. Despite extensive effort, these analyses have not replicated the experiences with these vessels.

Additional problems have arisen with these ships and the Coast Guard has removed them from service. We are working with the Coast Guard to re-review all data and analysis to isolate the cause or causes of the problem on these vessels. And once isolated and design solutions defined, the final path ahead will be laid out and we will work with the Coast Guard to deal with those issues.

At the outset, the 110s and 123s would eventually be replaced with Fast Response Cutters. That was the original plan for Deepwater. In 2005, because of the problems with the 123s, the Coast Guard accelerated the design and construction of the FRC by 10 years. A worldwide market survey of existing patrol craft determined that no existing craft would fulfill all FRC requirements.

To address the full set of requirements, Northrop Grumman proposed a new design. The design included a composite hull form with the potential to save $1 billion over the life of these vessels. The design is unique for patrol boats. This is driven by the need

to stay within the Coast Guard's funding limits, yet satisfy a never-before-seen requirements demand on a patrol boat.

Contrary to some accounts, the FRC did not fail model testing. A preliminary test was conducted improperly. When conducted properly, the FRC passed the test. Moreover, an independent analysis confirmed that the FRC design will meet performance requirements.

To meet the shortfall in patrol boat hours, the Coast Guard has pursued selecting an existing, proven patrol boat that, with limited modifications, can meet its highest priority requirements. This is an interim measure, as this craft will not satisfy all requirements originally required for FRC, thus the need for a dual path, explained by the Commandant.

Now let me turn to the National Security Cutter. The NSC is a state-of-the-art frigate size naval ship. The first of this eight class ship, the Bertholf, was launched earlier last year, in September, and will be delivered in fall of 2007. The second is now under construction. With regard to the allegations of inadequate ship structure, the NSC is designed to achieve a 30-year service life. NSC was designed using the same structural design standards used successfully on Navy and Coast Guard vessels since World War II. Northrop Grumman has full confidence in the ability of the NSC to perform all of its intended missions.

The issue under discussion with the Coast Guard deals with the long-term fatigue life related to various assumptions about operating conditions, as discussed earlier, it is not about whether the NSC, as designed, will be able to safely and effectively perform its mission over the range of operational environments.

When predicting fatigue life, even the best of engineers may reach different conclusions. This is driven by the different assumptions about operating conditions. Coast Guard and Northrop Grumman technical experts are engaged in a meaningful dialog which will lead to final agreement on the fatigue structure and how the ship will be constructed in the future.

With regard to NSC cost, the current NSC is not the ship that was proposed in 1998. NSC operational capabilities have substantially increased as a result of the post–9/11 Coast Guard requirement. The critical improvements, along with the impact of Hurricane Katrina, comprise the majority of the program's cost growth.

Northrop Grumman is committed, along with Lockheed Martin, our ICGS partners, and the Coast Guard, to making this Deepwater program successful. Thank you. I welcome your questions.

Mr. CUMMINGS. Thank you very much.

Let me go back to some of the things that I was asking the Admiral. The one thing that I am concerned about is I guess, Mr. Teel and Mr. Mackay, do you believe that the NSCs that you all have designed will not have fatigue cracks over 30 years? Do you believe that?

Mr. TEEL. Sir?

Mr. CUMMINGS. Mr. Teel?

Mr. TEEL. Oh, I wasn't sure I was on.

Mr. CUMMINGS. No, go ahead.

Mr. TEEL. Sir, fatigue analysis and fatigue projection is a fairly new science in shipbuilding. It has been something that has gone

on in aircraft building for some years, and the techniques and tools that are used in aircraft building are beginning to be used more frequently in shipbuilding. And there are reasons for that: airplanes fall out of the sky; ships, while they can sink, usually you can deal with a crack and solve that problem and not have a catastrophic failure.

Over the course of the last several years, we have been working with the Navy as it relates to LPD–17 fatigue forecasting, and DDG–1000 fatigue forecasting in trying to develop and refine tools and techniques to be able to predict from design, in the early phases of design, what fatigue cracking will occur and when on ships.

The NSC, as I mentioned in my statement, is designed to the same set of standards that the DDGs, the LPDs, all prior Navy ships and, for that matter, prior Coast Guard ships, and those standards are to achieve 30 years. There have been no techniques to forecast that ability, and we are now collectively, as an industry, refining those.

I apologize for going on, but———

Mr. CUMMINGS. No no no. No, that is fine. This is our problem. We have got people probably sitting, looking at this right now on C-SPAN, and they are trying to figure out, wait a minute, we are spending billions of dollars on a program and we are expecting that these vessels will last a certain period, and now do we hold you accountable and what standards do we use? And if there are no standards, then how do they know that they are getting everything out of their tax dollar?

And as I listen to Mr. Taylor—and I know how frustrated he has been in this hearing—and others, I mean, it seems to us—we want to know—most of the times, if somebody produces a product, they are willing to give some type of warranty.

Mr. TEEL. Yes, sir.

Mr. CUMMINGS. Where does that fall within this realm? And you never did answer my question. The question is the ship, the NSCs, do you believe that they will withstand cracks within 30 years? In other words, they can get through 30 years without a crack.

Mr. TEEL. Sir, I don't know about whether they can. But I can comment on the fact that all naval vessels that are out there today are designed to the same set of standards. The occurrence of a crack and when that occurs is usually not something that we, as the designer and builder, know the exact day when it occurs. We do deliver the ships and they last for 30-plus years, as the ships have that we have designed and produced.

The occurrence of the crack or a crack in structure is not always known by us because it is during the operational life of that vessel, and that is part of the reason that, today, the Navy and all of shipbuilding are looking to find ways to forecast the occurrence of a crack. The life of the vessel is 30 years. And, yes, I absolutely believe the NSC, as it is designed and built, will last 30 years. I cannot tell you when a crack might occur that would need repair, but the life of the vessel is 30 years.

Mr. CUMMINGS. In both the current report on the National Security Cutter and in a report issued in August 2006 on the design of information technology systems under Deepwater, the DHS Inspec-

tor General has asserted that you failed to meet technical standards on testing procedures established for procurements. How do you respond to that finding?

Mr. TEEL. Well, I can't comment on the IPTs. Maybe Dr. Mackay can.

Mr. CUMMINGS. Dr. Mackay?

Mr. MACKAY. With respect to the IPTs, we are certified by SPAWAR, which is a Navy organization with interim authority to operate and also with authorities to operate the systems on the ships, particularly the classified systems and SIPRNET. As a new procurement, we have worked through the issues with gaining and maintaining the authorities to operate, and worked through issues where we have worked with the Coast Guard, SPAWAR, and industry to set out procedures that streamline those activities. The 123s did have both an interim authority to operate the classified systems before they were withdrawn from service.

Mr. CUMMINGS. I think you heard me in what I said about the Admiral and this whole idea of trust and accountability, and, you know, I think one of the things that is happening here that, I mean, if you—I mean, you all heard, I think, what the Admiral said, that he is going to come back to us in 120 days. Are you all pretty much in agreement with the things he said? And if you are not, tell me what you are in disagreement with. Is there anything that jumps out at you that you disagree with with regard to what he said? Anything.

Mr. TEEL. No, sir, I have no disagreement with what the Commandant said. We are working with the Coast Guard on the issues associated with 123s. We will understand those problems, and those problems that are our problems will be resolved and we will take care of them. In the case of the NSC, we are working with the Coast Guard on the changes that they feel are required and we will get those changes defined and incorporated as quickly as possible.

Mr. CUMMINGS. Now, you heard him say that he was going to get back to us on the whole question—then I will turn this over to Mr. LaTourette—on the whole issue of the warranty. So is there any room for a warranty in this contract, this $24 billion contract? Any kind of warranty.

Mr. TEEL. Well, in the case of the ships, there is a warranty. There is a warranty. I will get you, for the record, what that is, the length of time. But there is a warranty that that ship will perform in accordance with the requirements of the contract, and we stand behind that. I don't recall the length of time of the warranty.

Mr. CUMMINGS. Counsel tells me that for the 123-foot boat it is a year.

Mr. TEEL. OK.

Mr. CUMMINGS. That is not very long, is it?

Mr. TEEL. Well, sir———

Mr. CUMMINGS. By the time you get in the water, the warranty is up.

Mr. TEEL. Sir, the warranty is on the basis of when we turn the ship over. As with the case of an automobile or other things, the warranties are on the basis of the length of time operated. Once they are in the Coast Guard's care, then we have to warrant work-

manship, and that workmanship continues long after the actual warranty of the full vessel operation. So workmanship is something that is always a guaranty. But I will get you a full explanation of the total and submit it to the record.

Mr. CUMMINGS. What does a cutter cost? The 123-footer, what do they cost?

Mr. TEEL. The conversion from 110 to 123 is about $8.5 million each.

Mr. CUMMINGS. $8.5 million?

Mr. TEEL. Yes, sir.

Mr. CUMMINGS. So we get a year warranty for $8.5 million. Is that what you are saying?

All right, Mr. LaTourette.

Mr. LATOURETTE. Thank you, Mr. Chairman.

Just for my edification, both of your testimonies indicate what you do, but could I just explore what your profession is by training? Mr. Teel, are you an engineer, for instance?

Mr. TEEL. Yes, sir.

Mr. LATOURETTE. And Dr. Mackay?

Mr. MACKAY. I was from the Naval Academy. I was a naval officer first. There is a general engineering curriculum at the Naval Academy.

Mr. LATOURETTE. Thank you very much. Just by sideline, the current Secretary of Transportation tells a story that you can tell the difference between an extrovert and introverted engineer because the extroverted engineer will stare at your shoes at a cocktail party, as opposed to their own. But that is another story.

[Laughter.]

Mr. LATOURETTE. I want to begin by a Watergate-like question, if I could, Mr. Teel, and ask you when, if ever, you were made aware of this?

Mr. TEEL. Well, I don't recall—first of all, I have been in this position for about, working with ships for about 18 months. During the early days of my turnover, there were fairly extensive briefings on all the programs. I don't recall, until within the last six months or so, issues that were not headed toward resolution. And let me explain that. In the case of design of all systems, whether they are ships or aircraft or whatever, there are issues along the way about design this, how you design it, what the designs will be, and those get vetted and then the answers then become a part of the record of the review process. And that is the case with the National Security Cutter; the issues were reviewed. There were issues with structure. We have made structural changes, several structural changes as a result, over the course of the design of the National Security Cutter, as a result of the discussions and review with the Coast Guard on almost a continuous basis through the design process.

So from that perspective there were issues. But from perspective that nothing was resolved, things were left to be resolved———

Mr. LATOURETTE. You are not aware of any?

Mr. TEEL. Not aware, no, sir.

Mr. LATOURETTE. And were you in the room when the Commandant was testifying?

Mr. TEEL. Yes, sir.

Mr. LATOURETTE. OK. And there was discussion, and in the IG's report there is discussion about events occurring in 2002 and a memo in 2004. You were not aware of those?

Mr. TEEL. Sir, I was aware of memos, but I was also aware of approval by the Coast Guard of the design that we were going forward with. So in my mind, and in our mind, that was a resolved issue to move forward with.

Mr. LATOURETTE. OK. And as I understood your testimony, you believe that the first two National Security Cutters, the one that is almost done and the one that is in production, meet the requirements set out in the Coast Guard contract?

Mr. TEEL. Yes, sir.

Mr. LATOURETTE. OK. And the issue of cost overruns, how is that mediated between your companies and the Coast Guard, who decides and how is it decided who eats the overrun? When is it something that you eat and when is it something that the Coast Guard has to take responsibility for?

Mr. TEEL. That is a discussion between the companies and the Coast Guard and the Coast Guard's contracting authority.

Mr. LATOURETTE. And relative to the 123 conversions, 123-foot conversions, are those discussions ongoing at the moment?

Mr. TEEL. The discussions are ongoing to determine what the cause of the problems are, yes, sir.

Mr. LATOURETTE. Right. And I understood your testimony that you think due diligence was done and we don't know what happened at this moment in time.

Mr. TEEL. Yes, sir.

Mr. LATOURETTE. OK. Based upon your testimony—I assume you saw the media coverage over the weekend.

Mr. TEEL. No, sir, I didn't.

Mr. LATOURETTE. OK. Have you heard about it? It was pretty big news around.

Mr. TEEL. Yes, sir, I have.

Mr. LATOURETTE. OK. The basic allegation that is made in the article, and I guess in the Inspector General's report, is that you all are delivering a product that costs more and doesn't perform, and I just want to give you the opportunity to say what you have to say about that.

Mr. TEEL. Well, sir, the National Security Cutter is, by all standards within our shipyard—and our shipyard has been in operation for 72 years—the best first-of-class vehicle that we have built. Prior to the storm, it set every record for first-of-class ship built by that shipyard. The storm did impact that; delayed us some and added cost, but she still is ahead of most first-class ships, and certainly in the case of first-time workmanship and in terms of her ability to perform her intended mission she is an outstanding ship.

Mr. LATOURETTE. The second issue that I talked to the Admiral about—and, Dr. Mackay, maybe you can chime in on this too—is there always some—when you have an integrated system and the integrators also are in the business of building the assets, the issue of competition. And if you could just briefly—I think I heard your testimony, Dr. Mackay, about how many vendors you deal with all across the Country, but could you talk about the robust competition that exists? And the question that I asked the Admiral,—if it is

within your knowledge; if it is not, if you could supplement the record—what percentage of the contracts are let to Lockheed Martin, Northrop Grumman and/or your affiliates and subsidiaries.

Mr. MACKAY. Well, we do have very robust competition. We have an open business model and in addition to the numbers of subcontractors that we work with across the Country and in the District of Columbia, we have a database of some 3,000 other suppliers that we have generated in six industry days. Both Lockheed Martin and Northrop Grumman have procurement systems that function in accordance with Federal acquisition regulations, and those acquisition regulations govern competition and they also point out some exemptions from competition for things like follow-on production, a highly specialized service or a unique supply where competition does not result in best value to the Government.

But if you look at the—since the inception of the program, if you look at the subcontracts that have been let in the Deepwater program, almost $800 million worth that are $550,000 or greater—and that is a FAR stipulation—and you back out the FAR exceptions for best value for the Government, 85 percent of those dollars have been competed in an open manner.

Mr. LATOURETTE. OK. And do you not have the information as to what percentage goes to your two companies?

Mr. MACKAY. The percentage to the two companies I will have to get that for you.

Mr. LATOURETTE. Could you get that for me?

Mr. MACKAY. Yes, sir.

Mr. LATOURETTE. And then just the last question, because Mr. Oberstar spent a good deal of time during his questioning of the Admiral, I see in your statement on page 7, Mr. Teel, you say that Northrop Grumman does not certify compliance. And I think I share Mr. Oberstar's concern that self-certification is a tricky business. So could you just amplify on that for a minute?

Mr. TEEL. Yes, sir. In the case of the 123s and in the case of the NSC, the oversight, we have ABS, the American Bureau of Shipbuilding, that are doing certifications on elements of the design and of the process. We don't approve our own designs and move forward. We submit those either to ABS or to the Coast Guard for approval to proceed to the next phase.

We don't conduct a test and certify that it is acceptable. We either do that for the Coast Guard or their representative, and then that test is then reviewed on the basis of the data collected to the test procedure and provided to the Coast Guard to move forward.

We are not in the business of self-certifying. We do not do that with any of our ships or vessels with the exception of some foreign customers that we actually do that.

The issue in question is about how this is done and the mechanism and thoroughness and robustness of the outside review of what we do. We are doing what our requirement asks us, and we are not self-certifying.

Mr. LATOURETTE. Thank you very much.

Thank you, Chairman.

Mr. CUMMINGS. Thank you, Mr. LaTourette.

Mr. Taylor?

Mr. TAYLOR. Thank you, Mr. Chairman.

I want to thank these gentlemen for being here.

A couple of things, Mr. Teel, and again my hearing is not perfect and my memory is even worse, but I thought I heard you say that this buckling that took place on the 123s was a part of the problem with the original 110 foot hull. For clarification, is there a history on that 110 foot hull that has not been modified of buckling in the same places as we saw on the six ships or the eight ships that were stretched?

Mr. TEEL. Let me clarify. I think what my statement says was that on the Matagorda, the first ship that we found buckling, that is attributed to a legacy problem, a workmanship problem on the 110, not a class program but a problem with a bulkhead not being welded on the legacy 110s. That is not considered to be what has caused the problems with the other ships.

Mr. TAYLOR. What do you think has caused the problem with the other ships?

Mr. TEEL. Sir, as my statement said, we haven't determined what has caused the problem. There are several possibilities. Those are all being examined with the Coast Guard, comparing data with them to understand. Part of that could be a condition of the legacy ships. Part of that could be we always have to question did we do the design adequately. We believe we did, but until we are finished with this process, we don't know. We are not sure.

Were the ships operated in conditions that were above the conditions that were defined for these ships after the modification? Sometimes the Coast Guard is forced to operate in conditions that are beyond this mod's requirements and potentially others, sir, but those are the ones that are in question and that we are reviewing with the Coast Guard.

Mr. TAYLOR. Back to the original question, did the 110 have a history of hull buckling, crackling or deformities prior to the conversion to the 123?

Mr. TEEL. There had been problems. I would like to submit that for the record because I don't fully understand the details of that. There were certainly issues associated with the condition of the ship in terms of its age and stress corrosion. We believed we understood that, and in fact part of the process of conversion was to replace parts of the hull and decks where we found a problem with the condition of the ship.

Mr. TAYLOR. OK, I would like to take you back to this part of the Investigator General's report and again, bad ears, worse memory, but I thought I heard you say that there is no way to model stresses on a ship ahead of time which begs my question of where did the Inspector General come up with this and how did they predict that you would trouble in those areas in 15 years or less.

Mr. TEEL. Sir, I didn't say there was no way to model stresses on the ship. The modeling of stresses on the ship and then the resultant impact of those stresses on the ship over the course of the life of the ship in a fatigue-failure analysis mechanism is what is only recently, the last several years, becoming understood and a science. So I was not saying that it couldn't be done.

I also didn't say that you could not model it, and in fact we have been modeling it through detailed fatigue analyses for years, but being able to predict its outcome in terms of when cracks occur

over the operating life of the ship is the part that is currently being developed and refined. I will put it that way.

Mr. TAYLOR. When the Assistant Commandant pointed out what he thought to be what needed structural changes, I am curious, did anyone from the Coast Guard contact your yard or your corporate office and say what would it cost to fix this now, even if it requires some after the fact work as opposed to what would it cost to do this later?

Was any sort of cost comparison, even in any verbal sense, run by your organization to get a ballpark figure of what it would to fix these things before the cutter went to sea?

Mr. TEEL. Sir, I am not certain that that was done. I will have to research our files and our data, and I will submit the answer for the record.

Mr. TAYLOR. OK.

Mr. TEEL. Not to my knowledge, but I will research that and give you a response to the record.

Mr. TAYLOR. OK, but just for the record, you are an expert shipbuilder. Is it an accurate assessment to say that when you discover a problem, it is a heck of a lot easier to fix it the first time before the void is filled with diesel fuel or lube oil or whatever, before the additional piping is run, before the additional electrical wires are pulled, before it is painted, while it is in your shipyard the first time and the crews are already down there? Is it cheaper to fix it then or to bring the ship back after it has been to sea for a while?

Mr. TEEL. Sir, once you have made the decision to make the change, it is clearly cheaper to fix it early, not later.

Mr. TAYLOR. OK, thank you, Mr. Teel.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Mr. Coble?

Mr. COBLE. Thank you, Mr. Chairman.

Gentlemen, good to have you with us.

Not unlike my friend from Mississippi, my hearing is not perfect either, but I don't think this question has been put to you, either of you. What methods did the Integrated Coast Guard Systems and the contractors use to review the proposed designs of each asset that will be acquired under Deepwater Program and what role, if any, did the subcontractors have at implementing these methods?

Mr. MACKAY. Congressman, at the programmatic level, there are a series of programmatic reviews that I think are fairly typical in industry: a critical design review—let me see—a preliminary design review, a critical design review, production readiness review, test readiness review.

At those reviews, both the team from industry which would be the appropriate domain head from ICGS, either Lockheed Martin or Northrop Grumman, and its principal subcontractors as well as technical authorities and programmatic authorities from the Coast Guard would review the data, and generally what is called a CDRL, a contract deliverable, is generated and sent to the Coast Guard. It is reviewed by the Coast Guard, and a decision to go forward, either without modifications or with other modifications and provisions, is made appropriate to the technical readiness at that particular gate.

Mr. COBLE. So the Coast Guard would end the loop with ICGS, the contractor, and the subcontractors?

Mr. MACKAY. Absolutely, sir.

Mr. COBLE. Did you all use the expertise of independent outside groups to verify the results of the reviews that were being formulated? That can be for Mr. Teel or Dr. Mackay, either one.

Mr. MACKAY. With respect to aircraft or C4ISR systems, the Coast Guard periodically avails itself. You will have to ask the Coast Guard which systems and programs precisely they have sought independent analysis on.

On the industry side, again for aircraft, for C4ISR, we didn't avail ourselves to independent analysis.

Mr. COBLE. Mr. Teel?

Mr. TEEL. In the case of ship design, we don't routinely get outside assistance. It would depend on the complexity of the issue. In some cases, if our internal design people have, as you know and I didn't point out earlier, not only do you tell engineers by staring at their shoes but also whether they argue with one another. If the level of controversy is high enough internally with the engineers about a solution, we will get outside activity involved.

Over the course of this program, there has been significant independent review, albeit after issues have been raised.

Mr. COBLE. I thank you.

Finally, let me apply hindsight which inevitably is 20–20, always easy to say what you should have done. But, gentlemen, what steps should have been taken by the Coast Guard and industry engineers, if any, to identify design deficiencies in the 123 foot patrol boat, the Fast Response Cutter and/or the National Security Cutter?

Mr. TEEL. Maybe I could take each of those separately, sir.

Mr. COBLE. Sure.

Mr. TEEL. In the case of the 110 to 123 modifications, it is really difficult for me to look at what might have been done differently. I believe after we are finished with this current analysis with the Coast Guard, we will understand that, but today I can't tell you because I know that due diligence was done.

Clearly, something differently needs to be done, and we will as a part of the response back to the Coast Guard, and when the Coast Guard comes back to you, we will make sure that we have contributed to the hindsight understanding of that and made recommendations about that.

In the case of the FRC, sir, I believe that the FRC is a victim of an attempt to put more into a patrol boat vessel than it could take and our inability to be able to design that ship to accommodate those requirements because of cost caps. I am not sure there is anything to be changed. I think the lessons to be learned are that we probably should have moved faster as a team to get on with the next steps.

In the case of the NSC, I do believe that the Commandant has defined those ways that we and the Coast Guard will be able to work more effectively together to vet all the issues more quickly than we did during the NSC design. I feel very strongly that the NSC is a very good ship.

There are issues that have not been resolved about fatigue forecasting, and had we vetted those much earlier, we wouldn't be talking about this today.

Mr. COBLE. Thank you, gentlemen.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much, Mr. Coble.

To follow up on what you just said, we will probably be calling you back in 120 days too because we want to take a look and see where we are then, considering this is major for the Coast Guard as you well know.

Mr. TEEL. Yes, sir.

Mr. CUMMINGS. We want to make sure that we are all still singing from the same hymn book and hopefully the same tune.

Mr. Larsen?

Mr. LARSEN. Thank you, Mr. Chairman.

I am sure we are all familiar with the concept of the Rashomon Effect that law enforcement uses to explain how different people can see the same situation and give totally different stories. It is interesting that it is actually from a movie called Rashomon, and it follows the story of four people who saw the same incident. The movie ends with one individual just bawling his eyes because he understands that there is no truth in the world as a result of this.

Through the process of this oversight hearing, I am trying to figure out what is not the truth but what is truth in this because I am hearing two different things being said on a variety of different issues. I think it is important that you do come back in 120 days because we are going to have a chance to chew on some of this stuff over the next four months and to try to put together some of the pieces that we have heard today.

For instance, in your testimony, Mr. Teel, you say that Northrop Grumman does not self-certify compliance with structural requirements in the contract, but we heard from the Commandant that clearly there was a self-certification that I believe I heard he wants to fix as they move forward and as they do further awards. The IG's report on page 15 says the Coast Guard allowed the contractor to self-certify compliance with standards. It sounds to me like two different diametrically opposed things are being said, and somewhere there is truth in there.

I want to know how you would make your statement comport with what the IG says needs to be done and with what the Commandant, I think, clearly recognizes as a problem in the current setup.

Mr. TEEL. Sir, I can only tell you what I understand about the situation. Now whether or not that is a result of multiple people seeing the same things differently, I cannot comment.

What I can comment on is that self-certification is a definitional issue, and I am not trying to split hairs. I really am trying to say that when we go through any process of designing and building the ship, we are submitting data for approval and review to either ABS or the Coast Guard as it is defined in the contract.

I honestly have not seen the latest version of the IG report. I have seen earlier versions. I also understand that there are issues with the level of review and the voracity of review that I believe

the Commandant is addressing, and that may in fact be what the IG is addressing.

The question about certifying our work would be one that said that we have no oversight and no review or approval of the steps or the tests that we go through, and we in fact do.

Mr. LARSEN. Mr. Mackay, maybe you can try to illuminate this question a little bit for me on self-certification. Is Lockheed Martin, is the issue of self-certification with you?

Mr. MACKAY. In the area of aviation and C4ISR, there isn't that issue that I am aware of. As I said, with respect to the C4ISR system, the Coast Guard works with the SPAWAR out of the Navy, of course, and with aviation there are myriad regulatory and oversight authorities.

With respect to the HC–144 we just delivered, it was certified by INTA, a European aviation authority, and then I believe the Coast Guard is going to work with NAVAIR in this Country to certify. There is a surfeit of certification authorities on the aviation side.

Mr. LARSEN. Mr. Teel, with respect to the Fast Response Cutter replacement, the question I asked the Commandant, I would like to ask of you with regards to the RFP that is out and due, I think, March 31st if I recall.

Will Northrop be doing the assessment of the RFPs?

Mr. TAYLOR. In conjunction with the Coast Guard.

Mr. LARSEN. Is Northrop planning to do their own RFP?

Mr. TEEL. No, sir.

Mr. LARSEN. You will be not involved in the design.

Mr. TEEL. We will not be proposing a competitive approach, no.

Mr. Carter. OK, so you will be out of that process to allow neutrality in that evaluation.

Mr. TEEL. Yes, sir.

Mr. Carter. Thank you.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you.

Mr. LoBiondo?

Mr. LOBIONDO. Thank you, Mr. Chairman.

Gentlemen, thank you for being here today.

The IG has raised some serious questions and concerns about the ability of the Coast Guard to resolve disputes such as those with the National Security Cutter through the integrated product teams. We have had a lot of discussion on this in trying to understand it.

How do you feel they are working? I mean what is your assessment of this as we try to struggle to get to the bottom of this and what assurances can you give that the Coast Guard concerns are being heard and maybe more important properly addressed?

Mr. MACKAY. Congressman, what I will say about the IPT process is it has certain strengths. It provides a great deal of transparency between industry and the Government as we work with these issues.

I think the Commandant was very clear about some of the changes and improvements that he intends to make with respect to the overall management of the program, and he accurately characterized the spirit within which both Lockheed Martin and Northrop Grumman intend to work with him as he leads us in this transformation and to align industry with Government as they

make changes to streamline and to very clearly compartmentalize several authorities and responsibilities with respect to this program and overall acquisition in the Coast Guard.

Mr. TEEL. I really don't have anything more to add other than that we welcome the changes and we will certainly respond in kind with the changes in our organizations that best reflect what the Coast Guard does and make sure that we match up well. We have been co-located with their teams from the beginning at the working level. We hope to continue that same level of activity, and getting a full participation of all of the Coast Guard functional specialists in that team environment is welcome.

Mr. LOBIONDO. I really hope that is the case because as you are keenly aware, we have had challenges from the very beginning, getting the program up and running, and we never had much of a margin for error, but we just have none left at all. There are critics, and you read a lot of the articles, some in Congress who believe the program should be abandoned and then come back and figure out how to do it. The Coast Guard is in too much of a dire need of the assets, but we can't sustain any more bad news.

There are people out there that are decision-makers in this Congress who are not happy and are saying I told you so. Despite all the assurances we have had over the last couple of years, it turns out we find ourselves in hotter water than we have been before. I know that is not lost on you, but it is something that has got to be repeated over and over again.

As we turn to the National Security Cutter, I am still having a hard time understanding why the cost was originally at around $500 million and now we are up to, I think, $960 million. How do we explain this when somebody asks this question? Is there an easily understandable explanation that doesn't go into 50 pages of technical aspects?

Mr. TEEL. Yes, sir, I will attempt to do that. I will apologize ahead of time for the engineer in me.

I don't identify with the numbers that you use, but there are significant changes to the National Security Cutter from the original ship that was proposed which is the baseline. Those changes came about as a result, as we have talked about, the Commandant and myself, of 9/11 requirements, and they are quite significant, and those changes resulted in a ship that is quite significantly different than that ship that was proposed.

There are additional costs on the early ships as a result of Katrina. We have talked about that. The value of those ships, we believe is far greater than the cost will turn out to be. As the Commandant said, we are in the process of defining what those costs will be for the follow-on ships on the basis of the requirements for the fatigue structure if any is required, and it obviously appears that it is.

What that ultimate cost will be, will be reported, as the Commandant said, as we get those refined and prior to the next report back to you.

Mr. LOBIONDO. Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much.

Let me close this out. First of all, I want to thank you all for your testimony.

Just following up on some of the things that Mr. Larsen said, certainly two or three people can look at one situation and see it differently, but the fact is that when the bottom line comes, when we get down to the bottom line, it does not appear that we are meeting our goals. I think the testimony from the Admiral and from you all has been very enlightening.

I know that there are members of the Congress, and Mr. LoBiondo, I know is absolutely correct, there are members of Congress that are very concerned about this program, mentioning that they would like to see the funds cut off for it. I have heard that.

We are determined to make this work, and we believe that when people sit down and reason and keep the goals of the American people's safety at heart, we can do this. This is America, and we can do this.

The thing that certainly I think we also want to keep in mind is that when we talk about the Coast Guard, again we are talking about our young men and women who are going out there every day, putting their lives on the line. The whole basis of what we are doing here is trying to make sure that they have the very best equipment that they can have.

Just the other day in a town hall meeting, a lady said to me, one of my constituents. I sit on the Board of the Naval Academy, and her daughter is a fourth year student at the Naval Academy. She said, Congressman, I know my daughter is going out there, and she is probably going to end up in Iraq or Afghanistan. But, she said, I just want to make sure that you do everything in your power to make sure she has the equipment that she needs.

Well, I feel the same way, and I promised her that I would. I know every single member of this panel feels the same way, that we want to make sure that our Coast Guard and men and women who are doing just a phenomenal job under sometimes very trying circumstances, we want to make sure they have what they need.

I hope that when you all sit down with the Coast Guard—I think we have been blessed to have a great Admiral in charge, and when you all sit down and try to work out whatever differences there may be, that you keep that big picture in mind because this is not about Lockheed Martin. This is not about Northrop Grumman. This is not about the Admiral. This is about the security of our Country.

As Mr. LoBiondo said, we have spent a lot of time going through, trying to figure out what to do. We have been losing time, and we don't have time, any more time to lose.

I ask you that when you go back to the table, consider everything that we have said, so that when we come back in 120 days, that you will be able to report to us that we are moving forward.

One of the things that we must do, we must—we must—we must stop the bleeding. I am very serious about that. This Congress is tired of reading the stories in the paper that seems like we just cannot get it right. I know we are saying it is somebody else's fault and all that. The bottom line is that we have got to have trust and we have got to have accountability.

We look forward to working with you. I promise you this is going to be one of the number one issues that this Subcommittee deals

with during this session, and we look forward to working with you and thanks a lot.

That will end this hearing.

[Whereupon, at 1:53 p.m., the subcommittee was adjourned.]

STATEMENT OF
THE HONORABLE JAMES OBERSTAR
OVERSIGHT HEARING
COAST GUARD INTEGRATED DEEPWATER SYSTEM
SEPTEMBER 26, 2006

Mr. Chairman, I would like to thank you for scheduling today's hearing on the Coast Guard's Deepwater program.

No one here debates the need to replace the Coast Guard's aging fleet of aircraft and ships. However, over the past several years, Members of this side have voiced concerns about several aspects of the Deepwater Acquisition Program. For example, we have been concerned about rebuilding the aging HH-65 Dolphin Helicopters and buying used HH-65 helicopters instead of buying new helicopters to meet their future mission needs. We have also been very concerned about the lack of competition in awarding subcontracts in this program. Therefore, last year we added a provision to the Coast Guard Authorization Act for FiscalYear 2007 requiring the Coast Guard, or their contractor, to compete the contract to build the new Fast Response Cutter among all U.S. shipyards. However, this bill died at the end of last Congress.

At the time, our Members said that Deepwater was in deep trouble. We were then informed in November of 2006 that the Commandant of the Coast Guard has had to tie up 8 of the 123 foot patrol boats because the alterations made to these boats under the Deepwater contract made them unsafe to operate. Tens of millions of taxpayer dollars were spent to ruin these boats. Now we have a deficit of over 20,000 patrol hours that the Coast Guard will try to fill by driving other patrol boats to an early grave by more use.

Now, the Inspector General of the Department of Homeland Security has to tell the Congress that the National Security Cutter, the backbone of the new fleet, has such serious design flaws that it will not be able to be underway for 230 days per year over its 30-year operational service life in areas like the North Pacific that were specified in the Deepwater contract. To last 30 years, the National Security Cutter operations will have to be cut back to 170-180 days per year.

I have always been skeptical of the Government contracting out those functions that should be performed by the Government. Deepwater confirms my suspicions. I will never understand why the Coast Guard chose to give the contractor full technical authority over all Deepwater design and construction decisions. As a result, the contractors can force the Government to buy a ship or an aircraft that Government engineers insist will not meet the Governments needs or requirements. The Coast Guard let the fox guard the chicken coop. You simply cannot give the person that is building a ship the technical authority to decide whether that ship will meet the Government's needs. That is for the Government to decide.

I am very disturbed by the restrictions that the Coast Guard and its contractors placed on the Inspector General's office in their attempt to perform this audit. That is unacceptable. There cannot be any preconditions, screening of questions, or debriefing of individuals interviewed. At times, these interviews need to be conducted confidentially and privately by the Inspector General. To do otherwise can lead to witness or whistleblower intimidation by the Coast Guard or the contractor.

I think that one of the keys to finding our way out of this mess will be the warranty for the cutters and aircraft that is given by the manufacturers. If Integrated Coast Guard Systems and their subcontractors will take responsibility for fixing for free the 8 patrol boats that that they altered so that they can be used – that would be a step in the right direction. Similarly, if these contractors truly believe that the National Security Cutter can and will operate for up to 230 days per year over the next 30 years in the North Pacific or Atlantic without developing any fatigue cracks – great – let's take them at their word – but require them to warranty and repair any fatigue cracks that may develop over the next 30 years.

It is not our job just to be a cheerleader for this program and to try to have it accelerated. The current track that the Deepwater program is on is a waste of the taxpayers money and a disservice to the men and women who service in the Coast Guard and who will put their lives at risk to save others using these assets. Mr. Chairman, I pledge to work with you to develop any legislative initiatives necessary to put the Deepwater program back on the right track.

Thank you.

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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.

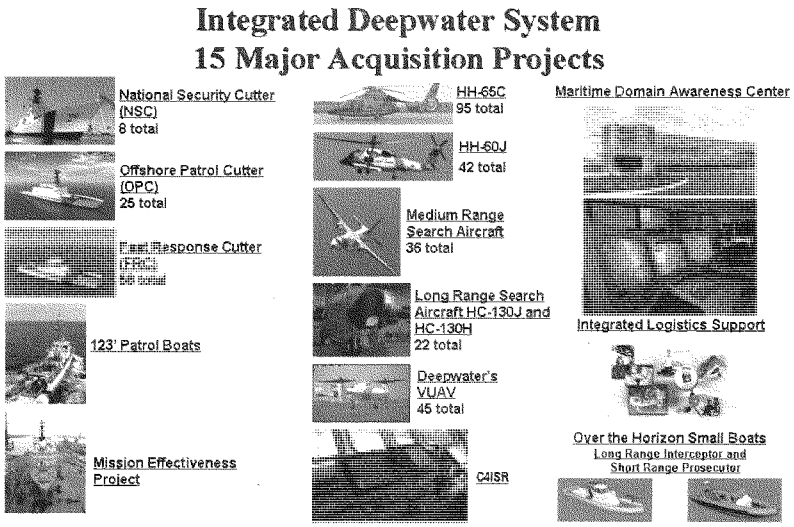
Our ability to save lives, interdict drug and alien smugglers, and protect ports, waterways and natural resources depends on our having the best-trained people operating a modern, state-of-the-art fleet. The Deepwater Program has and will continue to provide America with more capable, interoperable assets 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.



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).

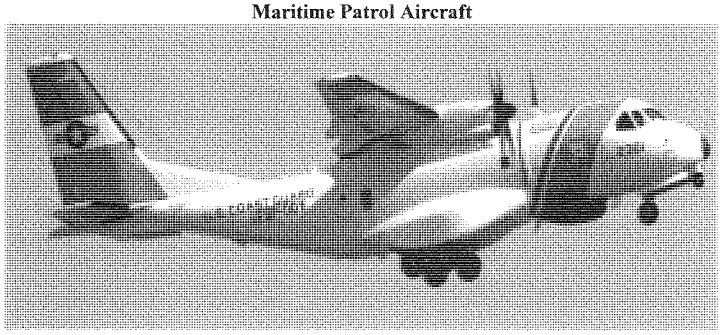
Following nearly ten years of planning, beginning in 1993, the Coast Guard moved toward contract award believing that we had addressed many of the concerns likely to arise from this transformational strategy. We understood there would be challenges, but we never expected the larger challenge that lay 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.

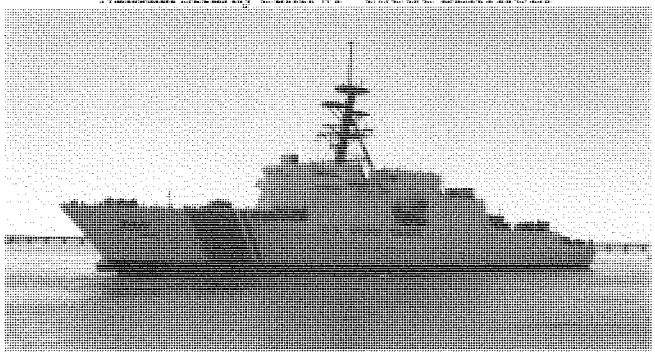
CASA (HC-144A)
Maritime Patrol Aircraft



Recent media coverage has overlooked significant Deepwater accomplishments, including:

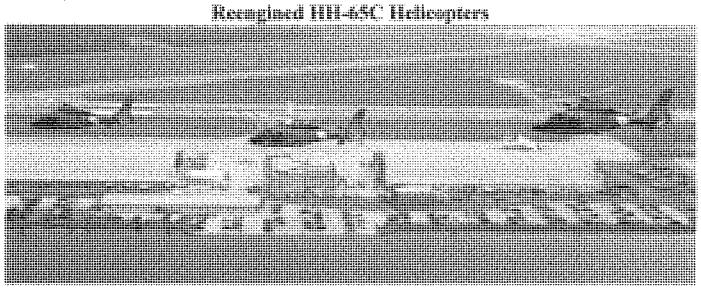
- command, control and sensor (C4ISR) upgrades to all 39 medium and high endurance cutters and at Communications Area Master Station Atlantic (CAMSLANT);
- the December 2006 arrival of our first new HC-144A Maritime Patrol Aircraft, currently undergoing installation of mission pallets in Elizabeth City, 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

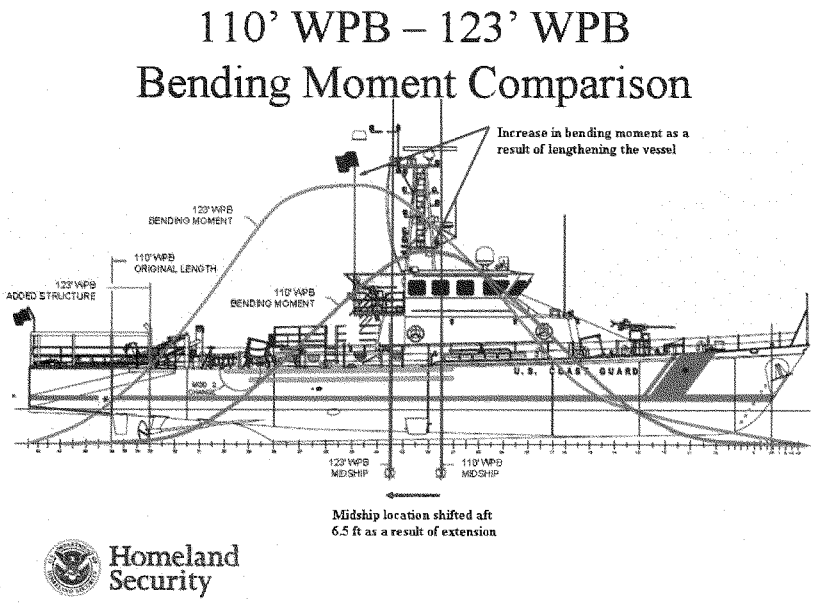


Eighty-four of 95 HH-65 helicopters will have been re-engined and converted to Charlie models by June 2007, enabling operators to routinely perform missions they could not have attempted before, including remaining aloft for longer periods and having the ability to carry greater loads as was demonstrated 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

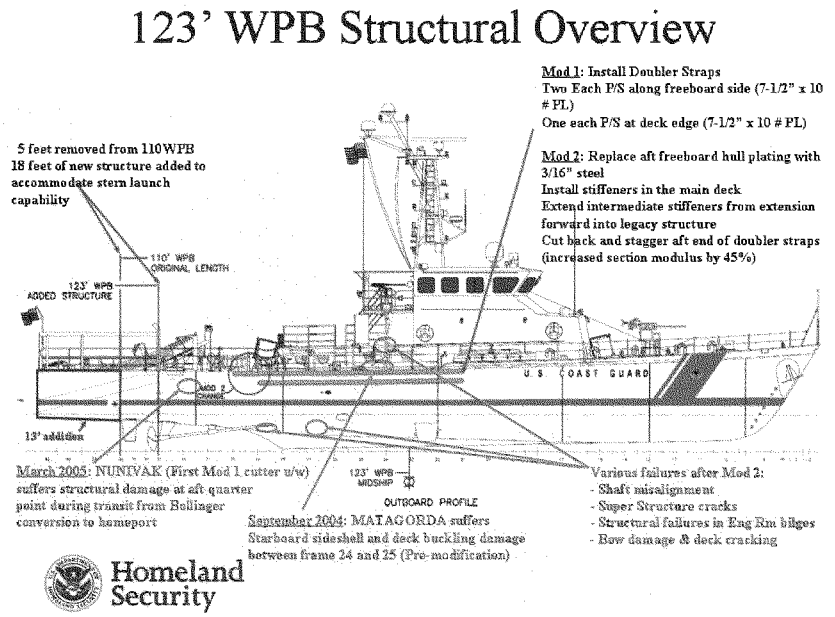
The innovative Deepwater program is large and complex and I would be remiss if I didn't acknowledge the challenges we have faced in the areas of program management and contract execution. Our performance-based acquisition strategy has created unique contracting and management challenges for the Coast 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.



Homeland Security

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.

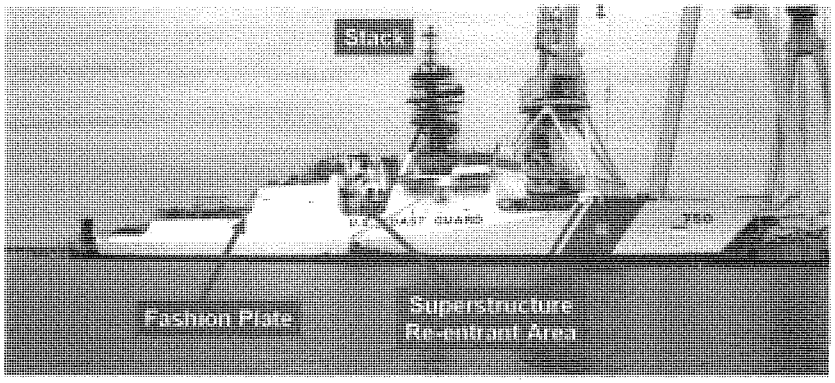
The failure of the 123-foot patrol boat project is unacceptable. I have established a group of legal, contracting, and engineering experts to examine the process at all stages, from beginning design work until we tied up the boats. I have directed this group to establish responsibility and propose measures 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.

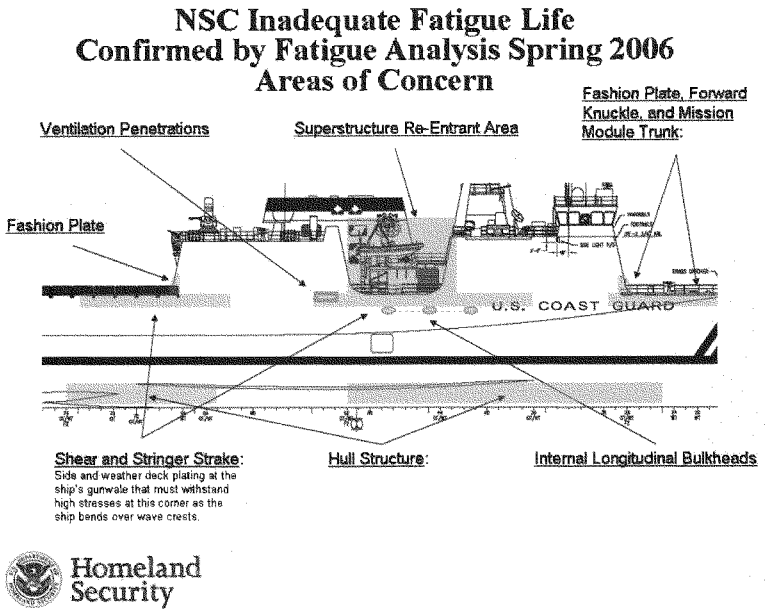
Clearly with this design review, the FRC-A Class path doesn't get boats into the fleet as quickly as needed. As an interim solution, the Coast Guard is simultaneously working to acquire a "parent craft" design based on a vessel already in operation; one that will require minimal modifications to meet 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)



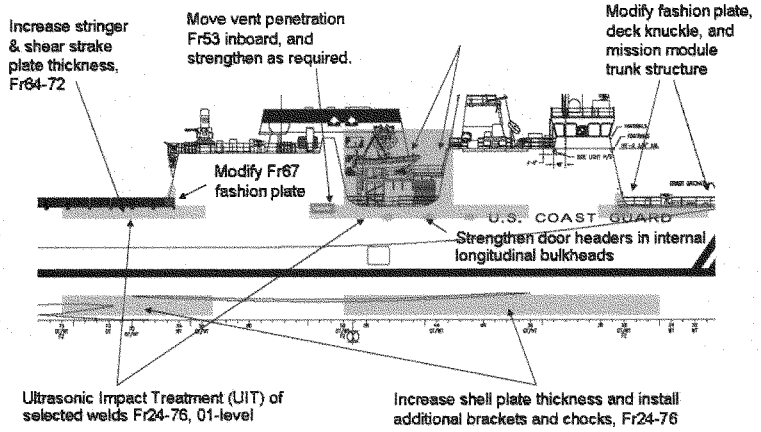
Turning to the National Security Cutter (NSC), I would like to clarify recent reports of structural problems. The DHS OIG recently concluded an audit of the NSC which highlighted concerns with our approach to potential structural integrity issues with the NSC hull. The issue here, which we have communicated 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.



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

Homeland Security

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.

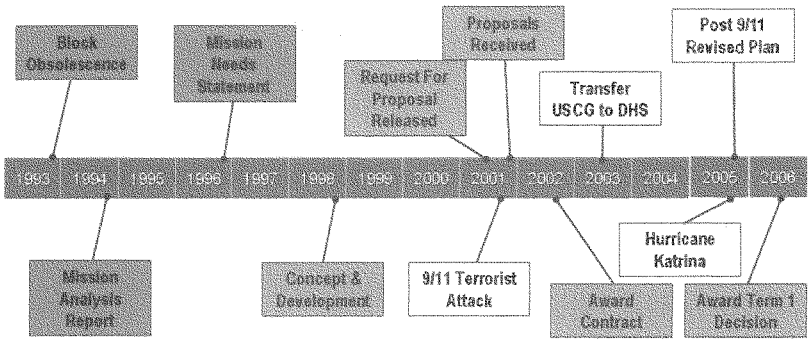
As I mentioned earlier, many of the challenges within the Deepwater Program stem from the lack of an integrated Coast Guard acquisition program to manage this system-of-systems acquisition, as well as to conduct effective of oversight to Integrated Coast Guard Systems. In the coming months, you will 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.

BLUEPRINT FOR ACQUISITION REFORM

in the

U. S. Coast Guard

Assistant Commandant for Acquisition (CG-9)
12 February 2007

Version 1.2

Executive Summary

This document contains the ***Blueprint for Acquisition Reform*** in the form of a whitepaper and Power Point presentation suitable for delivery to groups both familiar and unfamiliar with the Coast Guard acquisition structure and processes. This package is designed to layout the current state of planning for the Coast Guard's overarching schema for acquisition reform. Integral, but not all-inclusive, to this effort is the consolidation of the Acquisition Directorate, IDS (PEO Deepwater), CG-66, CG-85 and the R&D Center into CG-9, or the reformed Acquisition Directorate which will be accomplished as Commandant's Intent Action Order (CIAO) #1. The general plan and background are contained in the white paper, with the overarching strategy and details of the four suggested component plans contained in the Power Point (note pages). The four plans that constitute sub-components of the ***Blueprint*** are:

1. Organizational Leadership and Alignment (CIAO #1)
2. Human Capital
3. Policies & Processes
4. Knowledge and Information Management

The intent of the ***Blueprint for Acquisition Reform*** is to survey past assessments, lessons learned following project execution (hotwash), input from Defense Acquisition University and other independent sources, with the goal of cataloging specific issues that historically impede the efficient execution of acquisition projects. Following the identification of specific shortcomings, positive steps are recommended to remedy each. The cumulative effect of implementing corrective actions will be the enhancement of the Coast Guard's ability to:

- Continue to efficiently execute asset-based "traditional" projects
- Effectively employ a governmental or commercial entity as a systems integrator for complex acquisitions
- Efficiently execute non-major acquisitions and contracts for necessary goods and services

Following the path suggested in the ***Blueprint for Acquisition Reform*** will yield distinct improvements in Coast Guard acquisition processes and results, but the full benefit of lifecycle systems management will not be realized until the Mission Support (CIAO #4) architecture is defined and implemented. The ***Blueprint*** represents a significant step forward in establishing the Coast Guard as a model mid-sized federal agency for acquisition processes, policy, workforce and functionality.

The central goal is to enhance Coast Guard mission execution through effective and efficient lifecycle systems management.

Assistant Commandant (G-A)

The U.S. Coast Guard Blueprint for Acquisition Reform

The USCG is a unique federal institution in its scope of constituency and customer base. To adequately perform missions, the USCG works daily with commercial entities, law enforcement organizations and military authorities around the globe. In times of threat to security or safety, the Coast Guard is the only organization capable of coordinating the wide span of forces brought to bear by Defense, Department of Homeland Security (DHS) partners, Federal, state, local governmental and other organizations in the maritime environment. As such, the USCG must deploy operational assets and command and control systems capable of operating with a diverse population of stakeholders at all levels. Through the authorities specified in the National Maritime Strategy and several other policy instruments, including Homeland Security Presidential Directives, the Coast Guard is designated the lead Federal agency for response to safety and security threats in the maritime arena.

Integrating regulatory, public safety and military functions is a critical USCG competency. Accordingly, the service acquisition enterprise must be capable of providing the unique tools and platforms required to accomplish that tasking. The strategic context within which the Coast Guard was required to achieve this integration changed dramatically following the events of September 11th 2001. Mission stability was superseded by an environment of new strategic imperatives that drove additional operational requirements. Disruption in the acquisition process followed as the USCG sought to meet the demands of new mission-generated requirements across the Integrated Deepwater System (IDS/G-D) effort, as well as in several other major Acquisition Directorate (G-A) projects. Acquisition capability lagged behind the expanded operational requirements and budget revitalization experienced post-9/11. As a result of Federal reorganization, the USCG became a key component in the Department of Homeland Security. Upon migrating from the Department of Transportation to DHS, the USCG shifted from being a Tier II to a Tier I agency in a department with a decidedly different focus. Early on, the Coast Guard recognized a need to enhance several competencies and capabilities including the ability to acquire complex systems in support of expanded mission requirements.

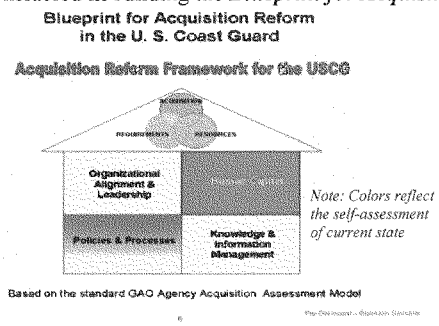
The Coast Guard's current patchwork arrangement of acquisition, systems engineering, contracting, testing and logistics support has evolved over our 200 plus year history in response to emergent requirements, often driven by time-critical national priorities. In 2001, the decision was made to split the nascent IDS acquisition from the Acquisitions Directorate. The IDS acquisition was to be accomplished through a commercial integrator using a system-of-systems modality, while ongoing asset acquisitions continued through the administration of traditional contracting methods.

Within the two primary acquisition entities (G-D and G-A) staff redundancies exist that independently provide the same or similar functions. In addition to these components, the Engineering & Logistics Directorate (CG-4) which is responsible for systems engineering, maintenance and logistics support for all operational assets and physical infrastructure, executes acquisition and procurement activities for systems and facilities support. Contracting, procurement policy and resource management are split between G-ACS, in the Acquisition Directorate, and CG-85 in the Resource Directorate. Information technology-related procurement is accomplished, to a large extent, by the Command, Control, Communications and Information Systems Directorate (CG-6), although the lines for governance of information technology (IT) related acquisition are often blurred. The Assistant Commandant for Operations (CG-3) manages the acquisition of several non-major systems in concert with CG-4 and G-ACS. At the Headquarters level, governance issues continually arise due to lack of standardized systems management doctrine, cross-directorate alignment and standardized decision making tools. The current arrangement results in a lack of standardized processes, internal inefficiencies and external confusion regarding who is responsible and accountable at each step in the Coast Guard acquisition process.

Additionally, there is no accepted doctrine for the collaborative integration of requirements generation, design, acquisition, sustainment, planned obsolescence or planning for future acquisitions. In short, major systems are not managed from a lifecycle perspective. Governance of individual projects has become problematic, causing confusion within headquarters staffs and operational sponsors regarding where the responsibility for project execution lies. Meanwhile, DHS is building policy requirements for standardized, department-wide acquisition processes and investment review. DHS views the Coast Guard acquisition structure as fragmented. The Coast Guard should take a lead role in assisting with DHS developmental efforts, but must first ensure that its own internal processes, workforce and policies are aligned.

When ADM Thad Allen assumed the office of Commandant in May 2006, one of his first directives was to initiate the reform of acquisition in the Coast Guard. Initially, the task was defined as consolidating the Deepwater and Acquisition organizations within a single, more efficient and effective construct. Following a close examination of the level of acquisition capability in the Coast Guard, it became evident that a broader initiative was required. The Assistant Commandant for Acquisition (G-A) was given the mandate to develop, in concert with other stakeholders, common process, policy, structure and procedure for the service acquisition enterprise. The Coast Guard has recognized that it will never have, nor does it require, the acquisition capabilities of the Department of Defense. It must, however, build internal competencies and establish the ability to partner externally with governmental and commercial entities to continue the efficient execution of asset-based systems acquisitions, while attaining the ability to effectively employ an external integrator when appropriate. The overarching goal is to enhance mission execution through a responsive, competent and efficient acquisition organization. The plan to accomplish this capabilities enhancement is titled the ***Blueprint for Acquisition Reform.***

This effort commenced with a comprehensive assessment of the current state. Numerous studies, IG reports, GAO assessments and internally generated lessons learned over the past five years cited deficiencies in systems acquisition process and structure which were considered in building the ***Blueprint for Acquisition Reform***. Additionally, the plan considered features mandated in the Services Acquisition Reform Act (SARA) and department-wide expectations expressed by the DHS Chief Procurement Officer. The *Blueprint* utilizes a framework developed by the U.S. Government Accountability Office for assessing the relative health of acquisition performance in Federal agencies.



Note: Colors reflect the self-assessment of current state

While the consolidation of Deepwater and the Acquisition Directorate, to also include elements of the Command, Control, Communications and Information Systems Directorate, the Resources Directorate and the Research and Development Center, is a major component of the *Blueprint*, the plan also encompasses actions that must be taken in concert to achieve the functionality required in today's Coast Guard. Each cornerstone (room) in the framework has required the development of individual plans comprised of specific actions needed to enhance the overall efficiency of the enterprise. The four individual plans, attached as annexes to this document, include:

1. Organizational Alignment & Leadership (including CIAO #1)
2. Policies and Processes
3. Human Capital
4. Knowledge & Information Management

The synergies built within this combination of plans will enhance the overall competency, capability and capacity of the Coast Guard to organically acquire assets and services using traditional contracting, while facilitating the use of outside (governmental or commercial) systems integrators when warranted. The plans will result in sustainable enhancements through the development of workforce competencies, particularly in program management and contracting. New start projects will be closely reviewed to ensure adequate cost estimation, technical feasibility and risk assessment. Details of the four plans are contained in the accompanying power-point and annexes. The bottom line result of these concerted actions will be the development of the Acquisition Directorate capable of efficiently and effectively meeting the mission requirements of Coast Guard operational forces.

Blueprint for Acquisition Reform in the U. S. Coast Guard

The Way Ahead:

Phase I – CIAO 1 +

Phase II – CIAO 1 and 4 +

Assistant Commandant for Acquisition
Deepwater Program Executive Officer
12 February 2007

Version 1.2, 12 February 2007

Blueprint for Acquisition Reform in the U. S. Coast Guard

"The Coast Guard must become the model for mid-sized Federal agency acquisition in process, workforce and capability." ADM Thad Allen

The Coast Guard must have the organic ability to:

- Execute major systems acquisition of required assets and services in compliance with DHS policy.
- Employ an integrator to acquire assets compliant with a Coast Guard defined systems architecture in a performance-based contract environment.
- Execute non-major acquisitions to efficiently and effectively support missions, facilities, and infrastructure.

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• This brief will map the Coast Guard Blueprint for Acquisition Reform. Defined as capital assets requiring lifecycle management.

• With the ascendance of the Coast Guard to tier one Federal agency status, transfer to the Department of Homeland Security following the events of September 11, 2001, the ongoing acquisition of the IDS using non-traditional contracting and various other more traditional systems acquisitions, the Service acquisition enterprise has never been more challenged.

• Acquisition functions are currently accomplished by numerous staff elements (HQ & field) without common process, procedure, experience, abilities or knowledge.

• Numerous reviews and studies have cited significant deficiencies in the Coast Guard's ability to acquire complex systems despite some notable successes.

• The acquisition budget has grown by an order of magnitude. Currently at $1.4B per FY. As currently structured, this exceeds the Coast Guard's ability to execute.

• The Coast Guard must institute positive change to enable the execution of traditional contracting, as well as execution through a government or commercial systems integrator

Blueprint for Acquisition Reform in the U. S. Coast Guard

Current State – Numerous Internal Acquisition Activities

- **Acquisitions Directorate**: Asset-based systems acquisition (DoD 5000 model >CG Major Systems Acquisition Manual)
- **Deepwater Program Executive Officer (PEO)**: System of Systems performance-based acquisition using a non-governmental Systems Integrator (ICGS).
- **CG-3** (Operations Directorate), **CG-1** (Human Resources Directorate), and **CG-4** (Engineering and Logistics Directorate): Procurement of assets below the major systems threshold.
- **CG-6** (Telecommunications and Information Systems Directorate): Procurement of IT systems.
- **Field activities**: Acquisition of sub-systems level asset support.

Lack of standardized structure, process and accountability

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• Various commands and staff elements procure goods and services to satisfy Coast Guard needs. This decentralized construct has resulted in an inefficient, undisciplined approach that lacks common procedures, internal controls, common financial transaction and property accountability systems.

Blueprint for Acquisition Reform in the U. S. Coast Guard

Past Assessment Reports

- *DHS - "Waste, Abuse, and Mismanagement in DHS Contracts", U.S. House of Representatives*, Committee on Government Reform, July 2006
- *USCG-"Observations on Agency Performance, Operations and Future Challenges"*, GAO-06-448T/June 2006
- *USCG-"Improvements Needed in Management Oversight of Rescue System Acquisition", GAO-06-623/May 2006*
- *USCG-"Changes to Deepwater Plan Appear Sound and Program Management has Improved but Continued Monitoring is Warranted"*, GAO-06-546/April 2006
- *DHS-"Success and Challenges in DHS' Efforts to Create an Effective Acquisition Organization", GAO-05-179/March 2005*
- *USCG-"Coast Guard's Deepwater Program needs Increased Attention to Management and Contractor Oversight", GAO-04-380/March 2004*
- *USCG-"New Communications System to Support Search and Rescue Faces Challenges", GAO-03-1111/September 2003*

Common Themes

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• Past assessments reveal common themes regarding shortcomings in our procurement and acquisition processes, workforce and structure.

Blueprint for Acquisition Reform in the U. S. Coast Guard

Common Causes for Coast Guard Acquisition Performance Problems

- Inadequate definition, understanding and/or stability of requirements
- Lack of acquisition expertise in program management
- Inability to effectively manage a systems integrator
- Inability to adequately assess programmatic risk
- Lack of expertise in cost estimation
- Suboptimal contract strategy formulation
- Inadequate senior level strategic program management and oversight
- Lack of continuity in key management positions
- Lack of knowledge management and decision support systems

These shortcomings are common across government acquisition

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• Throughout the catalog of studies, reports and hot-wash of recent experience, a set of common deficiencies in the Coast Guard's ability to execute emerges. It is beneficial to identify these specific issues as the first step toward remediation.

• These shortcomings are common throughout government and commercial systems acquisition to varying degrees.

• The Blueprint defines corrective action, both short and long-term, for most of these deficiencies.

Blueprint for Acquisition Reform in the U. S. Coast Guard

Summary of Acquisition Reform Strategic Intent

- Enhance **mission execution** by delivering integrated systems, assets and support necessary to accomplish maritime safety and security tasking.
- Become the **model for mid-size Federal agency** acquisition and procurement.
- Establish adequate **balance** between requirements generation, acquisition management, and resource functions.
- Equip the Coast Guard to acquire major systems using **organic capability or through management of a systems integrator** when appropriate.
- Align Coast Guard **acquisition and procurement policies** with DHS review and process mandates
- Develop **organic workforce competencies** (military & civilian):
  - Program Management
  - Contracting (1102 series)
  - Business/Financial Management, Lifecycle Logistics, COTR, etc.
- **Reform organization** to facilitate efficient and effective execution:
  - Policies & Processes
  - Knowledge & Information Management
  - Human Capital
  - Organizational Alignment and Leadership

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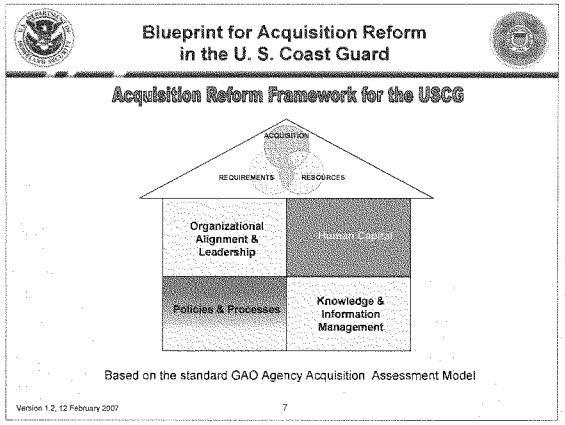
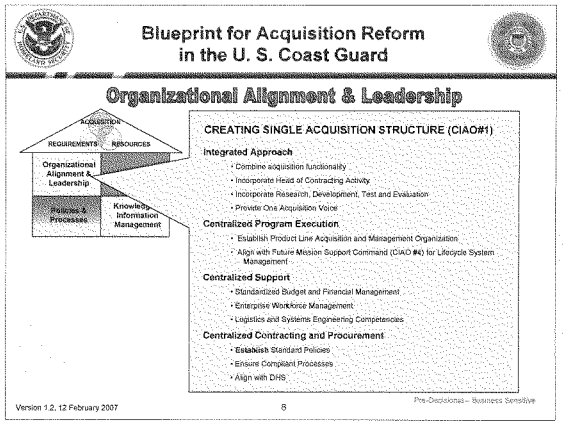
• The Blueprint for Acquisition Reform, of which CIAO#1 is a part, is designed to achieve the specific strategic intent listed here.

• Accomplishment of these goals will start the Service on a path to effective and efficient program and contract execution in a lifecycle context.

• Full acquisition reform will only be realized through the aggregate effect of CIAO #1, CIAO #4 and the other actions identified in this plan.



- To adequately assess, identify and correct deficiencies in our acquisition architecture, we have adopted the GAO framework for assessing the health of an agency's acquisition capability.
- Strategy for building our acquisition capabilities is based on this model.
- Note the interconnected circles in the "attic" of the "house." This is the balance of key functions that must be achieved to facilitate efficient acquisition processes.
- The colors of each "room" reflect our own current self-assessment.



Overview

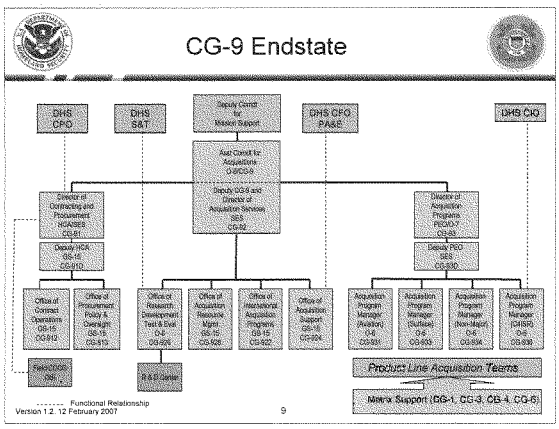
- Provides a framework illustrating what USCG intends to achieve in the area of Organizational Alignment and Leadership with an Integrated Approach to acquisition that centralizes Program Execution, Support as well as Contracting and Procurement.
- CIAO#1 and supporting initiatives accomplish these goals.

Expected Results

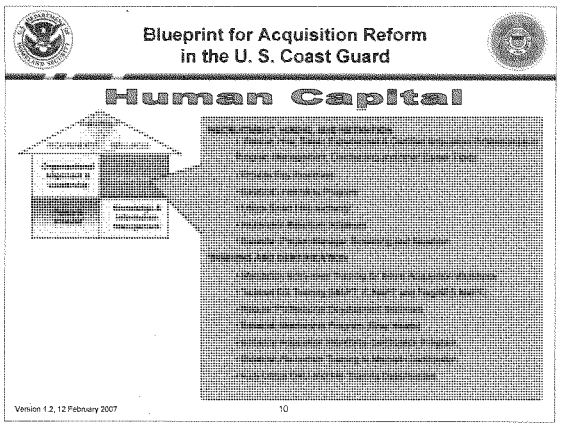
- Improve mission execution by delivering more effective platforms and support aligned by product lines in a lifecycle management context
- Enhance acquisition process execution by organizing internal functions to eliminate redundancies and optimally align support activities to better control cost and performance in all acquisitions.
- Provide a single-point executive leadership for the CG acquisition function

Approach

- Implementation of CIAO#1 over the next 6-24 months
- Hire SES to HCA and Deputy CAO positions
- Continue collaboration with DHS in policy formulation



- This slide depicts the end state envisioned for CIAO#1
- Program management is the "operational" arm of the acquisition structure. All other elements exist to support the Program Manager, the lynchpin function for the entire process.
- Contracting is aligned in execution and policy, both at HQ and in the field.
- The R & D Center has been incorporated into an Office of Research, Development, Test & Evaluation which will provide critical acquisition support tasks heretofore not assigned. This cell will also contribute to requirements establishment and review during the pre-acquisition phase.
- Acquisition Services exists to support the PM Division in all aspects of the process including new starts, cost estimation, risk assessment, financial management, corporate outreach, training & certification and myriad other support tasks. This structure addresses and corrects specific areas of weakness identified earlier.
- This construct provides for lifecycle management of product lines, as well as alignment with DHS for policy and oversight.
- This organization is a component part of the overarching Mission Support Organization (SYSCOM) currently under development.



Overview

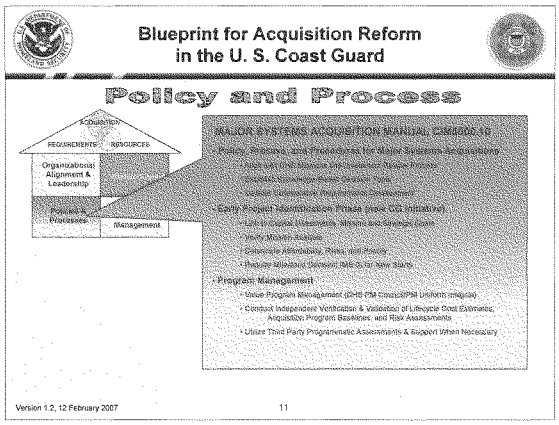
- Provides a framework illustrating what USCG intends to achieve in the area of Human Capital through more effective programs to recruit, hire, retain, train and certify a core cadre of acquisition personnel in Program & Contract Management as well as in other acquisition disciplines such as budgeting, logistics, and systems engineering.

Expected Result

- Goal in this area is to recognize that quality people are an essential element for ensuring that our acquisition programs are positioned for success.

Approach to Achieving Results

- Recognize the importance of personnel continuity, particularly in key leadership positions
- Institute a robust training and certification program
- Establish a balanced workforce between civilian and military
- Develop career paths for civilian and military
- Identify key acquisition competencies and hire/develop accordingly
- Enhance professional development of existing workforce



Overview

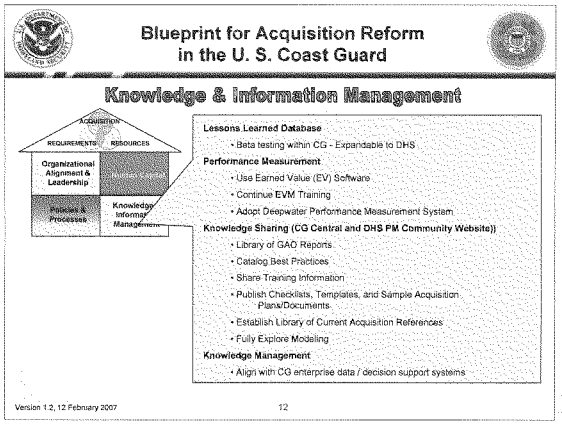
- Provides a framework illustrating what USCG intends to achieve in the area of Policies & Processes through implementation of the updated Major Systems Acquisition Manual, instituting a more rigorous approach to identifying projects, ensuring proper accomplishment of Acquisition Program Management functions and aligning with DHS investment review policy.

Expected Results

- Policies, processes and procedures tailored to better position acquisition programs for success.

Approach to Achieving Results

- Establish common processes and effective controls across all acquisitions
- Establish integrity and discipline in project execution
- Align with DHS and DOD
- Partner with other DHS components through the JRC and Commodity Council
- Align resource requirements with an approved acquisition plan (E.G. APB>>CIP)



Overview

- Provides a framework illustrating what USCG intends to achieve in the area of Knowledge & Information Management through Lessons Learned, Performance Measurement, Knowledge Sharing, and Knowledge Management.

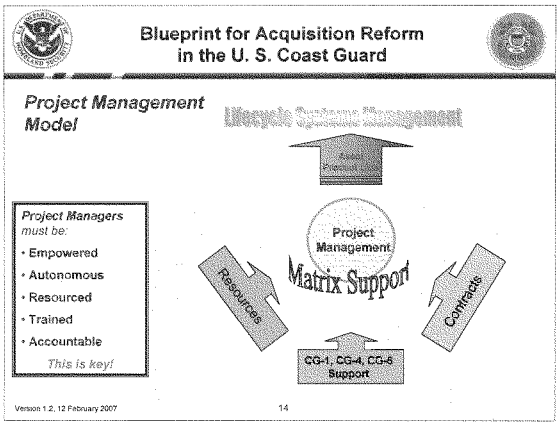
Expected Results

- Goal of this area is to help make individual acquisition projects more efficient and effective by sharing knowledge and information.
- Growing experience through sharing lessons learned
- Robust data centric decision making tools

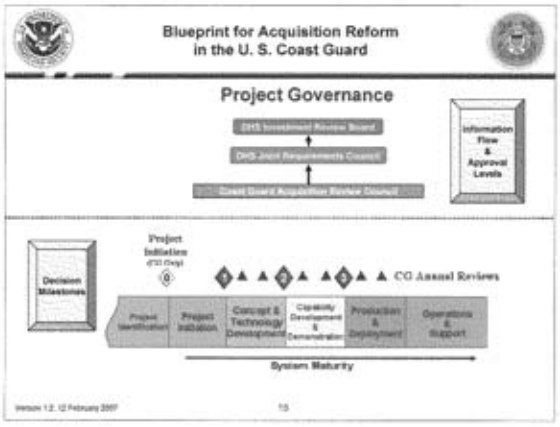
Approach to Achieving Results

- Establish standard, meaningful metrics
- Facilitate data-driven decision making
- Expand the use of modeling

Key Concepts for Success



- Project management is the lynchpin for success of this reformation
- Project Managers must be empowered, the single point of authority for their programs, the strategic managers of the entire process.
- The span of control is such in the CIAO#1 structure that PM's must be the (semi-) autonomous, trained, resourced, empowered and accountable leaders of the effort
- Project management capabilities must be "built or bought." The Coast Guard must establish a competency development methodology for military and civilian employees.
- Properly trained and supported project managers must be the single point of accountability for successful execution.



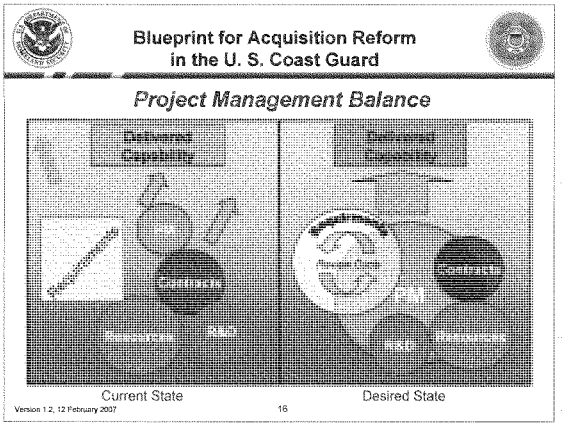
Project Governance processes are in place and include:

Information Flow and Approval Levels

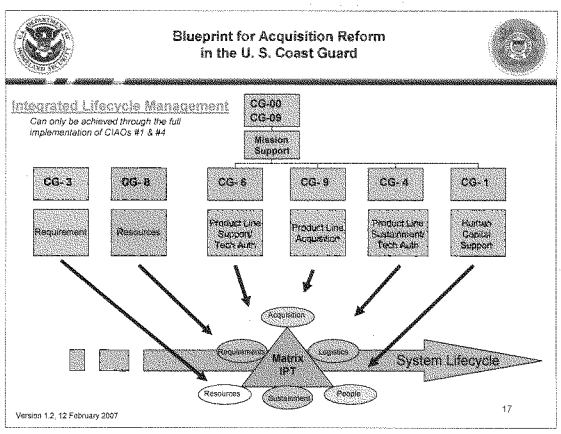
- Formal Investment Review Process in place for review and approval of major investments
- Validates requirements and ensures affordability
- Ensures spending supports DHS missions

Decision Milestones

- Project Initiation milestone (CG unique) to document mission analysis and assess preliminary affordability
- Internal (CGARC) and External (DHS JRC/IRB) milestone approval required prior to moving into next acquisition phase
- Exit Criteria have to be satisfied and satisfactory progress demonstrated at each milestone
- Investment performance reviewed annually by CG Acquisition Executive and all Stakeholders
- Both internally and externally, budget planning, review and approval tasks must be aligned to ensure adequate oversight and policy compliance, while focusing on efficient project execution.



- Critical elements and functions required for successful acquisition execution are disparate and not aligned in process
- As a result of a lack of expertise borne from experience, Project Managers do not exercise strategic management
- By default, Contract Officers assume a larger role than desired creating an imbalance in overall project management. This results in management by "line item" rather that strategic project management
- Requirements are generated, then passed to the acquiring activity without interactive review during the acquisition process
- The planning, programming and budgeting (Resources) authority does not dynamically interact with the acquisition process. Need to expand Below the Threshold Reprogramming Authority.
- R & D is not centrally connected to the acquisition process. Doing so will provide the PM with a critical set of tools.
- Although this system has produced success in medium sized, asset-based projects, its is not suitable for large, complex contract execution, particularly those involving C4I/IT requirements.
- A new, fully integrated and aligned process must be established to focus, coordinate and strategically manage projects
- All component parts must interact strategically over the life of the acquisition to most efficiently produce the required capability
- In particular, the Project Manager must be empowered to lead the whole process from a strategic perspective
- Requirements must be reviewed on a cyclical basis to revalidate through the lens of affordability and technical achievability



- Staff elements contributing to project execution must contribute to the effort, under the leadership of the designated Project Manager, in a matrix Integrated Project Team which, once chartered, will exist throughout the lifecycle of the system being acquired
- Leadership of the matrixed IPT can change as the system matures, but the core competencies represented remain in place throughout the lifecycle
- This reality can only be realized through implementation of the Mission Support (SYSCOM) structure defined in CIAO#1 & CIAO#4
- Interim steps can be taken to structure the acquisition phase IPTs in advance of the full realization of the Mission Support structure

Blueprint for Acquisition Reform
in the U. S. Coast Guard

What the Blueprint for Acquisition Reform Yields

Phase I (CIAO #1 +):

- **Single Coast Guard Executive Point of Contact for Acquisition**
- **Standard Acquisition Processes & Doctrine**
- **Disciplined and Balanced Project Management**
- **Centralized Contracting Operations and Policy**
- **Systems Acquisition Using the Product Line Model**

Phase II (CIAO #1 & #4 +):

- **Product Line Management through Asset Lifecycle**
- **Resolved Governance of Acquisition Initiatives**
- **A Viable Acquisition Workforce Career Path for Military and Civilian Employees**
- **Enhanced Ability to Acquire at the Major and Non-Major System Levels**
- **Ability to Manage Systems Integrators**
  - **DoD or OGA**
  - **Commercial Contract**

Enhanced Mission Execution Through Efficient Acquisition and Lifecycle Management of Critical Assets and Capabilities

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• Implementation of this "Blueprint" will position the Coast Guard well on the road to becoming a model for mid-sized Federal agency acquisition processes, functionality and workforce.

• Although incremental results will be realized through the implementation of CIAO#1 and the Blueprint, full benefit will only be achieved when CIAO#4 is fully in place.

Blueprint for Acquisition Reform in the U. S. Coast Guard

Phase I & II Implementation Yields

Problem, Issue or Concern	Status Quo	New Model
Aligned Acquisition Processes		
Governance		
R & D Support of Acquisition		
Standard PM Support Functions		
Centralized Contracting Authority		
Workforce Development & Cert		
Lifecycle Systems Management		
Common Acquisition Doctrine		
Decision Tools & Internal Controls		

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Additional Slides/Backup

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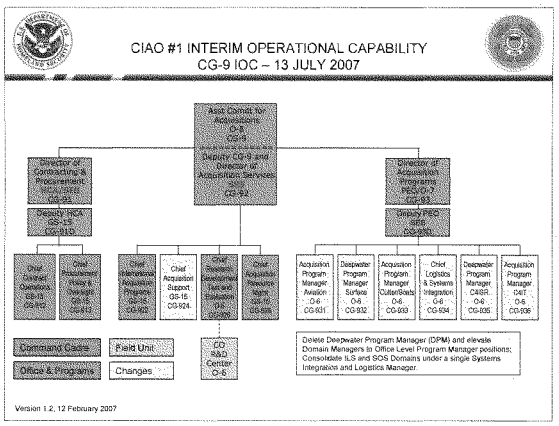
CIAO #1 INTERIM OPERATIONAL CAPABILITY
CG-9 IOC – 13 JULY 2007
Asst Comdt for Acquisitions O-9 CG-9
Deputy CG-9 and Director of Acquisition Services SES CG-92
Director of Contracting & Procurement SES CG-91
Deputy PCA GS-15 CG-910
Chief Deputy Operations GS-15 CG-911
Chief Procurement Policy & Oversight GS-15 CG-912
Chief International Acquisition Programs GS-15 CG-921
Chief Acquisition Support GS-15 CG-924
Chief Research Development Test and Evaluation GS-15 CG-925
Chief Acquisition Resource Mgmt GS-15 CG-926
Director of Acquisition Programs PEO/O-7 CG-93
Deputy PEO SES CG-930
Acquisition Program Manager Aviation O-6 CG-931
Deepwater Program Manager Surface O-6 CG-932
Acquisition Program Manager Cutter/Boats O-6 CG-933
Chief Logistics & Systems Integration O-6 CG-934
Deepwater Program Manager C4ISR O-6 CG-935
Acquisition Program Manager C4IT O-6 CG-936
Command Cadre
Field Unit
Office & Programs
Changes
CG R&D Center O-6
Delete Deepwater Program Manager (DPM) and elevate Domain Managers to Office Level Program Manager positions; Consolidate ILS and SOS Domains under a single Systems Integration and Logistics Manager.
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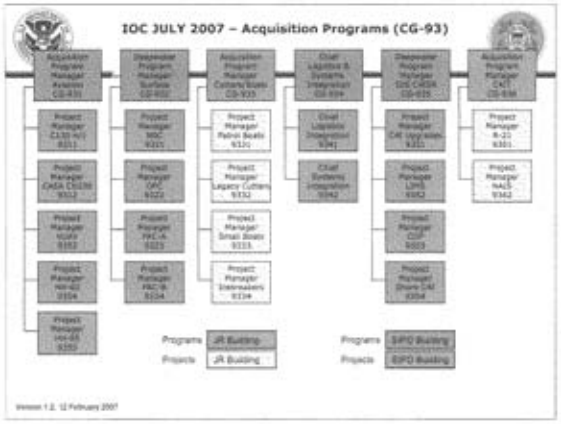
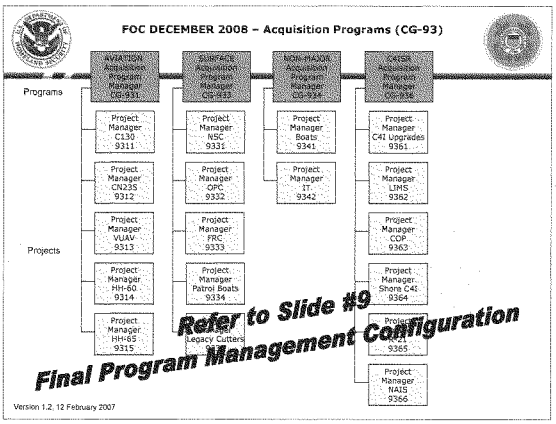

IOC JULY 2007 – Acquisition Programs (CG-93)
Programs
Projects
Programs
Projects


FOC DECEMBER 2008 – Acquisition Programs (CG-93)
Programs
Projects
AVIATION Acquisition Program Manager CG-931
SURFACE Acquisition Program Manager CG-932
NON-MAJOR Acquisition Program Manager CG-934
C4ISR Acquisition Program Manager CG-936
Project Manager C130 9311
Project Manager CN235 9312
Project Manager VUAV 9313
Project Manager HH-60 9314
Project Manager HH-65 9315
Project Manager NSC 9331
Project Manager OPC 9332
Project Manager FRC 9333
Project Manager Patrol Boats 9334
Project Manager Legacy Cutters 9335
Project Manager Boats 9341
Project Manager IT 9342
Project Manager C4I Upgrades 9361
Project Manager LIMS 9362
Project Manager COP 9363
Project Manager Shore C4I 9364
Project Manager 9365
Project Manager NAIS 9366
Refer to Slide #9
Final Program Management Configuration
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Future Initiatives

- Create Acquisition Career Paths (military and civilian)
  - Project Manager Tour lengths
  - Project Manager Selection
  - Project Manager and Deputy Project Manager Hybrid Structure (Best Qualified O-6/GS-15)
  - Precepts to Promotion Boards

Blueprint for Acquisition Reform in the U. S. Coast Guard

CIAO #1: Guiding Principles

- Optimize span of control at all levels
  - Establish clear lines of governance and communication
  - Align adequate Flag and SES positions
  - Consider need to co-locate SIPO with CG-9
  - Align with enterprise architecture
  - Align processes using Product Line Manager concept
- Enable organic contracting or contract systems integration
  - Ensure capability to provide synergistic Program Mgmt & KO functions
- Support full life cycle management of assets and systems
- Provide career progression and development of workforce competency (Military & Civilian)
- Minimize disruption to existing acquisitions during org changes
  - Allocate personnel within existing resource levels (initially)

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Blueprint for Acquisition Reform in the U. S. Coast Guard

CIAO #1: Structural Considerations

- Product Line Organization aligned w/ CG-3 (Ops), CG-4 (Log/Eng), CG-6 (IT)
- Asset sustainment to be managed by "field" product line managers
- Project Management (PM) Staff Construct
  - Core PM Staff: PM, dPM, Tech Mgr, COTR, Program Analyst, KO)
  - Core PM Matrix Members: Business Mgr, Logistics Mgr, Systems Engineer, Sponsor's Representative)
- PM is resourced, empowered, responsible, and *accountable*
  - positioned to manage workload and life cycle issues
- Improved PM career progression/succession at all levels
- Improve functional competency development in workforce
  - technical, financial, logistics

Version [illegible], [illegible] February [illegible]

Blueprint for Acquisition Reform in the U. S. Coast Guard

CIAO #1: Key Established Positions

AAE: Agency Acquisition Executive
- Chairs CG Acquisition Review Council (CGARC)
- DHS Investment Review Board member

CG-9: Assistant Commandant for Acquisition
- Oversees systems acquisition management process
- Ensures compliance with DHS investment review policy
- Single entity responsible for Agency-level acquisition

CFO: Chief Financial Officer
- Budgeting & Funds Management
- CFO Act compliance

HCA: Head of Contracting Activity
- Oversees all CG contracting activities
- Responsibility for all CG procurement policy and oversight
- Certification and Warranting of all procurement professionals
- Debarment Official
- Competition Advocate

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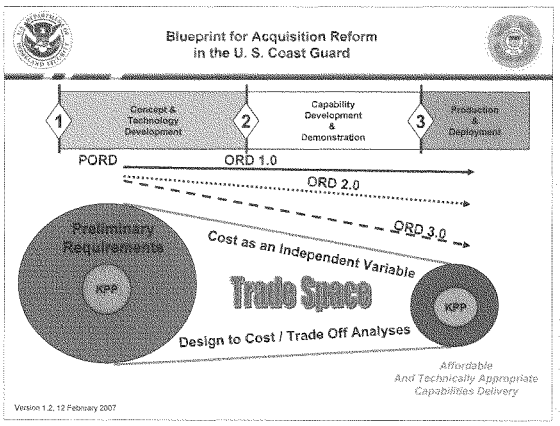
Blueprint for Acquisition Reform
in the U. S. Coast Guard
1
Concept & Technology Development
2
Capability Development & Demonstration
3
Production & Deployment
PORD
ORD 1.0
ORD 2.0
ORD 3.0
Preliminary Requirements
KPS
Cost as an Independent Variable
Trade Space
KPP
Design to Cost / Trade Off Analyses
Affordable
And Technically Appropriate
Capabilities Delivery
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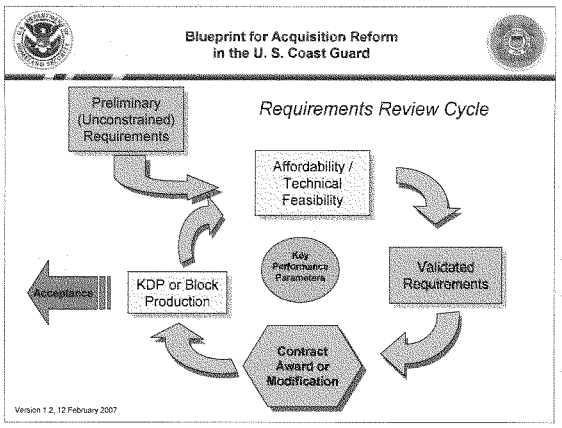
Blueprint for Acquisition Reform
in the U. S. Coast Guard
Requirements Review Cycle
Preliminary (Unconstrained) Requirements
Affordability / Technical Feasibility
Key Performance Parameters
Validated Requirements
Contract Award or Modification
KDP or Block Production
Acceptance
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Annex to the Blueprint for Acquisition Reform

Action Plan for
Organizational Alignment and Leadership
(Executive Sponsor: CG-9D)

Overview: Within the "Blueprint for Acquisition Reform," the first cornerstone of the assessment framework focuses on Organizational Alignment and Leadership. Organizational alignment means that the acquisition function is appropriately placed within the organization and that stakeholders involved in acquisition have clearly defined roles and responsibilities. Executive leadership means that senior leaders provide support for executing the acquisition function. Executive leadership determines the relationship between the various functional departments and is key to strengthening the interaction between the agency's management and employees.

Intent: The Acquisition Directorate will use the two elements and five critical success factors, that comprise Organizational Alignment and Leadership, to ensure proper organizational placement of the acquisition function, align stakeholder roles and responsibilities, and enhance leadership effectiveness.

Goal: The goal of organizational alignment is to ensure that the acquisition function enables the USCG to meet overall missions and needs. Clear, strong, and ethical executive leadership helps enable the USCG to work in an integrated fashion toward common goals.

Action Plan: The Acquisition Directorate will execute the following plan with completion dates and lead point of contact (POC) identified. Action Items are listed beneath each Critical Success Factor. The lead POC will track and monitor progress and brief the Executive Sponsor quarterly. This action plan will be reviewed and updated annually during the first quarter of the fiscal year.

Element: Align Acquisition with Agency's Missions and Needs

Planned Completion	**Lead POC**	**Critical Success Factor: Assure Appropriate Placement of the Acquisition Function**
3Q FY07	CG-9282/ CG-91	Benchmark percentage of discretionary budget which the USCG spends on acquisition of goods and services.
3Q FY07	CG-924	Ensure overarching roles and responsibilities of the acquisition function and acquisition personnel in the USCG are well defined.
4Q FY07	CG-9281	Establish USCG-wide award to recognize efforts made by acquisition personnel who contribute strategically to achieving USCG missions.
Planned Completion	**Lead POC**	**Critical Success Factor: Organize the Acquisition Function to Operate Strategically**
4Q FY09	CG-9	Continue to move forward with establishing the single acquisition structure initiated as part of Commandant's Intent Action Order (CIAO) #1. (Transitional Operational Capability (TOC): 1 Apr 07, Initial Operational Capability (IOC): 13 Jul 07, Final Operational Capability (FOC) 4QFY09). Ensure proper alignment with the future mission support organization CIAO #4 as well as with life cycle support.
3Q FY07	CG-9sa	Speak with one acquisition voice. Update and publish the mission and vision of the consolidated acquisition organization.
4Q FY07	CG-91/92/93	Identify controls that assess the health of the acquisition function.
4Q FY07	CG-9283	Update/Identify/Track/Publish outcome-oriented performance metrics for major acquisition programs related to acquisition efficiency, effectiveness, and results. Link to and demonstrate usefulness of achieving agency mission and goals.
4Q FY07	CG-9D	Develop and publish a Statement of Principles regarding acquisition throughout the USCG.
4Q FY07	CG-9	Strengthen contracting. Incorporate the Head Contracting Activity (HCA) as part of CG-9. Hire a dedicated Senior Executive to perform the HCA function.

Annex to the Blueprint for Acquisition Reform

Action Plan for
Organizational Alignment and Leadership
(Executive Sponsor: CG-9D)

Element: Align Acquisition with Agency's Missions and Needs (Continued)

Planned Completion	Lead POC	Critical Success Factor: Organize the Acquisition Function to Operate Strategically
4Q FY08	CG-91	Centralize contracting and procurement management. Standardize policies and processes. Ensure alignment with DHS.
3Q FY07	CG-9D	Incorporate Research, Development, Test & Evaluation (RDT&E) as part of the CG-9 organization
4Q FY07	CG-9D	Establish and provide centralized mechanisms for acquisition support in the areas of Budget and Financial Management, Workforce Management, Logistics Management and Systems Engineering.
4Q FY07	CG-93	Establish a product line acquisition and management organization.
3Q FY07	CG-93	Identify the leadership and reporting structure for the CG-93 Process Team.
3Q FY07	CG-93D	Evaluate the appropriate number of program manager/deputy program manager positions
3Q FY07	CG-9	Investigate need to establish internal oversight staff for acquisition governance
4Q FY07	CG-9	Investigate delegation of CG Acquisition Executive Authority

Element: Commitment from Leadership

Planned Completion	Lead POC	Critical Success Factor: Clear, Strong, and Ethical Executive Leadership
4Q FY07	CG-9	Ensure the USCG Assistant Commandant for Acquisition is properly designated and empowered by senior leaders in the Service as well as Department of Homeland Security.
4Q FY07	CG-9	Examine existing infrastructure for providing executive leadership (e.g., Overarching Matrix Team (OMT), Coast Guard Acquisition Resource Council (CGARC), etc.) with a view to establishing an appropriate forum to promote integration and coordination among the agency's budgetary processes and human capital, acquisition, and financial management functions.
4Q FY07	CG-9D	Review acquisition-related internal controls for sufficiency
4Q FY07	CG-924	Review and update, as necessary, the ethics code of conduct for the consolidated Acquisition Directorate.
1Q FY08	CG-924	Ensure ethics training on interacting with the contractor community is conducted by all personnel within the acquisition workforce on an annual basis.
Planned Completion	**Lead POC**	**Critical Success Factor: Effective Communications and Continuous Improvement**
4Q FY07	CG-9283	Expand and build upon existing USCG surveys (e.g., G-D, CG-85, etc.) to solicit views on the effectiveness of communications, effectiveness of acquisition processes, and areas needing improvement.
4Q FY07	CG-9283	Ensure processes are in place to develop, deploy and report metrics and identified internal controls.
4Q FY08	CG-9D	Continue coordination across acquisition functions to improve business processes, eliminate redundancy and inconsistency, and maximize leveraging of resources to meet common/shared requirements.

Annex to the Blueprint for Acquisition Reform

Action Plan for
Policies & Processes
(Executive Sponsor: CG-9D)

Overview: Within the "Blueprint for Acquisition Reform," the second cornerstone of the assessment framework focuses on Policies & Processes. Policies and processes embody the basic principles that govern the way an organization performs the acquisition function. To be effective, policies and processes must be accompanied by controls and incentives to ensure they are translated into practice. Major acquisitions require special attention to promote successful outcomes.

Intent: Use the three elements and eight critical success factors, comprising Policies & Processes, to improve implementation of the acquisition function within the USCG.

Goal: The goal of effective policies and processes is to improve acquisition outcomes. Policies and processes also enhance partnering by the USCG Acquisition Directorate with other USCG organizations and raise awareness of external factors that could impact acquisitions.

Action Plan: The Acquisition Directorate will execute the following plan with completion dates and lead point of contact (POC) identified. Action Items are listed beneath each Critical Success Factor. The lead POC will track and monitor progress and brief the Executive Sponsor quarterly. This action plan will be reviewed and updated annually during the first quarter of the fiscal year.

Element: Planning Strategically

Planned Completion	**Lead POC**	**Critical Success Factor: Partnering with Internal Organizations**
3Q FY07	CG-924	Conduct Requirements (Mission Needs Statement (MNS), Operational Requirements Document (ORD)) workshop with sponsors
4Q FY07	CG-924	Update Major Systems Acquisition Manual (MSAM) to reflect collaborative requirements process
4Q FY07	CG-924	Update MSAM to reflect systems program management
4Q FY07	CG-924	Update MSAM to reflect Acquisition Strategy process
4Q FY07	CG-924	Conduct Acquisition Planning workshop with sponsors
4Q FY08	CG-924	Investigate transferring DHS Investment Review Process (IRP) responsibility from CG-512 to CG-924
4Q FY07	CG-924	Document Requirements and Acquisition Planning lessons learned
4Q FY07	CG-924	Promulgate policy (i.e., Commandant Instruction 5000.9) for CG acquisition roles and responsibilities
Planned Completion	**Lead POC**	**Critical Success Factor: Assessing Internal Requirements and the Impact of External Events**
As resourced	CG-924	Baseline prior acquisition/contracting strategies of major systems for inclusion in lessons learned database.
Ongoing	CG-91	Track new or pending legislation that affects acquisition policies and processes
Ongoing	CG-91	Review Acquisition Plans (APs) with consideration of CG-wide needs (including non-majors)
Ongoing	CG-93	Monitor AP submittal with Advanced Acquisition Planning (AAP) forecasts

Element: Effectively Managing the Acquisition Process

Planned Completion	**Lead POC**	**Critical Success Factor: Empowering Cross-Functional Teams**
As required	CG-924	Conduct Independent Verification & Validation (IV&V) cost, schedule, and performance measurement baselines for major systems
3Q FY07	CG-924	Create cross-functional team to review draft acquisition/contracting strategies for major systems
3Q FY07	CG-924	Create cross-functional team to review draft Requests for Proposals (RFPs) for major systems

Annex to the Blueprint for Acquisition Reform

Action Plan for
Policies & Processes
(Executive Sponsor: CG-9D)

Element: Effectively Managing the Acquisition Process (Continued)

Planned Completion	Lead POC	Critical Success Factor: Empowering Cross-Functional Teams
As required	CG-93	Conduct cross-functional review (acquisition/contracting strategy and RFPs) for major systems
4Q FY08	CG-9281	Appropriately empower the Program Manager (PM) and Project Manager (PJM). Institute processes to demonstrate value of the PM/PJM (e.g., develop promotion board precepts, develop uniform insignia, etc.)
Planned Completion	**Lead POC**	**Critical Success Factor: Managing and Engaging Suppliers**
Annually	CG-91	Conduct training on Government and Contractor relationships
Planned Completion	**Lead POC**	**Critical Success Factor: Monitoring and Providing Oversight to Achieve Desired Outcomes**
3Q FY07	CG-9283	Establish Earned Value Management (EVM) policies and processes for proper oversight
2Q FY08	CG-91	Conduct strategic review of AAPs to assess workload & training requirements
3Q FY07	CG-91	Track training & certification, and assignment of USCG Contracting Officer's Technical Representatives (COTRs).
Ongoing	CG-9282	Track and communicate financial information for proper oversight
1Q FY08	CG-9282	Investigate integration of financial management and contract management systems
As required	CG-924	Monitor corrective action Remediation Plans in DHS Periodic Report

Element: Promoting Successful Outcomes of Major Projects

Planned Completion	Lead POC	Critical Success Factor: Using Sound Capital Investment Strategies
Annually	CG-9282	Ensure capital investments linked to missions
As required	CG-9282	Review Exhibit 300 submissions and Acquisition Program Baselines (APB) for link to CG/DHS missions
4Q FY08	CG-9282	Ensure all investments linked to DHS strategic goals
4Q FY08	CG-9282	Establish a position on resource/budget reform that will provide the acquisition function with the agility to respond to changing requirements as documented in APB revisions
Planned Completion	**Lead POC**	**Critical Success Factor: Employing Knowledge-Based Acquisition Approaches**
4Q FY07	CG-924	Link Project Identification phase with Capital Planning & Investment Control (CPIC) process that takes into account affordability, risks & priority.
4Q FY07	CG-924	Propose process for Milestone (MS) 0 review and approval to include process to verify mission analyses.
3Q FY07	CG-926/CG-93	Institute third-party independent review process for conducting programmatic assessments, determining technical maturity and verifying design stability
4Q FY07	CG-9283	Develop knowledge-based decision tools for acquisition oversight

Annex to the Blueprint for Acquisition Reform

Action Plan for
Human Capital
(Executive Sponsor: CG-9D)

Overview: Within the "Blueprint for Acquisition Reform," the third cornerstone of the assessment framework focuses on Human Capital. Human capital policies and practices should support an organization's overall missions and performance goals.

Intent: Use the four elements and eight critical success factors, comprising Human Capital, to determine whether the USCG has the appropriate human capital to execute the acquisition function.

Goal: The goal of human capital is to ensure that the USCG has the right staff in the right numbers applying skills where needed to accomplish the mission effectively.

Action Plan: The Acquisition Directorate will execute the following plan with completion dates and lead point of contact (POC) identified. Action Items are listed beneath each Critical Success Factor. The lead POC will track and monitor progress and brief the Executive Sponsor quarterly. This action plan will be reviewed and updated annually during the first quarter of the fiscal year.

Element: Valuing and Investing in the Acquisition Workforce

Planned Completion	Lead POC	Critical Success Factor: Commitment to Human Capital Management
4Q FY07	CG-9283	Expand and build upon existing Workforce Satisfaction Surveys (e.g., G-D, CG-85, etc.) to monitor human capital management performance and understand issues such as effects on the workforce from consolidation activities, press reports on employee morale and what can be done to assuage any real or perceived human capital issues. Survey results will be reported to CG9 senior leadership and shared with staff as well.
1Q FY08	CG-9D	Investigate and assess the value of establishing an Office of Acquisition Workforce Management to focus exclusively on managing all USCG Acquisition Human Capital issues including strategic workforce planning and development, training, recruiting, retention, and succession planning.
Planned Completion	**Lead POC**	**Critical Success Factor: Role of the Human Capital Function**
3Q FY08	CG-9281	Upon completion of strategic workforce plan, develop processes to ensure right workforce is in the right place at the right time to execute planned acquisitions.

Element: Strategic Human Capital Planning

Planned Completion	Lead POC	Critical Success Factor: Integration and Alignment
Ongoing	CG-9281	Examine and revise functional statements at the unit and individual level to create increased understanding and alignment of functions
4Q FY07	CG-9281	Work with CG-9 managers to clarify roles and responsibilities of CG-9 acquisition positions.
Ongoing	CG-9281	Work with CG-1 to update current acquisition Position Descriptions (PDs).
2QFY07	CG-9281	Ensure alignment of newly developed Position Descriptions (PDs) with roles and responsibilities for new hires under CG-9 organization to facilitate selection process for hiring qualified acquisition personnel.

Annex to the Blueprint for Acquisition Reform

Action Plan for
Human Capital
(Executive Sponsor: CG-9D)

Element: Strategic Human Capital Planning (Continued)		
Planned Completion	**Lead POC**	**Critical Success Factor: Data-Driven Human Capital Decisions**
1Q FY08	CG-9281	Develop and implement a comprehensive long-range Strategic Workforce Plan describing the necessary competencies of the CG-9 acquisition workforce, and the specific individual level skill sets needed to execute and sustain current and future acquisition efforts (E.g., Adjust acquisition workforce profile to adapt to changes in budget and program direction.)
2Q FY09	CG-9281/3	Implement CG-9 Workforce Management System- Automated system for capturing and analyzing key workforce data including Level of Effort (LOE) by task and function, FTE shortfall and surplus by project, workload management, training requirements and delivery, etc.
4Q FY07	CG-9281/3	Institute more robust human capital measure set including; ratio of offers to acceptances, average employee tenure, reasons for separation, training evaluation survey data, etc.
Ongoing-Beginning 2Q FY08	CG-9 Managers	Make workforce management and development decisions- hiring, reprogramming, training- using FTE and skill set needs projections and analysis derived from the Strategic Workforce Plan

Element: Acquiring, Developing, and Retaining Talent

Planned Completion	**Lead POC**	**Critical Success Factor: Targeted Investments in People**
Beginning 4Q FY07	CG-9281	Transition/develop specific individual skills- through training, education, and internships.
Ongoing	CG-9281	Expand and track use of current Federal programs for merit-based step/grade increases, bonuses, and recognition.
4Q FY07	CG-9283	Extend human capital database that tracks acquisition certification to include CG-9 personnel.
1Q FY08	CG-9281	As part of the Strategic Workforce Plan, work with CG-1 to implement succession planning thru workforce development to build deep bench strength of internally qualified candidates. Enhance acquisition career paths for civilian/military acquisition workforce.
Planned Completion	**Lead POC**	**Critical Success Factor: Human Capital Approaches Tailored to Meet Organizational Needs**
Ongoing-Beginning 3Q FY07	CG-9281	Work with CG-1 to identify and apply creative pay, recruitment, retention and other incentives (to include direct hire authority) as allowed for under existing Federal regulations, statutes, and policies.
1Q FY08	CG-9281	Develop CG-9 Strategic Human Capital Framework and Plan of Action & Milestones (POA&M), detailing policy and practices to ensure the right acquisition workforce is in place at the right time to execute the acquisition mission
4Q FY08	CG-9281	Develop process for PM/PJM Screening and Selection
4Q FY08	CG-9281	Institute innovative approaches to indoctrinate and train the acquisition workforce to include mandatory entry-level training, tailored CG Training (e.g., Major Acquisition Process Training (MAPT), Flag/Executive MAPT, etc.), professional development seminars, mentorship programs, maintaining certifications and training opportunities through DAU and Federal Acquisition Institute (FAI).

Annex to the Blueprint for Acquisition Reform

Action Plan for
Human Capital
(Executive Sponsor: CG-9D)

Element: Creating Results-Oriented Organizational Cultures

Planned Completion	**Lead POC**	**Critical Success Factor: Empowerment and Inclusiveness**
4Q FY07	CG-93	Implement the CG-9 Project Manager-centric acquisition execution model
Ongoing-Beginning 4Q FY07	CG-924	Develop & provide workforce training in Integrated Product Team (IPT) and Integrated Product and Process Development (IPPD) acquisition approaches
Planned Completion	**Lead POC**	**Critical Success Factor: Unit and Individual Performance Linked to Organizational Goals**
Ongoing	CG-9281	Coordinate and facilitate training for effected CG-9 workforce and ensure proper implementation of MaxHR.
Ongoing	CG-9281	Facilitate ongoing MaxHR use and associated workforce management system.

Annex to the Blueprint for Acquisition Reform

Action Plan for
Knowledge & Information Management
(Executive Sponsor: CG-9D)

Overview: Within the "Blueprint for Acquisition Reform," the fourth cornerstone of the assessment framework focuses on Knowledge & Information Management. Knowledge and information management refers to a variety of technologies and tools that help managers and staff make well-informed acquisition decisions.

Intent: Use the two elements and five critical success factors, comprising Knowledge & Information Management, to ensure the availability of data essential to making good acquisition decisions.

Goal: The goal of knowledge and information management is to identify opportunities to reduce costs, improve service levels, measure compliance with supplier agreements, and provide better management of service providers.

Action Plan: The Acquisition Directorate will execute the following plan with completion dates and lead point of contact (POC) identified. Action Items are listed beneath each Critical Success Factor. The lead POC will track and monitor progress and brief the Executive Sponsor quarterly. This action plan will be reviewed and updated annually during the first quarter of the fiscal year.

Element: Identifying Data and Technology that Support Acquisition Management Decisions

Planned Completion	Lead POC	Critical Success Factor: Tracking Acquisition Data
1Q FY08	CG-93	Implement EVM on all required acquisition projects in accordance with DHS requirements (e.g., using X-12 format, etc.)
1Q FY08	CG-924	Develop metrics to assess the effectiveness of the acquisition function for major systems
1Q FY08	CG-93	Develop a CG-9 Integrated Master Plan and Integrated Master Schedule for all projects and track status
4Q FY07	CG-9282/3	Develop Key Financial/Schedule/EVM reports and provide training for all program and project managers
4Q FY07	CG-9281/3	Revise HR metrics to include workforce training and education data and customer and employee satisfaction surveys
1Q FY08	CG-9281/3	Develop retention and recruitment metrics and strategies to monitor them
4Q FY07	CG-9282/3	Develop comprehensive financial metrics to include obligation and expenditure targets, undelivered obligations, interest, and aged commitments
1Q FY08	CG-9283	Develop data sources to track contract process metrics (e.g., Contract Information Management System (CIMS), etc.)
2Q FY08	CG-9282/3	Develop automated and flexible budgeting systems for use by all major programs and projects
Planned Completion	**Lead POC**	**Critical Success Factor: Translating Financial Data into Meaningful Formats**
1Q FY08	CG-9283	Conduct study to evaluate adapting or converting the current Deepwater Performance Measurement System (DPMS) or other existing system to establish a single Acquisition Performance Measurement System (APMS)
1Q FY08	CG-924	Implement lessons learned database
As Resourced		Establish and maintain a knowledge repository for knowledge sharing that contains links to relevant GAO Reports, Best Practices, Training Information, Checklists, Templates, Sample Acquisition Plans/Documents, current acquisition references, and modeling information.
3Q FY07	CG-9283	Integrate all three Coast Guard accounting systems into a complete data set useable by all CG-9 personnel
4Q FY07	CG-9282/3	Develop obligation and expenditure reports for each program/project manager
4Q FY07	CG-9282/3	Develop financial reports to track expenditures and interest expense
1Q FY08	CG-9282/3	Develop financial reports for external reporting

Annex to the Blueprint for Acquisition Reform

Action Plan for
Knowledge & Information Management
(Executive Sponsor: CG-9D)

Element: Identifying Data and Technology that Support Acquisition Management Decisions (Continued)

Planned Completion	Lead POC	Critical Success Factor: Analyzing Goods and Services Spending
2Q FY08	CG-9281/3	Track and analyze training spending by organization
Annually	CG-9283	Track and analyze CG-9 credit card purchases

Element: Safeguarding the Integrity of Operations and Data

Planned Completion	Lead POC	Critical Success Factor: Ensuring Effective General and Application controls
1Q FY08	CG-9D	Identify need to develop, document, and/or evaluate new internal controls for acquisition functions to include contract awards
1Q FY08	CG-9283	Ensure all systems used by CG-9 have completed certification and accreditation
Ongoing		Ensure alignment of CG-9 information & knowledge systems with CG-wide technologies
Planned Completion	**Lead POC**	**Critical Success Factor: Data Stewardship**
annually	CG-9283	Conduct internal review to ensure CG-9 data is accurate, complete, timely and reliable
1Q FY08	CG-93	Ensure all contractors working major acquisitions for Coast Guard provide data in electronic format (i.e., X-12) directly from transactional systems

Blueprint for Acquisition Reform in the U. S. Coast Guard

The Way Ahead:

Phase I – CIAO 1 +

Phase II – CIAO 1 and 4 +

Assistant Commandant for Acquisition
Deepwater Program Executive Officer
12 February 2007

Version 1.2, 12 February 2007

Blueprint for Acquisition Reform in the U. S. Coast Guard

"The Coast Guard must become the model for mid-sized Federal agency acquisition in process, workforce and capability." ADM Thad Allen

The Coast Guard must have the organic ability to:

- Execute major systems acquisition of required assets and services in compliance with DHS policy.
- Employ an integrator to acquire assets compliant with a Coast Guard defined systems architecture in a performance-based contract environment.
- Execute non-major acquisitions to efficiently and effectively support missions, facilities, and infrastructure.

Blueprint for Acquisition Reform in the U. S. Coast Guard

Current State – Numerous Internal Acquisition Activities

- **Acquisitions Directorate**: Asset-based systems acquisition (DoD 5000 model >CG Major Systems Acquisition Manual)
- **Deepwater Program Executive Officer (PEO):** System of Systems performance-based acquisition using a non-governmental Systems Integrator (ICGS).
- **CG-3** (Operations Directorate), **CG-1** (Human Resources Directorate), **and CG-4** (Engineering and Logistics Directorate): Procurement of assets below the major systems threshold.
- **CG-6** (Telecommunications and Information Systems Directorate): Procurement of IT systems.
- **Field activities:** Acquisition of sub-systems level asset support.

Lack of standardized structure, process and accountability

Blueprint for Acquisition Reform in the U. S. Coast Guard

Past Assessment Reports

- *DHS - "Waste, Abuse, and Mismanagement in DHS Contracts", U.S. House of Representatives*, Committee on Government Reform, July 2006
- *USCG-"Observations on Agency Performance, Operations and Future Challenges"*, GAO-06-448T/June 2006
- *USCG-"Improvements Needed in Management Oversight of Rescue System Acquisition", GAO-06-623/May 2006*
- *USCG-"Changes to Deepwater Plan Appear Sound and Program Management has Improved but Continued Monitoring is Warranted"*, GAO-06-546/April 2006
- *DHS-"Success and Challenges in DHS' Efforts to Create an Effective Acquisition Organization", GAO-05-179/March 2005*
- *USCG-"Coast Guard's Deepwater Program needs Increased Attention to Management and Contractor Oversight", GAO-04-380/March 2004*
- *USCG-"New Communications System to Support Search and Rescue Faces Challenges", GAO-03-1111/September 2003*

Common Themes

Blueprint for Acquisition Reform in the U. S. Coast Guard

Common Causes for Coast Guard Acquisition Performance Problems

- Inadequate definition, understanding and/or stability of requirements
- Lack of acquisition expertise in program management
- Inability to effectively manage a systems integrator
- Inability to adequately assess programmatic risk
- Lack of expertise in cost estimation
- Suboptimal contract strategy formulation
- Inadequate senior level strategic program management and oversight
- Lack of continuity in key management positions
- Lack of knowledge management and decision support systems

These shortcomings are common across government acquisition

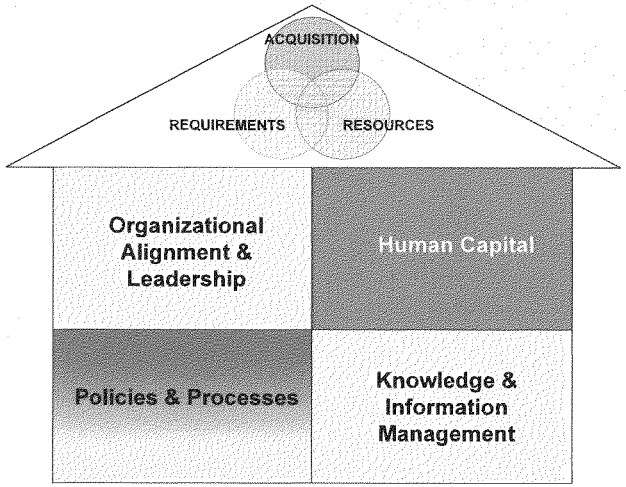
Blueprint for Acquisition Reform in the U. S. Coast Guard

Summary of Acquisition Reform Strategic Intent

- Enhance **mission execution** by delivering integrated systems, assets and support necessary to accomplish maritime safety and security tasking.
- Become the **model for mid-size Federal agency** acquisition and procurement.
- Establish adequate **balance** between requirements generation, acquisition management, and resource functions.
- Equip the Coast Guard to acquire major systems using **organic capability or through management of a systems integrator** when appropriate.
- Align Coast Guard **acquisition and procurement policies** with DHS review and process mandates
- Develop **organic workforce competencies** (military & civilian):
  - Program Management
  - Contracting (1102 series)
  - Business/Financial Management, Lifecycle Logistics, COTR, etc.
- **Reform organization** to facilitate efficient and effective execution:
  - Policies & Processes
  - Knowledge & Information Management
  - Human Capital
  - Organizational Alignment and Leadership

Blueprint for Acquisition Reform in the U. S. Coast Guard

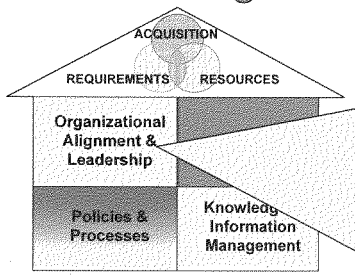
Acquisition Reform Framework for the USCG



Based on the standard GAO Agency Acquisition Assessment Model

Blueprint for Acquisition Reform in the U. S. Coast Guard

Organizational Alignment & Leadership



CREATING SINGLE ACQUISITION STRUCTURE (CIAO#1)

Integrated Approach

- Combine acquisition functionality
- Incorporate Head of Contracting Activity
- Incorporate Research, Development, Test and Evaluation
- Provide One Acquisition Voice

Centralized Program Execution

- Establish Product Line Acquisition and Management Organization
- Align with Future Mission Support Command (CIAO #4) for Lifecycle System Management

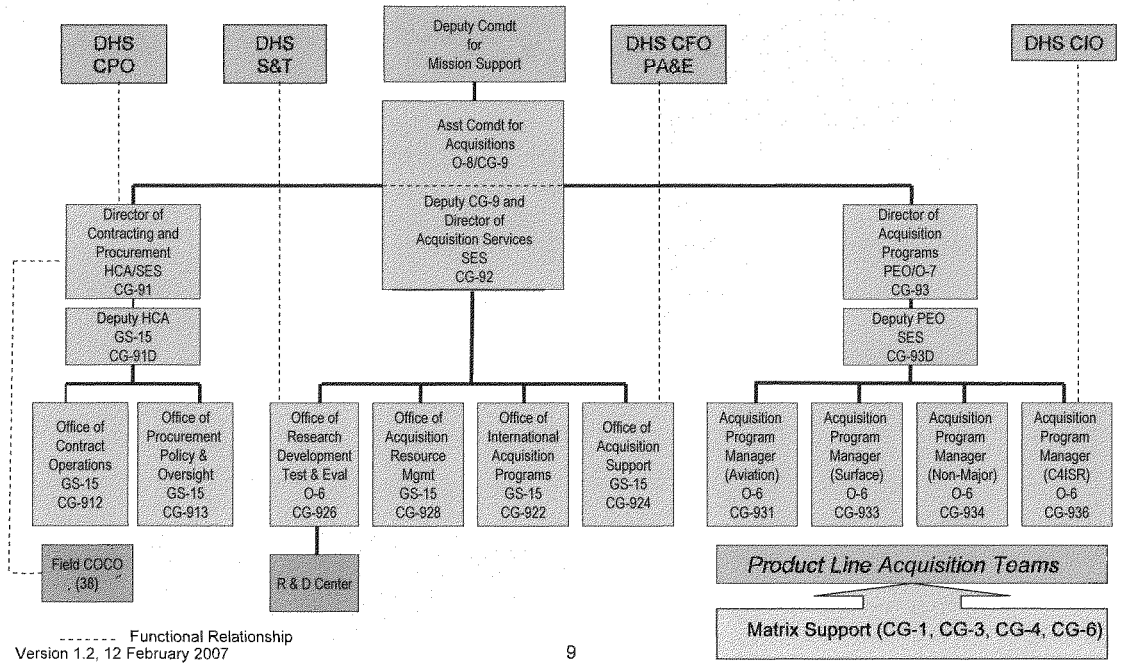
Centralized Support

- Standardized Budget and Financial Management
- Enterprise Workforce Management
- Logistics and Systems Engineering Competencies

Centralized Contracting and Procurement

- **Establish** Standard Policies
- Ensure Compliant Processes
- Align with DHS

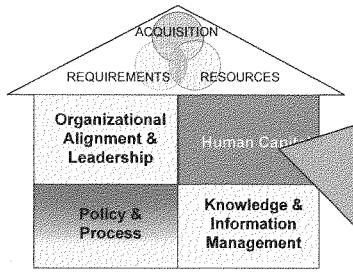
CG-9 Endstate



------- Functional Relationship

Blueprint for Acquisition Reform in the U. S. Coast Guard

Human Capital



RECRUITMENT, HIRING, AND RETENTION

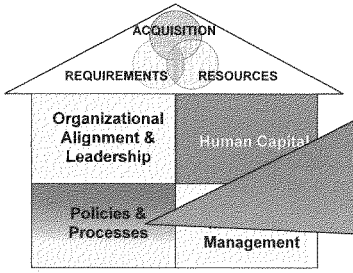
- Recruit, Hire, Retain Experienced & Certified Acquisition Professionals in Program Management, Contracting and other Career Fields
- Provide Pay Incentives
- Establish Internship Program
- Utilize Direct Hire Authority
- Implement Retention Initiatives
- Establish Project Manager Screening and Selection

TRAINING AND CERTIFICATION

- Mandatory Entry-level Training for Entire Acquisition Workforce
- Tailored CG Training (MAPT, E-MAPT and Flag/SES MAPT)
- Regular Professional Development Seminars
- Establish Mentorship Program (Gray Heads)
- Enhance Acquisition Workforce Certification Program
- Establish Re-current Training to Maintain Certification
- Fully Utilize DAU and FAI Training Opportunities

Blueprint for Acquisition Reform in the U. S. Coast Guard

Policy and Process

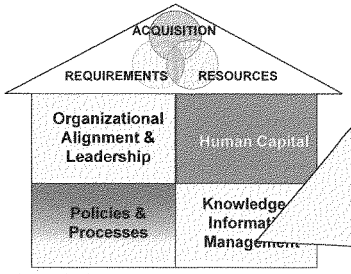


MAJOR SYSTEMS ACQUISITION MANUAL CIM5000.10

- **Policy, Process, and Procedures for Major Systems Acquisitions**
  - Align with DHS Missions and Investment Review Process
  - Establish Knowledge-Based Decision Tools
  - Institute Collaborative Requirements Development
- **Early Project Identification Phase (new CG Initiative)**
  - Link to Capital Investments, Mission and Strategic Goals
  - Verify Mission Analysis
  - Determine Affordability, Risks, and Priority
  - Require Milestone Decision (MS 0) for New Starts
- **Program Management**
  - Value Program Management (DHS PM Council/PM Uniform Insignia)
  - Conduct Independent Verification & Validation of Lifecycle Cost Estimates, Acquisition Program Baselines, and Risk Assessments
  - Utilize Third Party Programmatic Assessments & Support When Necessary

Blueprint for Acquisition Reform in the U. S. Coast Guard

Knowledge & Information Management



Lessons Learned Database

- Beta testing within CG - Expandable to DHS

Performance Measurement

- Use Earned Value (EV) Software
- Continue EVM Training
- Adopt Deepwater Performance Measurement System

Knowledge Sharing (CG Central and DHS PM Community Website))

- Library of GAO Reports
- Catalog Best Practices
- Share Training Information
- Publish Checklists, Templates, and Sample Acquisition Plans/Documents
- Establish Library of Current Acquisition References
- Fully Explore Modeling

Knowledge Management

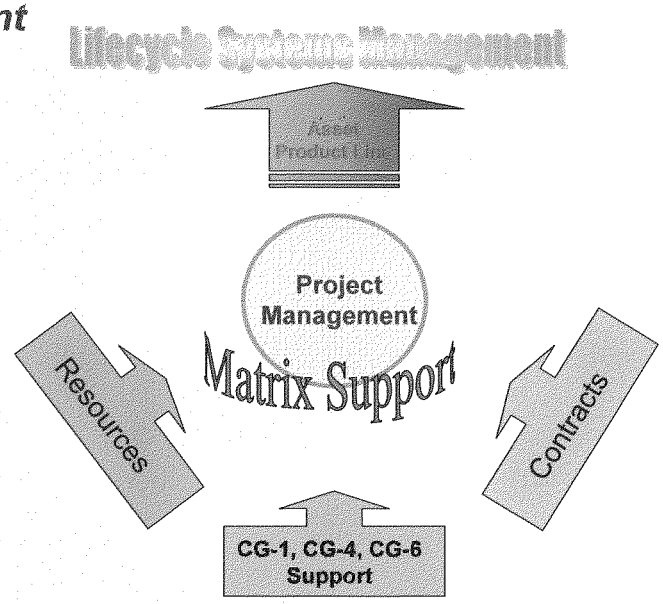
- Align with CG enterprise data / decision support systems

Key Concepts for Success

Blueprint for Acquisition Reform in the U. S. Coast Guard

PROGRAM MGMT

Project Management Model



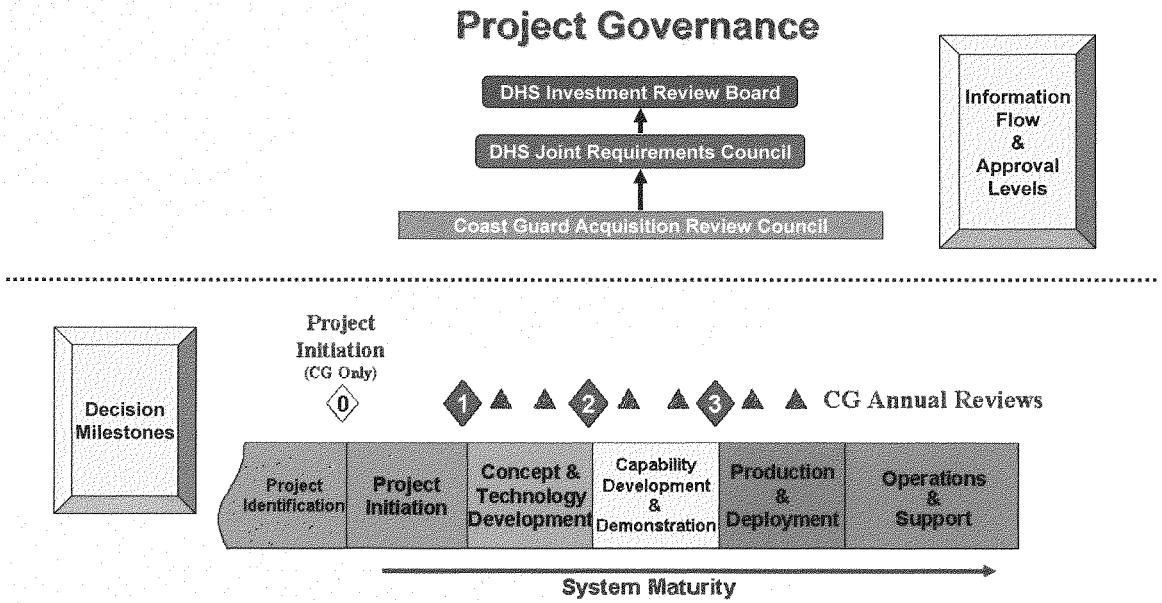
Project Managers *must be:*

- **Empowered**
- **Autonomous**
- **Resourced**
- **Trained**
- **Accountable**

This is key!

Blueprint for Acquisition Reform in the U. S. Coast Guard

Project Governance



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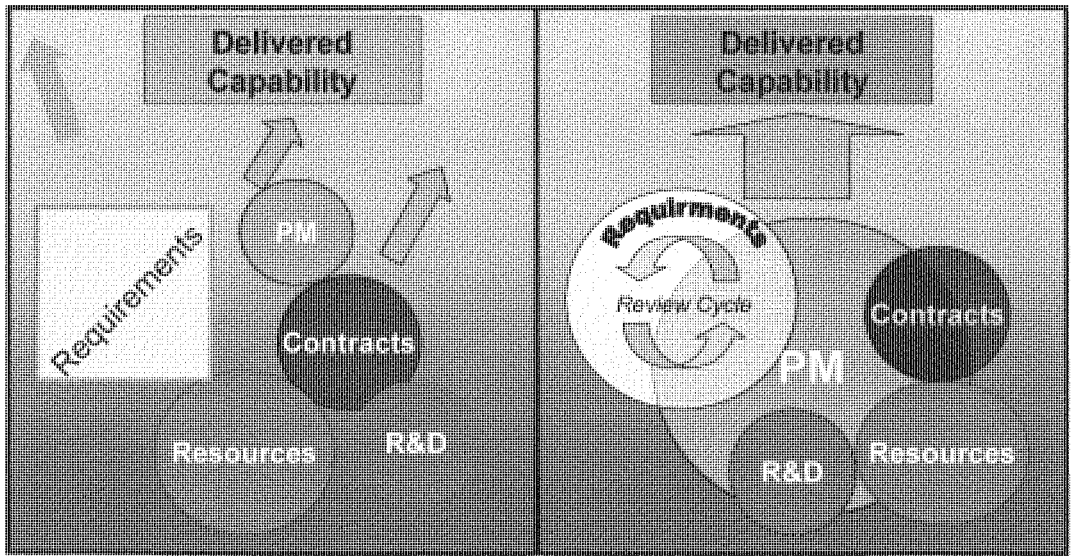
Project Management Balance



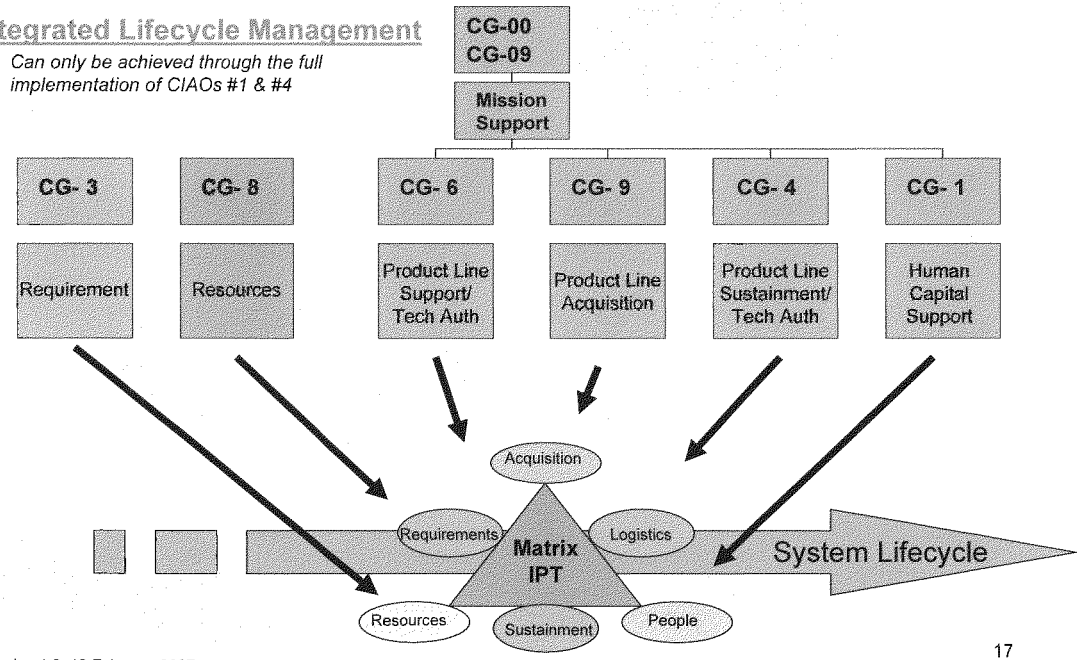
Current State

Desired State

Blueprint for Acquisition Reform in the U. S. Coast Guard

Integrated Lifecycle Management

Can only be achieved through the full implementation of CIAOs #1 & #4



What the Blueprint for Acquisition Reform Yields

Phase I (CIAO #1 +):

- **Single Coast Guard Executive Point of Contact for Acquisition**
- **Standard Acquisition Processes & Doctrine**
- **Disciplined and Balanced Project Management**
- **Centralized Contracting Operations and Policy**
- **Systems Acquisition Using the Product Line Model**

Phase II (CIAO #1 & #4 +):

- **Product Line Management through Asset Lifecycle**
- **Resolved Governance of Acquisition Initiatives**
- **A Viable Acquisition Workforce Career Path for Military and Civilian Employees**
- **Enhanced Ability to Acquire at the Major and Non-Major System Levels**
- **Ability to Manage Systems Integrators**
  - **DoD or OGA**
  - **Commercial Contract**

Enhanced Mission Execution Through Efficient Acquisition and Lifecycle Management of Critical Assets and Capabilities

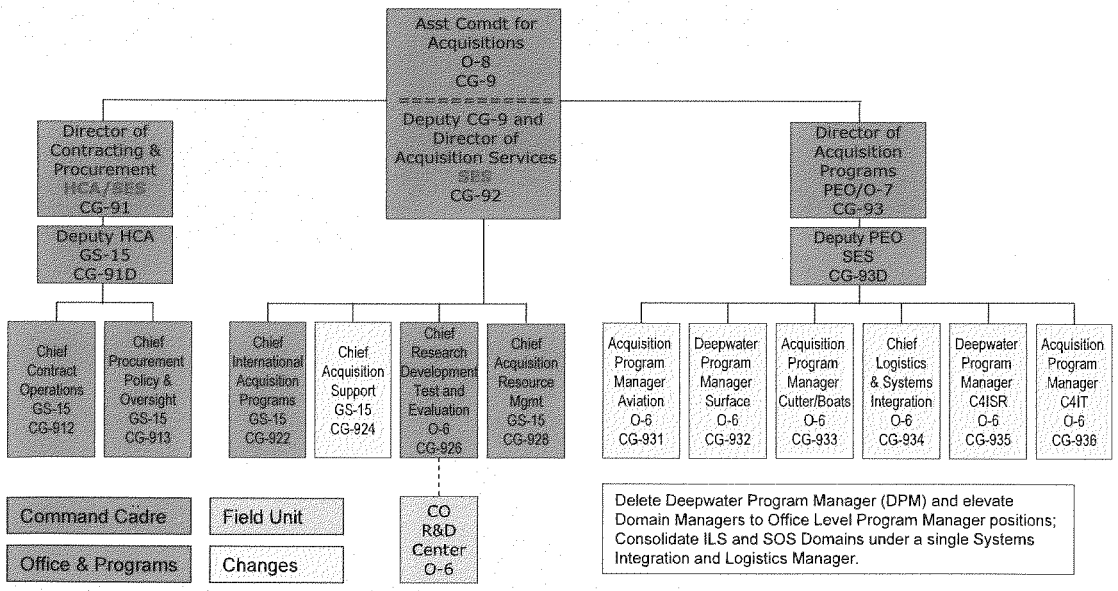
Blueprint for Acquisition Reform in the U. S. Coast Guard

Phase I & II Implementation Yields

Problem, Issue or Concern	Status Quo	New Model
Aligned Acquisition Processes		
Governance		
R & D Support of Acquisition		
Standard PM Support Functions		
Centralized Contracting Authority		
Workforce Development & Cert		
Lifecycle Systems Management		
Common Acquisition Doctrine		
Decision Tools & Internal Controls		

Additional Slides/Backup

CIAO #1 INTERIM OPERATIONAL CAPABILITY
CG-9 IOC – 13 JULY 2007



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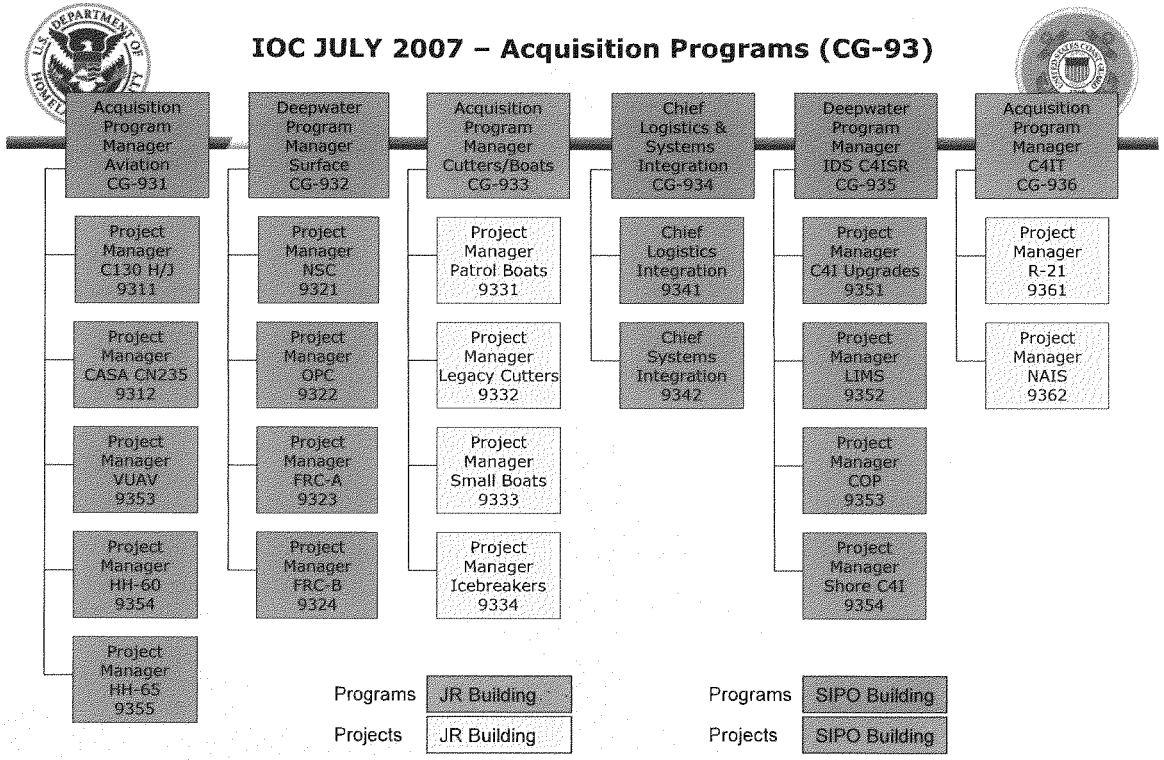
IOC JULY 2007 – Acquisition Programs (CG-93)



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FOC DECEMBER 2008 – Acquisition Programs (CG-93)

Programs

Projects

- AVIATION Acquisition Program Manager CG-931
  - Project Manager C130 9311
  - Project Manager CN235 9312
  - Project Manager VUAV 9313
  - Project Manager HH-60 9314
  - Project Manager HH-65 9315
- SURFACE Acquisition Program Manager CG-933
  - Project Manager NSC 9331
  - Project Manager OPC 9332
  - Project Manager FRC 9333
  - Project Manager Patrol Boats 9334
  - Project Manager Legacy Cutters [illegible]
- NON-MAJOR Acquisition Program Manager CG-934
  - Project Manager Boats 9341
  - Project Manager IT 9342
- C4ISR Acquisition Program Manager CG-936
  - Project Manager C4I Upgrades 9361
  - Project Manager LIMS 9362
  - Project Manager COP 9363
  - Project Manager Shore C4I 9364
  - Project Manager R-21 9365
  - Project Manager NAIS 9366

Refer to Slide #9

Final Program Management Configuration

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Future Initiatives

- Create Acquisition Career Paths (military and civilian)
  - Project Manager Tour lengths
  - Project Manager Selection
  - Project Manager and Deputy Project Manager Hybrid Structure (Best Qualified O-6/GS-15)
  - Precepts to Promotion Boards

CIAO #1: Guiding Principles

- Optimize span of control at all levels
  - Establish clear lines of governance and communication
  - Align adequate Flag and SES positions
  - Consider need to co-locate SIPO with CG-9
  - Align with enterprise architecture
  - Align processes using Product Line Manager concept
- Enable organic contracting or contract systems integration
  - Ensure capability to provide synergistic Program Mgmt & KO functions
- Support full life cycle management of assets and systems
- Provide career progression and development of workforce competency (Military & Civilian)
- Minimize disruption to existing acquisitions during org changes
  - Allocate personnel within existing resource levels (initially)

CIAO #1: Structural Considerations

- Product Line Organization aligned w/ CG-3 (Ops), CG-4 (Log/Eng), CG-6 (IT)
- Asset sustainment to be managed by "field" product line managers
- Project Management (PM) Staff Construct
  - Core PM Staff: PM, dPM, Tech Mgr, COTR, Program Analyst, KO)
  - Core PM Matrix Members: Business Mgr, Logistics Mgr, Systems Engineer, Sponsor's Representative)
- PM is resourced, empowered, responsible, and *accountable*
  - positioned to manage workload and life cycle issues
- Improved PM career progression/succession at all levels
- Improve functional competency development in workforce
  - technical, financial, logistics

CIAO #1: Key Established Positions

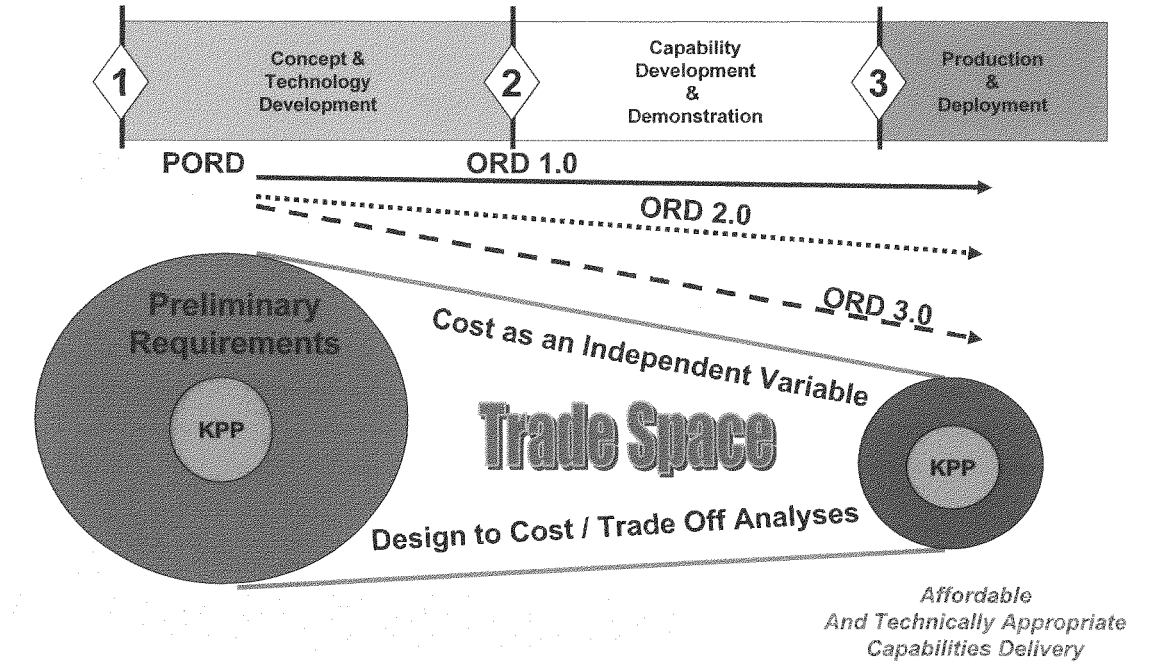
AAE: Agency Acquisition Executive
- Chairs CG Acquisition Review Council (CGARC)
- DHS Investment Review Board member

CG-9: Assistant Commandant for Acquisition
- Oversees systems acquisition management process
- Ensures compliance with DHS investment review policy
- Single entity responsible for Agency-level acquisition

CFO: Chief Financial Officer
- Budgeting & Funds Management
- CFO Act compliance

HCA: Head of Contracting Activity
- Oversees all CG contracting activities
- Responsibility for all CG procurement policy and oversight
- Certification and Warranting of all procurement professionals
- Debarment Official
- Competition Advocate

Blueprint for Acquisition Reform in the U. S. Coast Guard



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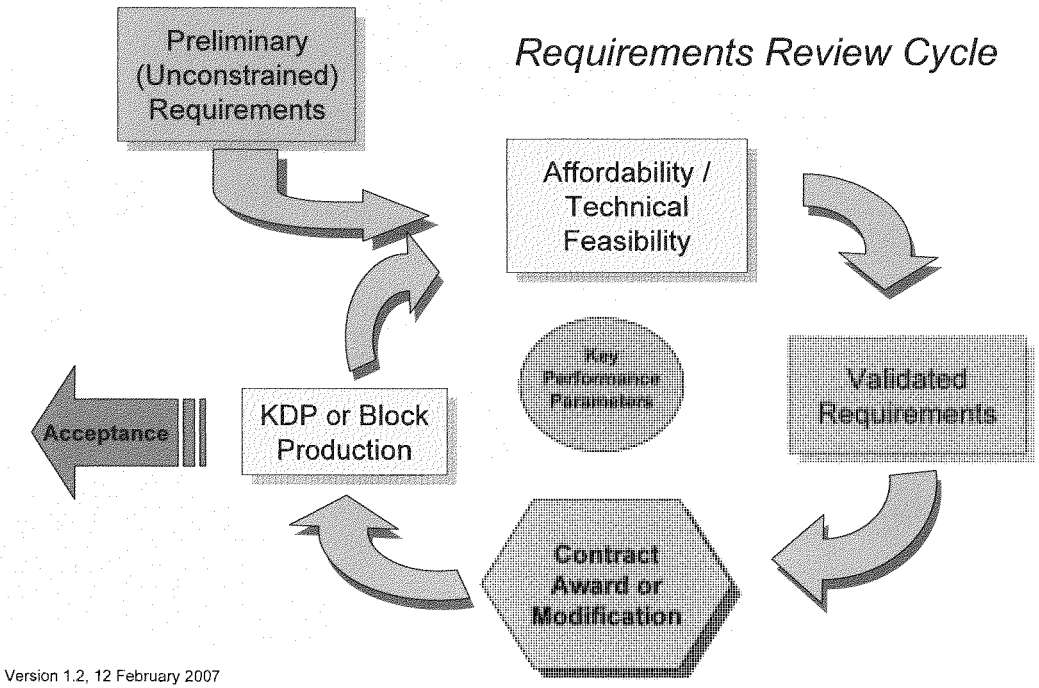
Requirements Review Cycle



Version 1.2, 12 February 2007

Testimony before the U.S. House of Representatives Committee on Transportation and Infrastructure

Subcommittee on Coast Guard and Maritime Transportation

Tuesday January 30, 2007, 11:00 AM, 2167 Rayburn House Office Building

Dr. Leo S. Mackay, Vice President and General Manager, Coast Guard Systems
Lockheed Martin Maritime Systems & Sensors
1530 Wilson Boulevard, Suite 210 Arlington, VA 22209
Telephone: 571 218 3418

Good Morning Mr. Chairman and distinguished Members of the Subcommittee.

Thank you for the opportunity to explain the progress we are achieving on the U.S. Coast Guard's Integrated Deepwater System program. Speaking for the men and women of Lockheed Martin, we are very proud to be associated with this critical program. The Coast Guard is a key national asset for assuring the security and safety of our country's maritime transportation system. Each of us, in accomplishing our daily tasks on the program, has a deep sense of the importance of achieving the very best for the Coast Guard and our nation.

Overview

The Integrated Deepwater System program is delivering both new and upgraded fixed wing and rotary wing aircraft; new communications systems that are making a significant contribution to improved mission performance; and, the logistics systems necessary to support fielded assets. We understand the Integrated Deepwater System will continue to evolve. To meet this ongoing challenge, Lockheed Martin is applying a disciplined system engineering approach to the program. This will continue to be vital for achieving more robust capabilities given fiscal realities – a one-asset-at-a-time recapitalization approach would be unaffordable. Lockheed Martin is committed to providing our best talent and capabilities for supporting the Coast Guard.

Lockheed Martin is primarily responsible for four Deepwater domains: System Engineering & Integration, C4ISR (the command and control network), Logistics and Aviation (refurbishment of existing assets and production of new assets). Lockheed Martin's goal is the full application of system engineering methodologies to establish the best mix of assets and introduction of new capabilities as well as implementation of the associated logistics systems. Most important is maintaining emphasis on the implementation of the Deepwater system-wide command and control network. C4ISR (Command & Control, Computers, Communications, Intelligence, Surveillance and Reconnaissance) is the network "glue" that permits various assets including ships, aircraft and shore stations to work together to more effectively and efficiently achieve a common purpose. Thus, the C4ISR domain is of particular importance as most modern civil, commercial and military systems are dependent on the value delivered by the integrating power of the network.

Key Achievements

We are making good progress and are delivering significant new and upgraded capabilities. At the same time, we recognize the system level effects of networking are essential to achieving the level of mission performance needed by the Coast Guard. Lockheed Martin is accomplishing high rates of software re-use as well as system commonality and integration by the rigorous application of proven system engineering processes and capabilities. In addition, we are managing implementation of support systems for all Deepwater program domains. The Lockheed Martin team is working closely with our Integrated Coast Guard Systems, LLC (ICGS) joint venture partner, Northrop Grumman, to ensure that electronic equipment developed and produced under the cognizance of the C4ISR domain is appropriately configured for installation on the ships.

Every one of the Coast Guard's 12 high-endurance and 27 medium-endurance cutters have received not one but two command and control system upgrades – giving the fleet markedly improved capability to seize drugs, interdict migrants and save lives. As for shore sites, there are a total of 12 on contract: two Communication Area Master Stations, eight Districts, one Sector and Headquarters. Use and reuse of Commercial-Off-The-Shelf, Government-Off-The Shelf and fielded maritime systems are being maximized for commonality and interoperability. The application of off-the-shelf software permits Deepwater to take advantage of the rapid changes in the commercial market place and the investments which commercial firms make in their best of class technologies. This will facilitate Coast Guard interoperability with civil and international systems, a key consideration given their mission mix.

The National Security Cutter is using 75 percent of the U.S. Navy's Open Architecture Command & Decision System. The Command & Control System for Maritime Patrol Aircraft employs more than 50 percent of the functionality of the Navy's P-3 Anti-Surface Warfare Improvement Program. The Operations Center consoles on the National Security Cutter utilize more than 70 percent of the design of the Navy's UYQ-70 display systems. Use and reuse of available software and systems is the key to commonality. In addition, this approach takes greatest advantage of the work undertaken with the Navy to establish the best Human System Interface including workspace ergonomics, viewing characteristics, input devices and overall system architecture.

The first medium-range surveillance maritime patrol aircraft, the newly designated HC-144, has been transferred to the Coast Guard. It arrived at Elizabeth City, N.C., on December 20, 2006 and is now undergoing missionization work that will be completed in April. The second aircraft was accepted by the government on January 25, 2007 and the third aircraft is in flight testing. The second aircraft will now be delivered to Elizabeth City for missionization and two crews are already in training. At the same time, we are working to complete re-engining and upgrading of HH-65 helicopters with 65 of 95 helicopters delivered to date. This project was part of the original Deepwater program plan. However, at the direction of the Coast Guard, it was rapidly accelerated due to safety of flight issues. Lockheed Martin and American Eurocopter working with the Coast Guard Aircraft Repair and Supply Center are now producing upgraded helicopters ("Charlies") that can fly faster, twice as far and with twice the payload.

Six long-range surveillance C-130J aircraft are undergoing missionization and will be delivered within 15 months after receipt of the contract with fully interoperable command, control and communications systems. The first aircraft was inducted for missionization at Greenville, S.C., on December 19, 2006. In addition, the service contract for the Helicopter Interdiction Tactical Squadron (HITRON) based in Jacksonville, Fla., has been renewed for a fifth year. These eight MH-68A helicopters are equipped with Airborne Use of Force and have had a significant impact on illicit drug interdictions. The squadron celebrated its 100th interdiction last May.

Industry's performance has been closely supervised by the Coast Guard with additional oversight from the Department of Homeland Security, the Congress and the Government Accountability Office. Each of the multiple reviews has provided constructive recommendations as requirements and funding levels continue to evolve. The results so far indicate that Deepwater has made a dramatic difference in the effectiveness of the Coast Guard with regard to the numbers of drug seizures, migrant interdictions and lives saved. Coast Guard statistics show double-and triple-digit percent improvements as Deepwater assets and upgrades enter the fleet.

Strategic Context of ICGS

The Deepwater program is modernizing the Coast Guard by providing new assets and expanding capabilities in aviation, ships, shore stations, logistics, and command, control and communications systems. The ICGS joint venture between Lockheed Martin and Northrop Grumman was designed as a low overhead contracting vehicle. Its purpose is to provide for rapid parsing of work between the two partners while at the same time achieving close collaboration and cooperation. It is important to note what it is not. The ICGS joint is not a systems integrator, nor is it a replacement for Coast Guard decision-making. All designs and improvements are based on trade studies, analyses, and technical considerations. But make no question about it – the Coast Guard is the decision maker and contracting authority and all major acquisition decisions are reviewed and approved by Coast Guard senior leadership. ICGS utilizes the depth of capabilities and experience of its partners to provide solutions in accordance with Coast Guard requirements. The joint venture partners are utilizing more than 600 suppliers in 42 states plus the District of Columbia. In addition, ICGS maintains an active database of more than 3,000 potential suppliers.

The Deepwater program began in 1997 as competing teams were established to develop proposed solutions for bidding the program. In fact, proposals were submitted to the government less than two weeks after 9/11. Since then, the ICGS team was awarded the Deepwater program and successfully accomplished a number of changes. Most significant were those resulting from the dramatically increased Coast Guard operating tempo in the post-9/11 environment. This means that legacy equipment began to wear out far more rapidly than had been projected. A good example is the HH-65 helicopters mentioned above. While the ICGS team's approach always included re-engining of this equipment, the original plan was to be accomplished over a longer time period. Nevertheless the team was able to process the urgent requirement for re-engining and more than two-thirds of the fleet have already been upgraded and returned to service. It is this inherent flexibility of the ICGS joint venture stemming from the deep capabilities of its partners that will facilitate our working with the new acquisition organization planned by the Coast Guard.

The Way Ahead

Our overarching goal is to provide more capability to the fleet, sooner. We are dedicated to analyzing and recommending approaches for maximizing the value delivered to the Coast Guard, in accordance with the customer's view of value, not that of industry. This requires the best talent from each corporation. ICGS works closely with Coast Guard personnel to assure constant communications and improved working relationships. The strategic policy changes that have occurred since 9/11 must be factored into problem solving. The Coast Guard and the Department of Homeland Security have needs that can be satisfied by the Deepwater program and its approach to value delivery. The way forward will be difficult, but given the capabilities of the participants and the strategic imperative to better outfit our Coast Guard so the safety and security of our nation is improved, the Deepwater program is eminently achievable.

Thank you again for the opportunity to present and explain the progress we are achieving on the Deepwater program, I look forward to answering your questions.

STATEMENT FOR THE RECORD

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Testimony Before The
House Subcommittee on Coast Guard and Maritime Transportation
House Committee on Transportation and Infrastructure

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2167 RHOB COMMITTEE ROOM

Good morning Chairman Cummings, Ranking Member LaTourette, and distinguished members of the Subcommittee.

Thank you for the opportunity to appear before you today to discuss the Deepwater Program. As you know, within the Integrated Coast Guard Systems (ICGS) structure, a joint venture established by Northrop Grumman and Lockheed Martin, Northrop Grumman Ship Systems (NGSS) is responsible for design, construction and support of all three classes of cutters; the National Security Cutter (NSC), the Offshore Patrol Cutter (OPC), the Fast Response Cutter (FRC), as well as the 110' to 123' converted Island Class Patrol Boats. References in this statement to ICGS or separately to Northrop Grumman or NGSS should be construed to mean the role of Northrop Grumman Ship Systems as part of ICGS.

At the outset, on behalf of Northrop Grumman and all of the men and women working in support of this program, I would like to thank this Subcommittee for your strong support of the Coast Guard, and of the Deepwater Program. We look forward to working closely with you and the Coast Guard to ensure the success of this important modernization. The following statement contains information that I, on behalf of Northrop Grumman, am submitting based on my current knowledge, information and belief.

Overall Deepwater Program Management: On June 25, 2002, the Deepwater Program prime contract was awarded to ICGS. As program requirements have changed since 9/11, the Deepwater prime contract has been amended accordingly to accommodate the new requirements in support of national security.

There has been an extraordinary level of transparency in program management and execution between ICGS and the Coast Guard. The Coast Guard has been involved in every aspect of the Program throughout its history. Each Deepwater asset undergoes design reviews by government and contractor technical experts at key points in the design life cycle, with questions and issues adjudicated as part of the review process. Personnel from the Coast Guard, Northrop Grumman, Lockheed Martin, various subcontractors and ICGS are co-located at production sites as well as in the Systems Integration Program Office in Arlington, Virginia. Full participation by the Coast

Guard is built into every level and function within the ICGS team. With respect to programmatic decision making, all major acquisition decisions are made by the Coast Guard, after review and approval by Coast Guard senior leadership through a series of cross-functional government teams. These include reviews by subject matter experts from Engineering and Logistics, Electronics & Communications, Human Resources, Intelligence, and the Programs & Budget Directorate at the staff and flag level. Northrop Grumman and ICGS do not make decisions in relation to what cutters and boats to buy—we make recommendations. The U.S. Coast Guard is the decision making and contracting authority, and has retained the traditional contract management functions, including the right to issue unilateral change orders, to stop or terminate work, to order or not order assets and supplies, and to accept or reject the work.

There is a lot of interest on the way forward for Deepwater and as you know the Commandant met with the CEOs of both Northrop Grumman and Lockheed Martin. The leaders used the opportunity to focus on the most important issues related to the 25-year, $24 billion acquisition program, 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. The way forward is encapsulated into three objectives. (1) Capitalize on proven, first-article Deepwater successes. (2) Sustain momentum in recapitalizing the Coast Guard through the Deepwater program and (3) Resolve outstanding challenges associated with some projects within Deepwater. The senior leadership in each of our organizations is committed to meet regularly to review the progress of the program and provide executive level oversight at all times, with specific direction when warranted.

Competition is also an important component of the Deepwater team's effort to deliver "best value" to the Coast Guard. The tenet of competition within the ICGS Deepwater program plan is an open business model that invites participation and competition through the life of the program. Both contractors have a Contractor Purchasing System that is patterned after the Federal Acquisition Regulations. All Northrop Grumman purchases over $25K are individually reviewed for compliance with purchasing guidelines, and the purchasing system is audited (usually every three years) by the Defense Contract Audit Agency (DCAA). A government sponsored third party review of Deepwater acquisition practices found our statistics favorable compared to large US Navy procurement programs. In addition, competition for subcontract awards is encouraged via the annual Industry and Innovation Days where suppliers and vendors have an opportunity to provide input on new or improved products. ICGS to date has placed orders with more than 600 suppliers representing more than 41 states and maintains an active database of over 3000 potential suppliers from which it draws to host annual supplier innovation and industry days.

Patrol Boats are small naval ships, generally designed for coastal defense duties, operated by a nation's navy, coast guard or police force in marine – "blue water" - and littoral and river - "brown water" - environments. They are commonly found in various border protection roles, including anti-smuggling, anti-piracy, fisheries patrols, immigration law enforcement and rescue operations. Patrol boats usually carry a single artillery gun as main armament with a variety of lighter secondary armament such as machine guns, and are diesel-powered, with speeds generally in the 25-30 knot range. The above definition aptly describes the 49 "Island Class" 110 foot patrol boats and the 123 foot conversions under the original Deepwater proposal.

The Coast Guard's current 110 foot patrol boats were built in the 1980s and early 1990s by Bollinger Shipyards, Inc. These boats have seen extensive duty in support of the Coast Guard mission to save lives, interdict aliens and seize drugs. ICGS and its teammate, Halter Bollinger

Joint Venture (HBJV), proposed to convert the 110 foot boats to 123 foot boats as an interim measure to improve the capability and extend the life of this vessel until its FRC replacement entered operation in 2018. ICGS proposed the conversion concept as the best means to provide the Coast Guard with the necessary capability to continue to meet its mission objectives while remaining within the confines of program funding requirements. Deepwater competitors were required to propose a "system of systems" solution that did not exceed the funding limitation of $500 million per year. With new assets such as the National Security Cutter (NSC), Maritime Patrol Aircraft (MPA) and the Vertical Unmanned Air Vehicle (VUAV) being developed early in the program, it was not possible to design, develop and construct new patrol boats at program inception while keeping within annual funding limitations.

Bollinger had designed and built the original 110 foot boats and was very familiar with their construction. Bollinger was awarded a contract for 16 110 Island class boats in August 1984 and another contract for 33 more boats in 1986. The design of the 110 Island class was approximately 20 years old and was based on an existing patrol boat developed by a British firm, Vosper Thornycroft (UK) Ltd. The 110 Island Class boats were commissioned between November 1985 and 1992. Notably, after the first boats came into service, it was discovered that the 110s suffered from hull problems when operated in heavy seas. As a correctional measure, heavier bow plating was added to hulls 17 through 49 during construction and additional stiffeners were retrofitted to earlier hulls.

Under the proposed Deepwater conversion plan, HBJV added a 13 foot extension to the 110', which accommodated a stern ramp for the launch and recovery of a small boat, used primarily to support boarding and rescue operations. In addition, the conversion installed an improved pilot house, enhanced Command, Control, Communications, Computers and Intelligence, Surveillance and Reconnaissance (C4ISR) capabilities and tested, identified and renewed hull plating in areas where an ultrasonic thickness inspection indicated that the existing plating was deteriorated. The proposed approach to replacement of the hull plating was consistent with the subsequent findings of the Coast Guard's 110 WPB Service Life Extension Board, published in March 2002 before the conversions occurred, which recommended a program of systematic hull repairs, predominantly in documented problem areas, to address the hull deterioration problems that were impacting 110' WPB operational availability.

After being awarded the patrol boat conversion work, ICGS engaged in a rigorous design process that included extensive reviews with all stakeholders. These programmatic reviews included a Preliminary Design Review, a Critical Design Review and a Production Readiness Review all of which were conducted with the Coast Guard before the actual conversion work began. Leading up to each of these reviews, the evolving design, design drawings and calculations were formally presented to the Coast Guard subject matter experts in increasing detail for their review, comment and approval. During this series of reviews I am not aware that structural, buckling or deformation concerns were raised as an issue. In addition, during the conversion of the Matagorda, the American Bureau of Shipping (ABS) examined the design of the hull extension and new deckhouse and monitored key elements of the work being performed. At the conclusion of the Matagorda work, they issued a letter of approval for the conversion work and expressed no reservations with the feasibility of the conversion.

The Performance Specification requirement calls for the 123' to be capable of unrestricted operation up through sea state 3, or seas averaging less than four feet. Operation restrictions are imposed beginning at sea state four, or seas less than eight feet, where the boats are to be able to sustain limited operations, altering course or reducing speed as required to maintain a ride which

does not damage the boat or its machinery or overly fatigue the crew. The 123' is to be able to survive sea state 5, or seas averaging between eight and 13 feet, maneuvering as necessary to minimize damage or injury to the crew, and then be capable of returning to port under its own power once the seas have subsided.

In September of 2004, after all 8 hulls had entered the conversion program and the first 4 hulls had been delivered, the Matagorda was forced to conduct a high speed transit to avoid Hurricane Ivan. This operational necessity forced the Coast Guard to transit in a sea state and speed where the cutter was operating near or above the design limits of the 123' conversion. Upon arrival at their destination, the crew discovered buckling of the side shell and main deck on the starboard side near midships. An engineering tiger team was formed consisting of Coast Guard and NGSS personnel. This team was dispatched to investigate the problem where it was discovered that the Matagorda had an inherent workmanship issue in the baseline 110' that existed prior to the conversion and contributed to the hull buckling. Specifically, a hidden, unwelded aluminum deck stringer was discovered immediately beneath the area where the failure occurred. Other boats were examined, and this unwelded stringer was also found on one additional hull undergoing conversion. When modeled using finite element analysis, the stresses in the panels which failed on Matagorda were significantly higher than the stresses shown when the model was run with this stringer intact. Based on this finding, the team believed this to be the primary cause of the buckling on Matagorda, and repairs were made accordingly.

In addition, a reconstruction of the engineering analysis of the 123' structure was conducted. Based on this, it was also discovered that an early calculation overstated the strength margin for the boat. A revised calculation using a common, agreed to set of assumptions by the engineering team showed the 123' would still meet the required operations defined in the Performance Specification.

In an effort to further improve the structural integrity on the 123', three stiffener bands were installed; one at the upper edge of the side shell, one below this one and another on the edge of the main deck to increase the overall structural strength. While the finite element analysis and conventional calculations both agreed that the original hull, with the stringer under the deck intact, should be sufficient throughout the operating range of the 123', these additional stiffeners were considered to provide an added margin of strength.

In November 2004, ICGS received a contract modification that changed the arrival schedule of hulls 9-12 to TBD. Long-lead time material for four additional hulls had already been authorized and work continued on the 3 remaining hulls in process.

By March, 2005, 6 of the 123s had received the structural upgrade and had been delivered. Certain operational restrictions imposed on these boats by the Coast Guard following repairs to the Matagorda had been lifted. Then, during a transit from Key West to Savannah, GA, the Nunivak experienced hull deformation in an area aft of the new reinforcing straps. This deformation occurred in a different area from that of the Matagorda. Further, this was not an area which had indicated potential for high stresses under any conditions modeled in the earlier finite element analysis.

An outside engineering firm, Designers and Planners, was contracted by the Coast Guard to perform a more detailed finite element analysis of the 123' hull, which showed that the overall hull structure design was adequate under all expected operating conditions up to the worst operating condition modeled. The analyses were not able to replicate the deformation seen on

Nunivak. A more detailed look at specific regions on the hull showed an area with high potential for localized buckling in a section of the side shell where the original 110' hull had been constructed of exceptionally thin four-pound plate. Despite this finding, no actual failures had ever been experienced in this area on 110 or 123' WPBs. As a precaution, this thin plate was replaced with heavier plating on those cutters undergoing the Post Delivery Maintenance Availability, with plans to eventually upgrade all the boats. Lastly, a metallurgical analysis of the deck material determined that the particular grade of aluminum used on the 110s is prone to corrosion and cracking in elevated heat and marine conditions.

In July 2005, then Coast Guard Commandant Admiral Collins' written testimony before Congress outlined the twofold reason for stopping the conversion process as follows: "As the first eight 110' to 123' conversions were conducted, the Coast Guard found that the 110' WPB hulls were in much worse condition than anticipated. This extended the conversion timeline and would have increased projected costs for conversions after the first eight (the first eight were negotiated under a firm-fixed-price contract). An operational analysis of the 123' WPBs also identified high risks in meeting mission needs, particularly in the post-9/11 environment."

To date the problems associated with the 123' conversion include buckling or hull deformation and shaft and propeller alignment problems. In addition to the actions previously described, additional and substantial work has been (and continues to be) done. In addition to the repairs and reviews of structural calculations, we have continued the review process by conducting two independent finite element analyses, modeling both the original and the upgraded hull, and we completed metallurgical testing that revealed an issue in the main deck which exists on both the 123' and across the legacy 110 fleet. Extensive strain gage testing has been conducted on a 123' hull to validate the finite element model and to identify potential problem areas which the model may not show. The parent craft designer, Vosper Thornycroft, has been engaged to evaluate the 123' hull and provide recommendations. Data is being collected on shaft alignment and maintenance procedures both during the conversion and since, so that the procedures for checking and correcting alignment can be validated for both the 110' and the 123'. Elements of the 123' design, including the propellers and the SRP stern-launch system are being reexamined and validated.

We are committed and determined to identify the root cause of the structural problems. Northrop Grumman and Coast Guard engineers are currently reviewing and re-reviewing all available data on the 110' and 123' patrol boats in an effort to better understand the cause or causes of both hull buckling and shaft and propeller alignment problems. Depending on the outcome of that analysis the possible outcomes range from removing the boats from service to effecting repairs with testing followed by placing them back in service. Until all analyses are complete, it is premature to speculate on the final cause and the final way forward.

Fast Response Cutter Acceleration: Before Congress in July 2005, then Coast Guard Commandant Collins testified: "A key component of the Deepwater Program is the replacement of the Coast Guard's 110' Island Class Patrol Boat (WPB) fleet. The Island Class patrol boat is a Coast Guard multi-mission workhorse and is rapidly approaching the end of its serviceable life. Under the initial IDS proposal, the 49 110' Island Class WPBs were scheduled to undergo a conversion to 123' WPBs by 2010 as a bridging strategy. The 123' WPBs would then be replaced by the Fast Response Cutter (FRC) starting in 2018. As the first eight 110' to 123' conversions were conducted, the Coast Guard found that the 110' WPB hulls were in much worse condition than anticipated. This extended the conversion timeline and would have increased projected costs for conversions after the first eight (the first eight were negotiated under a firm-fixed-price

contract). An operational analysis of the 123 WPBs also identified high risks in meeting mission needs, particularly in the post-9/11 environment. The Coast Guard recently decided to stop the conversion project following the first eight conversions. Instead, the Coast Guard plans to advance the FRC design and construction by ten years, and is analyzing alternatives methods for extending the life of the 110-foot fleet, as discussed above."

Consistent with this testimony, the Coast Guard accelerated FRC design and construction by ten years. The expanded set of post 9-11 requirements produced a set of required capabilities that exceeded the traditional patrol boat roles filled by the 110s and 123s and other similar worldwide patrol boat fleets. A market study was conducted and concluded that none of the existing similar sized patrol boats would meet these requirements. A series of business case analyses, Total Ownership Cost (TOC) studies and preliminary design efforts showed the benefits of using a composite hull form to meet this demanding set of requirements with a potential to save over $1B in lifecycle cost. The predominate savings came from the superior service life of composites. The Design to Cost constraints restricted the vessel length to 140 feet. In order to accommodate the added capability and equipment required to meet the post 9/11 mission requirements the resultant design was wider for its length than historical and traditional patrol boat hull dimensions. Independent third party analysis by John J. McMullen and Associates (JJMA) stated: "The review team believes that the FRC does appear to meet or is capable of meeting the requirements" and acknowledges that "The FRC preliminary design represents a design solution to a challenging set of requirements." Additionally, I would like to point out that, contrary to what was reported in the press, the FRC-A did not fail a tank test – a preliminary test was conducted improperly. When this test conducted properly, the FRC-A met all requirements, as is confirmed in the final model test report.

The Coast Guard made the decision to suspend the FRC-A program, as the all composite design is now called, and focus on a parent craft solution known as the FRC-B. This decision seeks to ensure a proven solution to a lesser requirements set. This will enable the additional time required to take the FRC-A through a design spiral, and perform trade analyses to optimize performance to cost including a robust operational test program for the fully capable FRC. The Coast Guard is also performing an additional business case analysis and a technology readiness assessment to confirm viability of the composite approach.

The current patrol boat acquisition strategy includes two paths: FRC-A, mentioned above and FRC-B. FRC-B will leverage existing patrol boat designs to serve as a bridging strategy while the fully capable FRC-A is undergoing design and development. The FRC-B program will select the candidate design from a field of worldwide patrol boat providers and is expected to enter concept design later this year

I want to assure the Committee that Northrop Grumman will continue to work with the Coast Guard in satisfying its patrol boat mission requirements throughout the life of the Deepwater Program.

National Security Cutter (NSC) Structure and Cost Growth: Designed to replace aging Hamilton Class High Endurance Cutters (WHEC) that have been in service over 40 years, the National Security Cutter (NSC) is a modern, well-armed, high-performance, 421-foot, 4000-ton frigate sized naval ship, with manned and unmanned aircraft, stern-launched rigid inflatable boats and secure communications facilities. It provides the Coast Guard with enhanced post 9/11 Homeland Security and core mission capabilities (drug interdiction, search & rescue, economic zone & fisheries protection). The first of the 8 ship class (USCGC Bertholf) has been launched

and will be delivered to the Coast Guard in the fall of 2007. The second (USCGC Waesche) is also under construction and is scheduled for delivery to the Coast Guard in early 2009.

With regard to the structure, we believe the NSC meets contract requirements/specifications. The NSC design uses the same Data Design Sheet (DDS) standards used in structural design of ships since WWII. The NSC is designed to meet a 30 year service life and many of the structural items raised by the Coast Guard during the design process have been addressed and were incorporated in the Bertholf and Waesche (NSC 1 and 2) prior to production. For example, upgraded steel, thicker steel, modifications to Fashion Plates and Re-entrant Corners, and the addition of 2 longitudinal Hovgaard bulkheads to provide increased stiffness at the stern were incorporated into the design.

ICGS has full confidence in the NSC as designed and as being built, and has full confidence about the structural integrity of the NSC to be able to perform its intended missions. The issue being debated today deals with long term fatigue life related to various assumptions about operating conditions.

With regard to NSC fatigue life, even the best engineers will have different opinions. Analysis has been performed on the NSC utilizing a relatively new model developed by Naval Surface Warfare Center, Carderock Division (Carderock) utilizing two different approaches. The difference in the two approaches is whether or not the model is benchmarked by calculating the fatigue strength of proven ship designs with similar operational characteristics and hull form that has been at sea for the desired time. This enables the calculation of permissible stress levels that can be applied to test the new design. The results of these two analyses have generated a responsible dialog between the engineers which will lead to final agreement about enhancements to fatigue structure.

Northrop Grumman does not self-certify compliance with the structural requirements in the contract. The Bertholf has and will undergo a comprehensive internal and external certification process. The American Bureau of Shipbuilding (ABS) certified 14 Systems Level drawings, including structural design drawings. ABS will also certify 35 ship systems during this acceptance process. These include; Command & Control Systems, Propulsion Plant, Machinery Monitoring & Control, Fuel Systems, Anchoring Systems, and Steering Systems. During the design process, there will be a total of 46 independent third party certifications prior to or as part of the USCGC Bertholf (NSC 1) delivery process. These include; Final Aircraft Facilities, Flight Deck Status and Signaling, Navigation Systems, Interior Communications Systems, Guns and Ammunition Weapons System Safety, DoD Information Security and Accreditation, and TEMPEST. The US Navy's Board of Inspection and Survey (INSURV) will conduct the Ship's Acceptance Trials (AT) when the cutter gets underway later this year.

Cost growth has also been mentioned in the media. Two elements have led to the majority of cost growth on the NSC - increased post 9/11 requirements and the impact of Hurricane Katrina. The NSC that will be delivered to the Coast Guard this year is not the same ship that was first proposed in 1998. Today's NSC has greatly improved operational capabilities that address post 9/11 requirements including Chemical, Biological & Radiation (CBR) protection, a Sensitive Compartmented Information Facility (SCIF) and more robust aviation installations so that the NSC, in addition to its normal embarked Coast Guard aviation complement, will be able to launch, recover and operate US Navy, US Government Agency and partner nation manned and unmanned rotary wing aircraft. These enhancements have added approximately 1000 tons to the displacement, including a one third increase in electrical power systems, a tripling of air

conditioning and ventilation capacity (HVAC), the addition of 25 antennas and a 26% growth in the size of the berthing spaces.

It is true that Katrina delayed the delivery of Bertholf by several months and added cost to the program. Prior to Katrina, Bertholf was the best "first of class" ship in the 70 years that warships have been built in Pascagoula. Even taking into account Katrina, Bertholf continues to set new lead ship standards in quality and efficiency with, higher performance to standards than both the first or second Arleigh Burke Class (DDG 51) destroyer and labor utilization measures that routinely out perform other programs in our shipyard.

Much of what has been done on the NSC program is being transitioned to the rest of the shipyard to other construction programs. In addition to the specific actions as they relate to the NSC program, we are investing $57.3 million dollars of our own money in a new suite of management tools that will increase our visibility, work sequencing capability, material and engineering modeling and capacity and resource planning. These tools will enable the reduction in the number of units we construct to build the NSC. Currently we build the vessel in 45 units and integrate these sub assemblies into 29 erection lifts on the ship. The new tool set will allow us to plan and construct the vessel in less lifts, our target is 16, and as we know the less number of lifts the less cost. We are investing in our human capital, process improvement, and our facilities to reduce the cost associated with building future ships.

Thank you for this opportunity to personally update you on the progress of the Deepwater Program.

This is the end of my statement. I welcome your questions.

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