INTEGRATED DEEPWATER SYSTEM

(108-62)

HEARING

BEFORE THE

SUBCOMMITTEE ON
COAST GUARD AND MARTIME TRANSPORTATION
OF THE

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INTEGRATED DEEPWATER SYSTEM

Wednesday, April 28, 2004

House of Representatives, Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, Washington, D.C.

The subcommittee met, pursuant to call, at 10:00 a.m. in room 2167, Rayburn House Office Building, Hon. Frank A. LoBiondo

[chairman of the subcommittee] presiding.

Mr. LoBiondo. Good morning. The Subcommittee on Coast Guard and Maritime Transportation will come to order. The subcommittee is meeting today to hear testimony on the Integrated Deepwater System. As an opening statement, I would like to proceed.

Today we are meeting to review the status of the Integrated Deepwater System and to examine concerns outlined in the GAO report that was released last month.

Deepwater will replace or modernize more than 90 ships and 200 aircraft currently utilized by the Coast Guard to carry out missions more than 50 miles from shore. The new assets procured under the program will greatly expand the Coast Guard's capabilities to perform the many and varied homeland security and traditional mis-

sions that the American people have entrusted to the Service.

The duration and magnitude of the Deepwater program require continued oversight and adjustment of the acquisition plan to meet the ever-changing conditions that the Coast Guard faces in its operational environment. The original Deepwater plan was formulated well in advance of the events of September 11th; therefore, the designs of assets to be acquired under Deepwater have been reviewed and, in some cases, revised to provide the Coast Guard with the capabilities necessary to carry out the Service's increased role in protecting our maritime security. The subcommittee understands the importance of this ongoing review; however, we are concerned with the impacts on cost, complexity, and procurement delays that may result as the program is re-baselined.

These adjustments to planned assets have combined with multiple years of underfunding to result in the situation that we find ourselves in today. The Coast Guard has estimated that the Deepwater program is now running two to seven years behind the original 20-year schedule. This, simply put, is unacceptable. We should

be accelerating, not decelerating.

This committee recently voted to authorize funding to accelerate the program to 15 years, partly because the need is so very compelling. The Coast Guard operates the second oldest naval fleet in the world, with some currently operating vessels that were commissioned in World War II. Most disturbing, though, are the recent operational asset failures. Over 20 110-foot patrol boats underwent emergency drydock for breached hulls this past year alone, and the rest of the fleet is in immediate repair for structural deterioration. On the average, the High Endurance Cutter fleet suffers a fire or fuel and oil leak in their main engineering space on every patrol. Over the past years, the HH–65 helicopters have suffered more than 115 in-flight main engine power losses, robbing the asset of its ability to hover and placing the lives of its crew, passengers, and those below in grave danger. These failures are increasing total ownership costs and are resulting in direct loss of several hundred patrol days annually, severely affecting readiness and diminishing the Service's ability to respond to terrorist threats and to conduct its other vital missions.

I understand that the Vice Commandant has brought a special guest here from Air Station Atlantic City today, which is located in my district, whose historic experience will illustrate the very real life-threatening conditions confronting our Coast Guardsmen operating these failing legacy assets. I look forward to the Vice

Commandant sharing the story with us.

Chairman Young and I have requested the General Accounting Office evaluate the current status of the Service legacy fleet of ships and aircraft, and the impact the asset failures have had on readiness and mission performance. We have also asked the GAO to ascertain the total amount the Coast Guard has spent in repairing these aging assets and how much of these costs fell outside of the Service's scheduled maintenance operations. I think we will find the costs and benefits associated with replacing these ships and aircraft much better than continuing the process of doing stopgap repairs, which we are doing now.

In a report released last month, the GAO expressed concerns over the management of the Deepwater program and the Coast Guard's oversight over the principal contractors and award of some contracts. The questions raised in this report are valid, and I look forward to hearing the witness' testimony as to both how the Coast Guard and the system integrator, Integrated Coast Guard Systems,

plan to move forward with the GAO's recommendation.

Finally, last Friday I was pleased to join Commandant Collins and the ICGS team, led by Fred Moosally of Lockheed Martin and Jamie Anton of Northrup Grumman, in the ribbon-cutting for the new Deepwater Maritime Domain Awareness Center in Moorestown, New Jersey. Extremely impressive operation that is underway there, and this MDAC represents some very important progress in the program that we expect will continue, we hope, at an accelerated pace.

This subcommittee has long recognized the importance of the Deepwater program and has supported its acceleration. We are committed to working with the Coast Guard and the ICGS to ensure the timely delivery of assets under the Deepwater program.

I want to thank the witnesses for appearing today, and I look for-

ward to hearing your testimony.

Now I would like to recognize Mr. Filner for any opening remarks he may have.

Mr. FILNER. Thank you, Mr. Chairman, and thank you for scheduling this hearing. I do want to echo your statement in many ways.

We know that this Deepwater project is a revolutionary one in terms of our procurement. Trying to replace all of the Coast Guard ships and aircraft that operate more than 50 miles offshore is a daunting task. Hopefully it is based on analysis of Coast Guard operations and designed to provide the correctness of assets to carry out the Coast Guard missions that have now changed for the 21st century.

As the Chairman mentioned, assets are breaking down. The HH–65 helicopters have been losing power, we are told. High-and medium-endurance cutters, it is said, have had to decrease their patrols due to failing ships systems. The fleet of patrol boats have suffered hull breaches, at least 20 of them, requiring emergency drydock repairs. So all of these legacy assets are requiring even

more money just to keep them going.

At the same time, we are trying to provide increased funding for the Deepwater project to replace them, and we have, as the Chairman said, recommended \$1.1 billion for fiscal 2005, and we had hoped that this increased funding was to accelerate the procurement schedule.

I think you all know and have read the Rand Corporation study of future Coast Guard missions requirements, and they recommend buying significantly more aircraft and cutters to enable the Coast Guard to carry out the historical mission that we expect and the growing homeland security missions that we now require. In addition, the Center for Naval Analysis, CNA, has also found that the Coast Guard will need more aircraft and cutters to meet all these responsibilities.

The Deepwater plan now includes eight national security cutters; the Rand and CNA recommendations are for more than five times that, 44. Deepwater plans 25 offshore patrol cutters; Rand nearly doubles that at 46. Deepwater says 58 fast response cutters; Rand almost doubles that with 90. And the 93 multimission cutter helicopters that Deepwater has planned for would be recommended for 50 percent more than that, at 139.

Now, we may not be able to meet those goals of Rand and CNA, but it is clear we have to spend billions more than the Coast Guard has currently planned to support, again, the historical mission and

the new responsibilities.

I am particularly concerned, as the panels proceed, with the multimission cutter helicopter component of the Deepwater plan. As I understand it, and, Admiral, you might want to comment on it, the Coast Guard is moving in the direction of rebuilding their HH–65 Dolphin helicopters. So at the end of this massive acquisition project, we will be operating with a fleet of helicopter frames that are 40 years old. It just doesn't make sense, it seems to me, to complete this type of major acquisition—I called it revolutionary—and have a fleet of helicopters that will be older, probably, than any other fleet of helicopters in the world operated by Coast Guards.

So my message would be, and I think the Chairman and I agree, we support replacing all of your cutters and aircraft as soon as possible. Obviously, we want the men and women serving the Coast Guard to have the best and safest tools to carry out the mission. But we need to know, Admiral, the price tag, the asset mix, the schedule for accomplishing this. I think without that information we are just spending money without knowing whether it is going to go to accelerate the program or buy ships, repair aircraft, or whatever.

I think this committee needs that information as soon as possible, Mr. Chairman, and I hope this hearing will move us forward in that, and look forward to working with you to ensure that our Coast Guard is successful in its traditional responsibilities and its 21st century homeland defense effort.

Mr. LoBiondo. Thank you, Mr. Filner.

Mr. Coble, thank you for joining us. Do you have an opening statement?

Mr. COBLE. Thank you, Mr. Chairman. Not a formal opening

statement, but very briefly.

Mr. Chairman, thank you for having this hearing. This is going to be a tremendously expensive item, Mr. Chairman, but I don't think we have any choice. And I realize that much of the equipment is deteriorating. I am not sure that that is anybody's fault. On this Hill, for as long as I have been up here, Mr. Chairman, the adage is "the Coast Guard can do it; let us give them additional duties, they can handle it."

And the Coast Guard continues to perform and discharge additional duties with the same amount of money available to them, and, Admiral, I don't know how long you can continue to do that. I think the pocket is becoming less deep, it seems to me. But I commend you for what you are doing and I look forward to the hearing, Mr. Chairman.

Mr. LoBiondo. That pocket hasn't been deep for a long time, Mr. Coble.

Mr. Coble. I concur.

Mr. LoBiondo. Thank you.

We will now move to the first panel. We welcome Admiral Thomas J. Barrett, the Vice Commandant of the United States Coast Guard.

Admiral, thank you for joining us today.

TESTIMONY OF VICE ADMIRAL THOMAS J. BARRETT, VICE COMMANDANT, UNITED STATES COAST GUARD

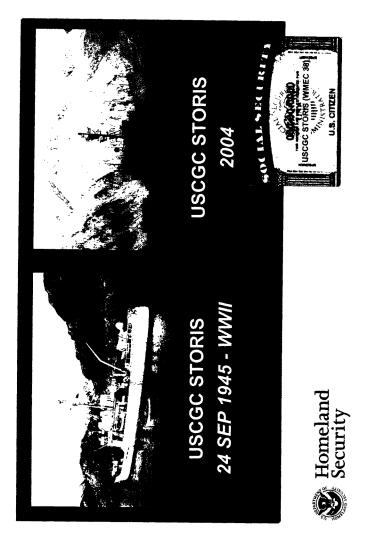
Admiral Barrett. Good morning, Mr. Chairman and distinguished members of the subcommittee. Thank you very much for this opportunity to discuss the Deepwater system. And thank you also for your recent passage of H.R. 3879, which is very important to the Coast Guard and our Nation. Your support of the Coast Guard is very deeply appreciated.

Deepwater acquisition is crucial to our ability to meet national priorities. As you know, bounded by oceans, America always has been and will be a maritime nation. The oceans are our resource to protect a path for global commerce, but unfortunately, in today's world, a route for potential terrorists and other threats to our security such as illegal drugs and illegal migrants.

Declining fleet readiness and increasing costs of maintaining our aging assets are jeopardizing our future ability to address these maritime missions. Readiness concerns were the basis in the mid-1990's for our pursuit of the Deepwater program. What has changed today is the urgency of need. Cutters like the STORIS, pictured here, began its service during World War II and have a very proud but a very long history.

[The information received follows:]

A Proud but Long History

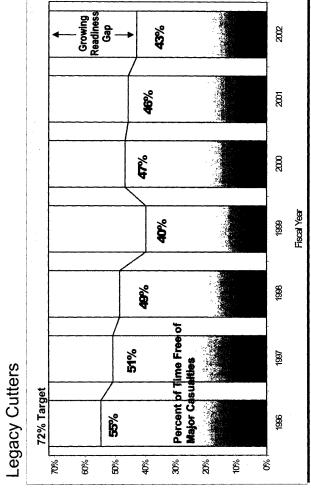


This ship is literally eligible for social security, it is 62 years of service. We simply cannot rely on assets commissioned in 1942 to fulfill the maritime safety and security requirements we have today.

Our crews take great pride in stretching the useful life of our ships and aircraft, and they are able to maintain our readiness largely through Herculean efforts and their innovative spirit. You know that; you have been aboard many of our ships and boats. However, only so much is possible with obsolete machinery which continues to fail. As shown, our current fleet of cutters are free of major equipment casualties less than 50 percent of the time.

[The information received follows:]

Readiness Gap





Maintenance costs are also escalating far beyond budgeted support levels. In fiscal year 2002, expenses exceeded the budgeted report by more than \$300,000 a vessel. If we plotted the 2003 data, it would literally be off the chart, as legacy cutter maintenance expenses now exceed funded support levels by almost a half million dollars per vessel.

Mr. Chairman, our cutters operate free of major casualties less and less. We are spending more for each operational day and get-

ting fewer of them.

As you know, because of HH-65 in-flight power loss problems, the Commandant recently decided to re-engine these aircraft, which are our backbone of our helicopter rescue fleet. I have with me this morning Lieutenant Commander Robert McCowski from Air Station Atlantic City. A year ago, patrolling in support of Operation Iraqi Freedom, his HH-65 experienced a power loss related to a failure in a power turbine governor, which is a piece of equipment that looks like this. He had to choose between landing in Syria and a single-engine cutter landing at night aboard DALLAS. Unable to hover, with no margin for error, he nailed a hard-deck landing dead center on the flight deck. Neither his crew nor his equipment was damaged. And for his extraordinary, truly extraordinary airmanship, we awarded him an air medal.

Yet, for all the pride and admiration we have for Lieutenant Commander McCowski, deteriorating readiness risks him and pilots like him, their crews, our mission success, and ultimately increases the risks for those who depend on us to help defeat terrorism, keep drugs out of our Country, protect our ocean resources, or

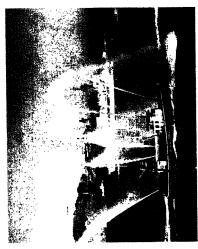
save those in peril.

Pictured here is a 378-foot high-endurance cutter RUSH returning home from Vietnam, as I did aboard the Coast Guard cutter CHASE in 1970. At right is a sister ship to CHASE and to RUSH, DALLAS, returning from deployment to Iraqi Freedom in 2003, 34 years later. It is simply too long.

[The information received follows:]

Capability Deficit

Defending the Nation Then... and Now – 35 years apart



378 COMING HOME FROM VIETNAM









Deepwater is the means to resolve these challenges. After years of study and debate, the President made the crucial decision in fiscal year 2002 to begin recapitalizing the Coast Guard, and has subsequently increased the amount of funding dedicated to this effort. Thanks to the support of the Administration and the Congress, we have in place a sound acquisition strategy to fundamentally address Coast Guard readiness. Our system integrator, Integrated Deepwater Systems, brings technical expertise, innovation, and national industrial-based capacity with a flexible contract vehicle.

We have also profited from multiple independent assessments and audits by GAO and others. From this feedback, we are steadily improving program management, increasing competition, and enhancing measures of contractor performance. Specifically, since GAO's March report, we are making measures of competition and award term factor; we have developed more objective fee criteria; we have converted some military positions to civilian to provide greater program continuity; and we have upgraded the training of our integrated program teams.

Program Executive Officer, Rear Admiral Stillman, reported to GAO for the first time this week on our progress, and I will provide each member of the committee a copy of the PEO's first periodic update detailing our progress and achieving the recommendations made by GAO. And obviously we would be very pleased to keep the committee fully apprised of our progress in addressing these recommendations.

As the Coast Guard's Vice Commandant and Agency Acquisition Executive, I can tell you Deepwater is fully aligned with national goals and DHS objectives. It is a well-run program that can respond to new requirements and address our national maritime priorities. I ask for your continued support and guidance in this endeavor

Thank you for the opportunity to testify. With your permission, sir, I have a complete statement I would submit for the record. And I would be very pleased to answer any questions you may have.

Mr. LoBiondo. Thank you, Admiral Barrett, for your testimony today. We thank you for relaying the heroic account of Lieutenant Commander McCowski's experience.

Commander, our Nation owes you a debt of gratitude for your service. We thank you for being here today. Congratulations on your commendation, it was certainly well earned. And I think that your story is very real and compelling to be able to illustrate why we feel so strongly about Operation Deepwater and the tragedy averted if you were not able to act so heroically on behalf of the United States of America. We are asking men and women to put their lives in harm's way for the dangerous situation. We should not be asking them to put their lives in harm's way because of equipment failures. That is absolutely wrong.

I would like to start off, Admiral, with some questions, but certainly we have been talking about the condition of the Coast Guard's Deepwater legacy ships and aircraft that is so severely degraded that the Service personnel are literally, as we have just illustrated, risking their lives and compromising their mission on a daily basis.

I understand that the Coast Guard estimates that sustaining its legacy assets has cost \$65 million through fiscal year 2004, and will escalate to about \$140 million through fiscal year 2005. I am really unhappy with this, and it is a very unsatisfactory state of readiness, and that is why I have asked the GAO to evaluate the state of the Coast Guard's legacy fleet. And I would like to know the condition of each of the asset class, the number of operational days lost, the cost of unanticipated repairs and their effect on the Deepwater capital replacement budget, which I am very concerned about.

Finally, I have asked the GAO to tell me if the Coast Guard should continue pouring money into upgrading some of these really questionable platforms, like the HH–65 helicopter and the 100-foot patrol boats, only to pay for replacements later, or should we cut to the chase and replace those aging assets now.

So, Admiral, I would like to ask you how much money is the Coast Guard diverting from the Deepwater replacement program to

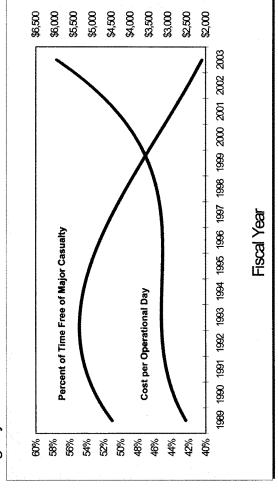
pay for sustaining Deepwater legacy assets?

Admiral Barrett. Mr. Chairman, I believe the number you quoted is approximately correct. In the past three years we have had to spend about \$121 million more than we had projected to sustain legacy assets, and, of course, those dollars are dollars that are diverted from capital replacement. And that declining spiral of having to spend more to sustain legacy assets is a terrible problem for us to have to manage, and it is one we are balancing with each asset class, and it is one we are continually reviewing. But as you could see, our numbers are tending in the wrong direction on keeping our fleet out there.

[The information received follows:]

Spending More – Getting Less

Legacy Cutters





And, frankly, we have to keep it out there. That is the other part of the problem. The mission requirements we have today require us and demand that our crews get these ships underway, fly these aircrafts, or else we risk mission failure, and that is something that is not part of the Coast Guard ethic. We strive as well as we can to be semper paratus every day for this Nation, as you, sir, well know and acknowledge.

Mr. Lobiondo. Well, in light of what you just said, Admiral, is there an ongoing analysis being done to determine when the Coast Guard should stop maintaining and repairing legacy assets and start dedicating those funds to their replacement? I know we have seen some decommissioning taking place. How are we handling

that or deciding how to do that?

Admiral Barrett. Sir, I think there are two aspects of it: there is the deterioration of the legacy assets, but there is also the limited capability of those assets. And particularly subsequent to 9/11, we have started looking very closely and are continuing to look at what we believe our mission capability and capacity requirements in today's environment are. We have completed what we call a performance gap analysis with respect to Deepwater. We are revising what we call the mission needs statement, which defines the capabilities we believe that we need to have. We will take that across to the Department of Homeland Security Requirements Counsel and Investment Review Board to validate that those capabilities are in fact valid and need to be achieved in today's environment; and then we will match against that capability the business decision as to whether it is prudent to replace a legacy asset, recapitalize it, or make some other type of adjustment.

But I recognize this process has probably gone not as fast as everyone would like. We will hopefully have the review I just spoke to you about completed and in place in order to address the 2006 budget cycle, but, frankly, these are significant decisions for our Service and our Nation; they are very costly, as you note, and we just have to do it right. And that review is underway both with re-

spect to legacy and also the capabilities we need to have.

Mr. Lobiondo. Admiral, the original plan for Deepwater and how this was all put together was really worked on well before the tragic events of September 11th. The original plan did not reflect the Coast Guard's new move to the Department of Homeland Security that occurred on March 1st of 2003, nor did the original plan consider the Coast Guard's role as the lead Federal agency responsible for maritime homeland security and maritime antiterrorism.

We understand that the Coast Guard is incorporating these new operational requirements into a revised Deepwater plan which will provide new requirements for the baseline. Can you tell us where

that plan is or when we can expect to see it?

Admiral Barrett. Sir, as I said, we are pretty close to have concluded our piece of that work. We will vet it with the Department of Homeland Security for their approval and validation, and take it forward from there. It is a complex and also a focused effort, though, to make sure we bring on the right capability. But as I said, I would expect that that process should be completed in time to address the 2006 budget cycle.

Let me give you an example. We have already moved forward some of these requirements where we knew we had to make decisions, and have gotten the approvals of the Department. We expect to lay the keel on our first new national security cutter this July. We have already had to make adjustments with the design of that ship to provide for improved chemical, biological, radiological, nuclear, environmental protection so the ship can operate in a threat environment. We have had to make space and weight reservations, and have done so, for improved what we call SIPRNET command control intelligence capabilities on board that ship so, again, it can deal with this fused intelligence picture we need to deal with today. We have extended the plan for the flight deck so it can be fully interoperable with other DHS and Department of the Navy air assets; a series of changes that we are making as rapidly as we can, but as prudently as we can to bring the capability forward this Nation needs.

Mr. LoBiondo. Thank you, Admiral.

Mr. Filner?

Mr. FILNER. Mr. Chairman, I would hope that you would allow today perhaps several rounds. I was just astounded by the brevity of the opening statement relative to the complex questions we have been asking both in our opening statements and many times before, and we are not getting answers to the questions, and I want to try to go deeper. I will read you one sentence from the statement that the Admiral made to show where you are getting words and not any sort of plan or action or numbers. "We have not simultaneously employed integrated product teams across multiple acquisition product lines, nor have we employed a performance-based strategy for such a long-term undertaking." What the hell does that mean?

I mean, we are not getting anything that we can in fact put numbers on and go into some of these very important questions you have asked. So I am going to try to hone in. You talked about the ships; I would like to talk about the aircraft for a little bit, and hope we have enough time to get some real answers and not all this bureaucratic doublespeak.

Admiral, the current capacity of the Coast Guard and the Department of Homeland Security to deploy helicopters for airborne use of force to meet both fast-boat drug interdiction, as well as to any terrorist threat to our ports or waterways coastlines, how many armed cutter capable helicopters do you have today to do this?

Admiral BARRETT. We have eight, sir. The Hitron squadron—

Mr. FILNER. Stop. You have eight helicopters.

Just think of that, Mr. Chairman, Mr. Coble. The United States of America has eight armed helicopters to meet the threats that are in the 21st century. It just seems to me just start with that. What are we going to do about it? What are we going to do about that? I mean, I am a layman here, but it doesn't sound like what we need. For example, I know those eight are deployed generally on the east coast. They have, in fact, done a great job for you and for this Nation. As I understand it, they have 100 percent kind of achievement. They have interdicted billions of dollars worth of drugs. And yet we have eight. I don't understand how the Coast

Guard, the Department of Homeland Security, this Administration can say that without any sense that we have got to do better.

So we have got to get, as you know and you have stated, an armed cutter helicopter that will meet the new requirements. I think, as a representative of the west coast—my chairman is on the east coast—I would like those eight back on the west coast, or an additional eight. And, in fact, you could lease those and put them there.

It seems to me, from questions that Admiral Collins has answered earlier, and your statements, that how you are moving forward, and you haven't really given us a plan or the cost of that, or the cost-effective of it, is you are going to take the American Honeywell engine out of your copter fleet, replace it with the French Turbomeca engine, that has more power than a helicopter can use, I am told. And even with that powerful re-engined copter you can't meet the vertical insertion and other requirements for boarding ships and repelling terrorists. The cabin of that HH–65 is too small; there is only one door, restricting access and exit in an emergency operation, and it doesn't have maneuverability. And, in fact, it was rejected in the original Deepwater solution.

If I am right on those points, and you can comment on them, how do you fix that? If you are going to re-engine the HH-65, and at the end how much does that cost, what does that do? You said yourself you have got to have all the assets operating, and yet to re-engine those you are going to have to take about 10 percent at any one time out of operation. And at the end of this process we are going to have 40-year-old helicopters that don't meet the needs of the 21st century. How are we going to move from where we are

to where we have to be?

Admiral Barrett. Thank you, Mr. Filner. I would be glad to ad-

dress that in sequence.

As you pointed out, airborne use of force, airborne insertion is a capability we need to bring forward, and we know that. We are working to bring that capability to our HH–60 fleet, and we will bring that capability to our HH–65 fleet both with the engine replacement program and eventually, as you point out, upgrading the helicopter as a whole to a revised airframe piece through the Deepwater program. The powering up, the replacement engines provide adequate power margins for the 65s to conduct airborne use of force and vertical insertions, and the full helicopter modification that Deepwater envisions will provide the airframe changes to allow the equipment to function adequately.

What I would offer to you-

Mr. FILNER. How long is that process going to take and how

much is it going to cost?

Admiral BARRETT. Well, the program on the line right now, the HH-65, the re-engining program will run 2.5 to \$3 million an air-frame, or roughly somewhere in the neighborhood of 250 to \$300 million for that piece of the program.

Mr. FILNER. Over how long a time?

Admiral BARRETT. Eighteen to 24 months is our notional timeline to re-engine the existing fleet of 95 65s.

Mr. FILNER. And have you given us a cost-effective comparison of doing that versus moving to the next generation of new heli-

copters, as opposed to having at the end of a process that is going to take X hundred million dollars over X period of time, taking out X percent of your fleet? And at the end where are we and what are we doing in the meantime? That is, I don't have any of those helicopters on the west coast interdicting drugs while you are re-

engining your Dolphins there.

Admiral BARRETT. Yes, sir. As you know, we deploy the aircraft from Jacksonville on a regular basis to the west coast, and down the east back to do the drug stuff. But I would offer you, too, that we really had no alternative to re-engining these aircraft. We have an immediate flight safety risk. We have got operational restrictions on the aircraft now. They are our primary aboard-ship airframe, and the ability to bring a replacement helicopter on, aside from any considerations of cost or benefit, is simply not there. We needed to power-up the aircraft and fix the control problem immediately for the safety of our crews and our immediate mission performance.

The Deepwater process-

Mr. FILNER. I am sorry, Admiral, I just don't understand that. It is going to take you an incredible amount of money over an incredible amount of time to do something that I am told you tried, in fact, with your ships in the 1960's and 1970's, that is, to repair an aging asset and spent a lot of money, then you don't have any money for the new assets, and you are in the 21st century, where we start off way behind. Has there been, for example, any sort of air and open competition for the new multipurpose helicopter that you are trying to go through with this re-engining process? Have you done that? And what is the cost-effectiveness? You are telling us you have got to do it now, it is the only way you can go, but I haven't seen any cost-effective analysis of going that way versus this way

Admiral Barrett. Well, as you know, we tasked the Integrated Coast Guard Deepwater Systems to come up with a solution to our power loss failure, and in the process of going through that, they went out and looked for solutions in the marketplace that could be rapidly brought on board. They use a competitive and a valuebased requirements-based process to do that, and this was the best

Mr. FILNER. Hold on. Wait, wait, wait, wait. Are you saying that the current-

Would you allow me to go further just a few minutes more, Mr. Chairman?

Mr. Lobiondo. You are going to get another round.

Mr. FILNER. OK, thank you. Just on that. We are not getting good answers. We need a lot of time at this.

Are you saying that Northrup or Lockheed went through an open competition or a request for proposals that evaluated one versus the other? Are you saying that?

Admiral BARRETT. We gave them the task order, the requirement

to rapidly improve the safety and reliability of our HH-65 aircraft with great urgency, and they went out, solicited proposals to do that, and made a decision and recommendation to that based on that survey and their assessment of the capabilities and the ability of different proposers to address our requirement.

Mr. FILNER. Is there any relationship between Northrup or Lockheed with the French re-engining process, that route that you said was decided on? Is there any relationship, maybe financial—how cynical of me to ever think that—between the re-engining by a certain company with a certain engine and Northrup or Lockheed? Is there any marketing or financial interest, any relationships between those two?

Admiral Barrett. I am not in a position to comment on that. I

Mr. FILNER. You are not in a position to comment? You mean you don't know or you don't want to comment on a yes or no?

Admiral Barrett. No, I don't know specifically what relationship

exists between those corporations.

Mr. FILNER. Well, I would ask, and I think this committee should ask. We are going to have a second panel, right? There may be some relationships which impact those decisions, and if there are, without being disclosed to you or to us, I would find very upsetting.

Thank you, Mr. Chairman.

Mr. LoBiondo. Thank you, Mr. Filner.

Obviously the committee has a lot of concerns about where we are and where we are going, but I would just like to remind anyone who is listening, as we move through these very difficult questions, this is not a position that the Coast Guard has put themselves in. During the 1990's the proposal for Deepwater was almost studied to death. A lot of us in Congress were screaming for that to move forward, without any real results. During that same period of time, the Coast Guard was literally gutted. Funding was gutted from the Coast Guard. Their mission requirements were increased by the Congress of the United States and their funding was dramatically decreased.

Now, just like some of their large cutters, they don't turn on a dime. In the last couple of years, through all of our collective team efforts, we have been able to increase the Coast Guard's operation and maintenance budget by more than 50 percent, we have got Operation Deepwater on track, but that can't erase years and years and years of neglect, and expecting the Coast Guard to do more with less. So we are right to be asking these very tough and difficult questions, but I think to sort of leave the thought that the Coast Guard has just been sort of wandering aimlessly for 10 or 15 years is a little bit misleading.

Mr. Coble?

Mr. FILNER. Mr. Chairman, if you would yield. I don't disagree with a word you say; however, it is up to the Coast Guard to give us the plan to move forward, and they haven't given us any real timeline, budget, cost-effective studies. We want to give them everything they need, right? And yet they are not telling us in a way which would allow us to do that. That is what I am saying.

Mr. Lobiondo. And in that we are in agreement. And I think the Admiral will take back the strong sentiments of the committee, that we need that information and we need it five minutes ago. But, again, I don't want to spend too much time on this, but they are in a very difficult position not because of their own doing. Now, they can help themselves out of it if they give us some additional information and we can all go to work on what we need to do. But

there is a little bit of background information that, in order to make an informed decision, everyone has to understand.

Mr. Coble?

Mr. COBLE. Thank you, Mr. Chairman.

Commander, I want to reiterate the Chairman's expressions of appreciation to you and extend congratulations to you for a job well done.

Admiral Barrett, good to have you up here on the Hill again. I want to revisit a question, Admiral, that the Chairman put to you regarding the Coast Guard's diverting from Deepwater replacement program to pay for sustaining Deepwater legacy assets.

Now, I am told, Admiral, that the Coast Guard underestimated these costs rather significantly, and maybe the reason for that was what the Chairman just said. Talk to me a little bit about that un-

derestimate.

Admiral Barrett. Yes, sir. Certainly, the costs have exceeded our expectations and, quite frankly, our operational tempo, particularly post–9/11, exceeded expectations that we had when the Deepwater timeline and program was envisioned in 1998.

Mr. Coble. Well, I figured post-9/11 had to be part of that prob-

lem.

Admiral Barrett. Yes, sir. And that has not changed. We are engaged, as you know, every day responding to the Nation's needs, and these needs are somewhat unpredictable at times. Recently we sent, for example, 15 cutters, 1400 personnel down to Haiti to provide the support that the President asked for to deal with the situation in that nation. That wasn't on our scope a few months ago, yet our people responded. But that comes out of cost. The cost is the operational hours and demands on our high-endurance, medium-endurance patrol boats and other assets, and we can't avoid that. This past week we have picked up over 700 migrants off Haiti, Haitian migrants, so that operation is continuing.

But those type of demands, plus the demands of homeland security, are unrelenting, quite frankly, and they are driving the use

of our assets, and those assets are failing increasingly.

Mr. Coble. Let me ask you to put on your prognostication cap, Admiral. After the Deepwater is complete, is it your belief that there will be a sufficient number of assets to meet the Coast Guard's new mission demands? And I realize I am putting you on the spot because I am asking you to fast forward, but your best opinion.

Admiral Barrett. My best sense is that the Deepwater, as originally envisioned, that is, the 1998 vision for Deepwater, even if fully realized, has to be adjusted to take into account the realities we confronted post–9/11. And we are doing that performance gap analysis and the mission needs analysis to make those adjustments to the long-term health of the program. It is a long-term issue for the Service and for the Nation.

Mr. Coble. I think you touched on it and I think the Chairman, in his questioning, examined this as well, as to how the original missions envisioned for Deepwater have changed since 9/11. Let me put this question to you, Admiral. Is this still the right acquisition mix for today's Coast Guard's missions?

Admiral Barrett. Absolutely, sir. Deepwater is a flexible, adjustable program. It was designed to be flexible and to take into account changing requirements because of the length of the program. And the program has built into it the ability to make the necessary adjustments to add the capabilities we need. So, yes, sir, I would say it is absolutely the right program.

Mr. COBLE. Thank you, Admiral Barrett.

I yield back, Mr. Chairman. Mr. LoBiondo. Thank you.

Mr. Taylor.

Mr. TAYLOR. Good morning, Commandant. How are you doing? Thank you for being here.

First on the good news. There was a boater back home who hit a submerged aid to navigation, the remnants of a piling, who contacted me on Friday morning. We contacted your Gulf Water station Friday afternoon, and I want to say within 12 hours they had a temporary mark-out. So we do want to commend you guys when they do the right thing, and much more often than not they do the right thing. So if you want to send a nice note to the guys at Ace Navigation Gulf Water, I am sure they would appreciate it. We already have.

Admiral BARRETT. Thank you, sir.

Mr. TAYLOR. Second, thank you for the decision to send the coastal patrol craft to Pascagoula. We are thrilled to have them as new neighbors in South Mississippi. Our Chairman was instrumental in having those craft transferred over from the Navy to the Coast Guard, and I think they will be a great asset for both the Coast Guard and for South Mississippi.

A couple of questions. First an observation. I think the 41-foot boats that are about to be retired, I think they first started showing up around 1974 or 1975, which means they are now 30 years old. To the best of my knowledge, you have had the same brand of engine in there for all those years. It is a domestic-built engine and, therefore, like most domestic things, the parts are not only

more accessible, but, as a rule, less expensive.

I would certainly encourage you, Commandant, as I have spoken to some of your other high-ranking officers, whenever possible, to buy American, for a number of reasons. First and foremost, those folks pay your salary, they pay my salary, and we ought to be trying to look out for our own. I am increasingly disturbed about the shrinking American industrial base, particularly when it comes to things for shipbuilding parts. But also as someone who probably understands diesel engines a little bit better than anybody else in this room, understand that parts wear out. Parts are expensive.

And as someone who is a boat owner, I also know that domesticbuilt parts are a heck of a lot cheaper in the long run, a heck of a lot more accessible in the long run than foreign parts. And it would be my guess that the follow-ons to the 41s will be in service for anywhere from 20 to 30 years, and even if a foreign-built engine is less expensive initially, in the long run there is no way on earth that you or anyone else is going to convince me that we are going to save the taxpayers money in the long run by buying foreign engines, when you start buying the sleeves, the pistons, the bearings,

the rings, all the other things, the alternators, generators that wear out on an engine.

So, again, I wanted to mention that to you.

Second thing, and this is way out in left field, but sometimes it is my job to be way out in the left field, a proposed defense contractor came to me the other day with what he presumes will be a unit small enough to mount on a Humvee, where he can combine a laser with a microburst of an electromagnetic pulse. In talking to some friends who are physicists, they tell me not only is that doable, but we will probably live to see it.

Now, it obviously makes a great weapon if you are trying to disarm a go-fast boat, or someone who is getting too close to one of your cutters like what we saw with the Kohl. If it is gasoline powered or even electronically timed diesel, you can stop it in its tracks.

The flip side, the more I think about it, is what if the other guys get something like that and it is pointed at your radar. So my question is I know the Navy has, from time to time, had elevated sense of awareness on EMP, and then it seems to drop off. In your next generation of cutters, is there any attempt at hardening for EMP, since I really do consider it one of the many threats we will face in the future?

Admiral BARRETT. I appreciate the comment, and I think certain of our cutters would have certain protections; others would have much more limited protections, and I would be glad to provide you some more detail on that for the record.

Mr. TAYLOR. OK. Again, we have seen several things happen just since I have been in Congress that were certainly unforeseen, and if we can prevent the disabling of a cutter in the future by taking some steps now, then I hope we would.

I am curious, I am aware, with the huge——Mr. Lobiondo. Excuse me just a minute.

Admiral, if we are into some classified territory, I think it is an important question that Mr. Taylor asked, and I certainly, on the committee's behalf, would like to have some follow-up information. If you can tell us if we are in a classified area, we will take appropriate precautions.

Admiral Barrett. Yes, sir. I think we would quickly get into it if we pursued it to any extent. And we can certainly provide the committee, at your request and desire, appropriate classified briefings on the capabilities of the cutters that we are building.

Mr. LoBiondo. I would like to follow up on that.

Admiral Barrett. Sure.

Mr. LoBiondo. Excuse me, Gene.

Mr. TAYLOR. Sure. No, thank you, Mr. Chairman.

Second thing, Admiral, I recently had the opportunity to visit with a Louisiana boat builder who actually built the coastal patrol craft, who told me how bad his business is, and he estimates a large reason for that is the high price of steel, and that many purchasers are waiting to see if it moderates. I am curious to what effect does that or does that not affect your Deepwater acquisition program. Obviously your largest cutters will be made of steel.

Admiral Barrett. Yes, sir.

Mr. TAYLOR. The price that you have received to build those cutters, was that a fixed price? And, again, we write checks; that is what we do. I am not going to tell you how to run a ship. But is that going to affect what we have to allocate as far as resources?

Admiral Barrett. Well, as you know, we negotiate the price of the cutters through the contractor. In the case of, for example, the national security cutter, the initial cutter is a cost-plus award and then the follow-on cutters are firm fixed price for delivery. So the market price of steel is obviously going to be a factor in the cost of the production. I want to be responsive. But obviously it is a factor.

Mr. TAYLOR. OK. I guess the last thing I would ask you is do you feel like you are getting the proper support from both the Administration and from Congress as far as the funding for your next generation of cutters? I am fortunate enough to serve on this committee and on Armed Services. Quite frankly, the Coast Guard, because it is a small service, just doesn't have the huge constituency that the United States Navy does. Do you feel like we are paying enough attention to that? And will turn that around, what steps are you and the other leaders of the Coast Guard taking to raise the level of public awareness so that we can get this done?

Admiral BARRETT. Sir, I think the support from the Administration has been extremely strong. Our budget lines have been up steadily the last several years. I think in part that comes from an acknowledgment of what we do every day for this Nation and some of the issues we have talked to here, and the support of the Congress and this subcommittee and this committee have been extremely strong, and they are deeply appreciated by our Service and, more importantly by the men and women that serve. These are not easy issues, they are costly; they are complex, and they require a concerted effort by all of us, the Service, the Department, the Administration, and the Congress. And I would say personally I feel we are getting better support than we have ever previously enjoyed certainly in my career.

Mr. TAYLOR. I have only seen a very brief synopsis of it, but what

is your opinion of the Rand study that recently came out?

Admiral BARRETT. Sir, I have not had a chance to review that in depth. As you know, it came out just earlier in the week. I know the Administration hasn't had a chance to review it, so I really don't have any opinion on it.

Mr. TAYLOR. May I ask that when you get a chance to review it, if you could find the time or send someone over? I would welcome

your thoughts on that.

Admiral Barrett. Sure.

Mr. TAYLOR. Thank you, Mr. Chairman.

Mr. LoBiondo. Thank you.

Admiral, in March the GAO released the report on Deepwater contract management and recommended that the Coast Guard and system integrator make improvements in the area of program management, contractor accountability, and cost control. How will the Coast Guard tackle implementing these recommendations?

Admiral Barrett. Sure. Across the board, we agree with the GAO recommendations. We are always open to that type of input and insight into how we do our business, and we are constantly

striving to do it better. Specifically with respect to the concerns that GAO raised, we are working to incorporate, for example, competitive factors into the award term review often contract. We will adjust the contract to build in requirements that address competition by the prime and the subs into our award term determinations, and that affects both the length and the re-award of the contract term. Also, in terms of contractor effectiveness, we are taking steps to change the award fee structure for the prime performance so that future award fees will take better into account and more objectively the contractor's performance as a system integrator. And we are also working very hard to upgrade the training, the stability, the performance of our integrative product teams, and those are partner teams; we work this contract as a partnership, and we believe we have a very strong partner.

As I indicated, the program executive officer provided a detailed report this week to GAO on our progress, and I would be pleased to provide a copy of that to the committee members, and we would be pleased to keep the committee fully informed as we make adjustments to those recommendations.

Mr. Lobiondo. Thanks. If we are successful in holding the number that the committee approved last week, the \$1.1 billion for 2005, what would the Coast Guard do with that money?

Admiral Barrett. Well, obviously we would do things in both aviation and surface and command control and communication. And we can provide you, if we have not already, a complete breakdown for the record of what the spend plan at that level would include.

[The information received follows:]

The Coast Guard fully supports the President's request of 678M for Deepwater as it meets the Coast Guard's FY05 needs.

An IDS budget of \$1.1B is an increase in the funding over the level included in the President's Budget. With the increased funding the Coast Guard would acquire an additional MPA, 1 NSC, 5 VUAVs, 5 MCHs (or SRRs), 5 Cutter Small Boats (LRI/SRP), 11 Legacy Cutter C4ISR Upgrades, 9 C4ISR Shore Upgrades, 5 Logistical Shore Upgrades, increased funding for the design and development of the OPC and allow continued acceleration of IDS Patrol Boat solutions. Legacy asset sustainment for all categories would have significant increases.

The table below is a \$1.1B FY05 IDS spend plan.

IDS Budget Categories	\$1,1B Level	
	Qty.	\$M
Aviation		386.8
Maritime Patrol Aircraft (MPA)	1	57.4
VTOL Unmanned Air Vehicle (VUAV)	5	80.0
Short Range Recovery (SRR)	5	110.2
Legacy Sustainment		139.2
Surface		474.5
National Security Cutter (NSC)	1P+LL	274.5
Offshore Patrol Cutter (OPC)		40.0
Patrol Boats (WPB)		120.0
Small Boats	5	4.0
Legacy Sustainment		36.0
CAISR		101.3
Command & Control System / Common Operational Picture (COP)		31.1
Legacy Cutter C4ISR Upgrades	11	52.2
Shore Site C4ISR Upgrades	9	16.4
Legacy Sustainment		1.6
Logistics		51.4
Integrated Logistics Support		21.4
Shore Site Upgrades	5	6.9
Facilities Upgrades		23.1
Systems Engineering and Integration		49.6
Government Program Management		42.1
Total Capital Acquisition (CA)		1,105.7

Note: Subtotals may not match due to rounding.

But we would look, for example, to accelerate the design and perhaps move forward a replacement cutter, the 110 stretch. Right now, as you know, we are going through conversions to 123s. We are committed for about eight or nine of those. We think ultimately the right number, if we can bring a replacement fast response cutter forward, is 12 to 16, probably in that range. But obviously we would accelerate the conversions and the movement forward of the design and the potential technology demonstration associated with a fast response cutter replacement, which I believe goes to some of the concerns that both you and Congressman Filner have raised about the need to perhaps replace, instead of continuing to stretch out. So that would directly affect the 110 to 123 conversion, as opposed to replacement process.

We would bring on an additional maritime patrol. We would look to increase the number of vertical unmanned aerial vehicles we would bring forward. We would expand the command control communication upgrades of some of our legacy systems, as well as our sustainment systems. And, finally, we would look to strength and take forward the design review that is in the 2004 budget for an offshore patrol cutter and look at whether there are ways to accel-

erate that.

Those are some of the things we would do, and I would be glad to provide the details for you, sir.

Mr. Lobiondo. So, following up on that, how would that impact

your operational capabilities?

Admiral BARRETT. It would improve our capability sooner; it would provide a more capable Coast Guard in less time, frankly, sir.

Mr. Lobiondo. Coast Guard UAVs under test right now, or

where are you with that program?

Admiral Barrett. Yes, sir. Two different. VUAVs we have had a design review and have passed the requirements test. We don't have an operational unit to test, but we expect by the end of the year that the contractor on that, that is Eagle Eye Bell Textron, will bring forward a model that we can test operationally. We are also conducting tests of UAVs. We did a demo test at King Salmon of Predator A in Alaska this past fall. We will be bringing on a Predator B test later this spring, early summer, again up in King Salmon, to determine whether that asset, a Predator, is suitable for use for the deep ocean missions we have, whether it is maritime boundary, fisheries enforcement, or other missions. So we are testing the Predator as we speak; the VAUV we are not to a test phase yet, but we hope to bring it along rapidly.

Mr. Lobiondo. The other services are obviously doing an awful lot with UAVs. Are you in Coast Guard communication so we are not reinventing the wheel with a lot of the testing and R&D that

has been done?

Admiral BARRETT. Yes, sir. We partner very closely with the Navy on a routine basis across all our program areas, Deepwater specifically. But we look at what we are doing, what our requirements are. Our requirements don't always match theirs, but we look for opportunities to leverage each other's research development test and evaluation programs, again, to see if we can save the

taxpayers some dollars and get the most effective product for all of our missions.

Mr. LoBiondo. Mr. Filner?

Mr. FILNER. Thank you, Mr. Chairman. I just want to follow up

a couple points that I raised initially.

I may have phrased the question differently, Admiral, but I was trying to ask how much it would cost to modernize the Dolphin fleet, and I think you gave me a figure of a couple million dollars.

Admiral Barrett. I gave you the figure for the re-engining of

the----

Mr. FILNER. Remember, I am a layman, you are the expert. If I am asking a question that doesn't make sense, please don't answer just that question and say, oh, I answered your question. I am trying to figure out the cost-effectiveness of going one route or the other, and you told me just the engine. Maybe that is what I asked. I meant to say what is the remodernized thing, what would it cost to do that? And I think you should have said, well, it costs this much for the engine, but you have got to do avionics and armor and gear boxes and tail rotors. Tell me what all that costs and don't just leave it to me to have the staff tell me, but he didn't tell you that.

Admiral Barrett. I would have to get you that for the record. You are talking about the total cost of the MCH program. I would have to provide that for you for the record, and I would be pleased to do that.

[The information received follows:]

With ICGS managing the HH-65 re-engining, the replacement that is being conducted this year will not need to be conducted again as part of the MCH introduction because the engine being installed has the power requirements to accommodate all of the weight associated with the MCH aircraft.

There are several additional upgrades to the MCH that are not installed as part of the HH-65C re-engining. The table below summarizes these changes and the estimated unit cost difference in FY 2002 dollars.

	Re-Engined HH-65C	мсн
Upgrades	Turbomeca Arriel 2C2 Engine (2)	Turbomeca Arriel 2C2 Engine (2)
	N4 Gearbox	N4 Gearbox
	Extended (Panther) Nose	Extended (Panther) Nose
		Fenestron (10 Bladed)
		Landing Gear Upgrade
		Tail Rotor Upgrade
		6th Fuel Tank
		CDU 900 Software Upgrade
		Radar Upgrade
		Avionics Upgrade
		Digital Flight Director System
		SATCOM (Voice/Data)
		Flight Deck Assist System
		Avionics Relocation
Estimated per unit cost	\$2.0M - \$3.0M	~\$6.2M

Eventually, 93 aircraft will be converted.

Mr. FILNER. Do you have that figure somewhere? I hope you would, because you are telling us—I have heard that you have estimated, I read somewhere, around \$9 million per helicopter. Is that in the ballpark?

Admiral BARRETT. That sounds high to me. I think the last ballpark we had for that, depending if you are talking about this year dollars, we are talking in the neighborhood of 6 to \$6.5 million. So the re-engining is about 50 percent of what we think the total package would be.

Mr. FILNER. OK, but, see, Mr. Chairman, here is where the issue that I am trying to raise is. What is the cost effectiveness and the timeline and etc. of doing whatever cost per Dolphin versus buying

a new one now an saving several years.

I mean, do you want to go before a future 9/11 commission and say, you know, it took us three years to remodernize, and if we had bought the one earlier, we could have stopped that last attack that took 5,000 lives? I don't understand why you couldn't start a competition now for that multipurpose helicopter, get it now . Your ICGS consortium has recommended one already. Why not go that route versus the other? It simply boggles my mind that you will take the additional time. You said you need all the assets in your opening statement. Now we can't afford. But you have got to take some out to change that, so you are lessening your capability. Meanwhile, we are going to have to wait three years and we are going to have an outmoded helicopter in any case. What is the common sense in all that?

Admiral Barrett. Sir, I think we will have a highly—we are satisfied that a prudent decision to re-engine the aircraft and also to bring forward the revision of that airframe, which, as far as I know, is in pretty good shape, it doesn't corrode, is a cost-effective and prudent one. And I would be glad to provide you, sir—and your question is a fair one.

Mr. FILNER. But everybody has said that. I have asked this same question to Admiral Collins and other things, and everybody says this is a prudent, cost-effective decision. I haven't seen any figures to prove that. And to take into account the timeline, to take into account the cost, to take into account the availability of the assets while you are taking them out to modernize, etc., etc., etc. I mean, that is the kind of analysis this committee needs, and we are not getting it.

Admiral Barrett. Yes, sir, I appreciate and understand that, and we have obviously failed to provide that to you, but I will, for the record, provide the way we look at that type of action, the total ownership cost involved, how we view it to be mission effective, and the methodology we use to make that assessment. But I would be pleased to provide that, and obviously we haven't done that so far to your satisfaction.

[The information received follows:]

Integrated Coast Guard Systems (ICGS) proposed the Multi-mission Cutter Helicopter (MCH), which is a major improvement of the existing HH-65 helicopter, as part of their system solution. During the source selection evaluation, the Coast Guard evaluated the competing cost proposals to ensure the acquisition prices were reasonable and realistic and that system level requirements were met.

During the first phase of the IDS Program, the competing industry teams performed an analysis of alternatives in the development of their proposed system solutions. A wide array of aviation asset solutions was considered by ICGS, ranging from modifications, upgrades, and service life extensions to existing legacy assets to new replacement platforms. The MCH upgrade was proposed by ICGS as the best value within their system that stayed under the notional funding level available for the Integrated Deepwater System. The MCH is a low risk, cost-effective, non-developmental solution, involving mature off-the-shelf components, which has greatly improved capability when compared to the legacy HH-65.

The table below provides a cost comparison of the MCH and the AB-139.

Assets	Average Unit Cost (\$M)	# of Units	Total Acquisition Cost (\$M)
MCH (Upgraded HH-65)	\$6.2M	93	\$576.60
AB-139	\$15.0M	93	\$1,395

Amounts are presented in FY2002 Dollars. Unit costs are based on the full production of these assets and if a smaller amount is acquired, the unit cost will increase.

Even though the MCH and AB-139 are not directly equivalent helicopters, the AB-139 is considered typical of a new helicopter that would be acquired to provide the capability of the HH-65 or the MCH.

Based on the prices in the ICGS proposal, it would have require approximately \$9M more per helicopter to acquire a new asset when compared to upgrading and extending the service life of the HH-65. This would have require an additional investment of over \$800M to achieve a comparable result in system performance.

Mr. FILNER. I would appreciate that.

If I may shift just briefly, and that is something I keep saying, but the need for a west coast drug interdiction capability now. You know and you have said you are short of air assets. You will be taking, if you proceed down this route of folly, you are going to have X percent, 10 percent maybe, out at any one time. We voted, this committee, this subcommittee, the full committee, and the House of Representatives has voted to establish a west coast Hitron fleet in our authorization bill. I think you should take advantage of that authorization. You have an existing arrangement, lease arrangement which you can expand. You cannot divert the Dolphin or Jayhawks for that purpose; they just simply don't meet it, and there is not enough of them to take them away from your other missions.

Again, I think you need something now, and, Admiral, I just simply don't understand. 9/11 has occurred. You have a committee and a Congress who are willing to expend whatever you need to move forward in the assets and in the timeline, because speed is of the essence. As I said, none of us wants to be put before another commission next year and you say, oh, we were planning to have that two or three years down line, when we know we need it now. And the assets are available now; you can get them right now. It is a question of making the lease, making the purchase, whatever. And if you are going to take 10 percent of your fleet out anyway, it would probably pay for itself to lease these other ones. So why can't we—we have given you the money to do it. Why not do it? Sir?

Admiral Barrett. Well, again, we think the right solution is to bring on the capabilities in the 65 and 60 fleet. There are also significant training and support issues if we establish a second squadron, if you will, outside of Jacksonville with a different type of airframe.

Mr. FILNER. I guess I give up. We know there are drugs going through right now that we could stop if we had the assets there. We could do it now. We could stop potential terrorists now. And you keep saying we have a plan X years now. I just don't get it. I mean, the Chairman said we support the Coast Guard, you can't turn it around on a dime, and we understand all that. But assets are available. The money, I think, is available. I don't understand your hesitancy and your caution. It's just a bureaucratic kind of movement in a post–9/11 world doesn't, if I can use this metaphor, cut it.

Mr. LoBiondo. Mr. Filner, it is a good question.

Admiral, maybe while we have certainly support through the authorization, it is a little bit different than the actual appropriation, and maybe you can come back to us for the record and tell us the dollars that we are lacking here, because I have a little bit different interpretation of dollars being available. It is my understanding that the dollars aren't available; that the authorization is there, our will of this subcommittee is there. And, as you know, magnificent Congress that we serve in authorizes the Coast Guard bill with 400 plus votes, and then when it comes to an appropriation, it is an altogether different story. When that appropriation comes down and the Coast Guard has got some pretty tough decisions to make, and I would like to know where that gap comes in.

Mr. FILNER. I understand, Mr. Chairman, but if the Commandant of the Coast Guard came before the Congress of the United States and said we need X number of multipurpose helicopters, an X amount of fast cutters now, and this is what it would cost, I think the Congress would have great difficulty in not responding to that. I know they have to operate as part of a team and part of an administration, but a clear statement of the needs I think would go a long way, rather than this bureaucratic stuff, well, you know, we have determined not his kind of test and blah, blah, blah, blah, blah, blah, blah, blah, blah, blah,

Mr. LoBiondo. Mr. Taylor.

Mr. TAYLOR. Commandant, Mr. Filner sparked something. In the simplest of terms, has the Coast Guard given much consideration for its next generation of helicopters? Rather than reinventing the wheel, just buying a variant of the Seahawk, which the Navy has used, and the Blackhawk, which the Army uses, for the purpose of

commonality and training, parts, etc.?

Admiral BARRETT. Yes, sir. On any of those decisions we look at, first, our mission performance, operational effectiveness. We do look at the cost and things like commonality, and support systems are obviously a cost driver both in terms of operating costs OE and the total ownership cost of the system and the acquisition cost. But we do review that closely to determine first if it meets our mission requirements and then, secondly, if we can afford that package and it is what capability we have to have.

Our requirements are different many times. We are a maritime service, as you know, and have served. It is on the water where we are, and we take the performance piece extremely seriously, and that is our primary driver, and we try to drive that down within

the best cost and effectiveness we can get for the taxpayer.

Mr. TAYLOR. So is a variant of a Seahawk in the running as one of the contenders as your next generation of helicopters or not?

Admiral Barrett. Other than the 65, which we are talking about the re-engining here, but the helicopter replacements within the Deepwater program right now are notional. We have not reached the point at which we have made the decisions in terms of actual helicopter procurements. Those are what the Integrated Coast Guard Systems has put up as notional, but we are not at the timeline yet where we would be, for example, replacing the 60's, the HH–60's. And we would look, frankly, at whether replacement, service life extension, modifications is the best decision to make.

Mr. TAYLOR. With the idea that any time you buy a lot of something, the per unit cost tends to go down?

Admiral BARRETT. Yes, sir.

Mr. TAYLOR. Along that line there was some talk at one point of trying to make, if I am not mistaken, the medium-sized cutter and the Lotoro combat ship to have them share a common hull. Where does that stand?

Admiral Barrett. Sir, we are working closely with the Navy, the Program Executive Officer, Admiral Stillman, partners with the Navy with the LCS. Whether we would get to a common hull or not, whether it would meet our requirements within our cost envelopes, we really haven't been able to say. What we are proposing, though, is to look at taking forward the conceptual design for what

we term the offshore patrol cutter, the replacement for our MECs, and that would give us, again, some additional fidelity on whether we would have to go with a separate platform or could leverage off a Navy platform, but at this point it is a little hard to say. The Navy requirements, in many cases, exceed ours, and certainly in

many cases the cost would exceed ours.

Mr. TAYLOR. Again, like the Chairman, I also serve on Armed Services and, particularly with the attacks on the convoys in Iraq, have become very much aware of just how fuel-dependent the American military is, and I think it is fair to say we are probably the most fuel-dependent of any military on earth. That dependency creates a vulnerability. I know that the Navy is working towards smaller crews. I would presume you are doing the same. I know the Navy is looking for vessels that require less maintenance. Again, I would presume you are doing the same.

What I haven't heard any talk from either service is in effort to reduce fuel consumption. And if that is a part of this proposal, if you could enlighten me on that, I would certainly appreciate it.

Admiral Barrett. I think certainly it is a factor. As you know, a lot of the driver on fuel consumption is speed, so it starts with a speed requirement and the other capability requirements that a given ship and a given hull has to have. And those speed requirements, with the other shipboard requirements, tend to drive the propulsion system, which tends to drive the fuel system that is going to give you the delivered performance. So, yes, sir, it is a factor, but it is an envelope of other considerations, primarily driven by the performance that is required.

Mr. TAYLOR. Just an observation. I keep a log, and I think a year ago right now I was buying diesel at 87 cents; now it is a \$1.20. I would sure hope that when the Deepwater program was put together, the presumption that fuel would be inexpensive forever was

not a part of that package.

Admiral Barrett. Sure. Mr. Taylor. OK. Thank you very much.

Mr. LoBiondo. Mr. Filner, do you have anything else?

Mr. FILNER. I'll rest my case.

Mr. LoBiondo. OK.

Admiral, thank you very much. We appreciate it. And we will now move to panel two.

Admiral Barrett. Thank you very much, Mr. Chairman. Mr. Lobiondo. OK, I think we are ready for panel two.

I would like to welcome Mr. Fred Moosally, the President of Lockheed Maritime Systems and Sensors, and Dr. Philip Dur, the President of Northrup Grumman Ship Systems.

Gentlemen, thank you for being here.

Fred, you want to proceed?

TESTIMONY OF FRED P. MOOSALLY, PRESIDENT, LOCKHEED MARITIME SYSTEM AND SENSORS; AND DR. PHILIP A. DUR, PRESIDENT, NORTHROP GRUMMAN SHIP SYSTEMS

Mr. Moosally. Good morning, Mr. Chairman, Mr. Filner. Thank you for the opportunity to discuss the Integrated Deepwater Systems program.

The Deepwater contract is 22 months old, but, as you know, our work with the Coast Guard began about six years ago. Not only is this the largest modernization effort in Coast Guard history, but the Coast Guard's approach to this program is truly visionary.

The Deepwater acquisition strategy is unlike any other government contract that we are associated with. It is entirely performance based, which means the ICGS team is measured at every step through the life of the program. It represents a new model for Federal procurement, one that focuses on overall mission effectiveness and total ownership cost, not on individual assets. In addition, the Coast Guard determined the cost it was able to pay, which required industry to find new and innovative solutions.

It is clear that the success of Deepwater's acquisition strategy rests on an unswerving commitment to disciplined execution if we are to keep the program on course, on or under cost, and on or ahead of schedule. To that end, we value the observations and input from the Congress and independent reviewers such as the GAO.

When ICGS developed its proposed solution for the system of systems, we used the Coast Guard's defined mission requirements to complete comprehensive operations analysis using proven modeling and simulation techniques. We considered the full range of options, and operational effectiveness and total ownership costs were key drivers in determining the optimum mix of assets, legacy and new. The ICGS solution includes the full range of manned and unmanned aircraft, new ship classes, legacy upgrades, logistics support, and the C4ISR architecture to connect all Coast Guard forces.

Most importantly, the solution defines how these assets and capabilities work together to provide new and more efficient capabilities. Systems integration ensures that all platforms and systems are compatible and interoperable, not just within the Coast Guard, but with other U.S. forces and agencies, providing high levels of operational effectiveness and yielding the best value to the American taxpayer.

As you know, Mr. Chairman, the Coast Guard has taken on additional maritime homeland security responsibilities not originally included in the Deepwater requirements, while continuing to supports its traditional missions. Today we are executing to the solution in our original plan with the same modeling and simulation expertise we used to develop the original solution. We are ready to adjust the plan to address the new mission requirements or other Coast Guard needs.

For example, it has been discussed here at length that in January the Coast Guard turned to ICGS with an emergency task to identify solution to re-engine the HH–65 helicopters. We have the solution, and the first engine will be ready to install in May. This solution supports the Coast Guard's emergent need to have these helicopters flying without restrictions and is consistent with other upgrades that are planned for this airframe later in the Deepwater timeline.

In order to deliver these capabilities and efficiencies, we rely on the benefits of an open and robust competition throughout the program. We call that the open business model. Lockheed Martin and Northrup Grumman have certified purchasing procedures that require competition to the maximum extent practicable. We are held accountable for these standards through the annual U.S. government contract purchasing system reviews. For Deepwater, we developed the open business model to identify solutions from a large number of suppliers, and we continue to rely on the open business model as we adjust the solution based on the changing requirements or evolving technologies. We will select the solutions that best meet the operational effectiveness and total ownership cost objectives.

In the end, the Coast Guard and the American taxpayers deserve results. Since this program was awarded, we have achieved well over 60 major program milestones, and I would like to focus on an area of responsibility for Lockheed Martin, which is the C4ISR and aviation achievements.

The Matagorda, the first 123-foot conversion, was delivered in March, after an extensive conversion that includes the addition of a robust new C4ISR capability. I would like to take a quote from the commanding officer of that vessel: "The bridge equipment layout is amazing. Gone are the days of scurrying down to get a fix,

then screaming the information up to the open bridge."

C4ISR upgrades are complete on seven 270-foot cutters and well under way on several other legacy surface assets. Let me quote the CO of a legacy cutter: "It changes the way we do business. I love it." Let me quote another legacy upgrade CO: "I would estimate that 75 percent of our operational coordination is now conducted via SIPRNET chat. I can get up to the second intel, as opposed to waiting for intel messages that is usually 12 to 24 hours late. During our recent case last week that resulted in a two-plus ton cocaine bust, 90 percent of our coms were down. I was not able to get permission for warning shots and disabling fire through normal means, so we turned to chat on the SIPRNET, and within several minutes we had permission to take the guy down."

Major upgrades to the Atlantic shore side communication stations are also complete, and the Pacific station will be complete this summer. The Eagle Eye UAV passed the highly successful preliminary design review. We awarded a contract to E.S. Causit for the first two maritime patrol aircraft. And as you have noted, Mr. Chairman, last week we celebrated the opening of the Maritime Domain Awareness Center at Lockheed. The state-of-the-art facility is ready to develop tests and develop Integrated Deepwater C4I requirements for all assets and systems before they are delivered.

What does this mean for the program? It eliminates risk in systems that would be fielded, it eliminates stovepipes that are common in platform-centric programs, and it provides the Coast Guard with capabilities it did not have. These capabilities in the Deepwater program are needed now. The need is demonstrated by the growing mission requirements and the reality that legacy assets are well passed their prime. As the Commandant has said, the increase in operations since 9/11 is accelerating the decay of those legacy assets.

In addition to the operational benefits, delivering Deepwater early will also maximize production efficiencies across the board. I want to assure you, Mr. Chairman, that ICGS team is fully capable and ready to carry out this acceleration if additional funds can be found.

Mr. Chairman and Mr. Filner, I am proud of our Governmentindustry partnership and the tangible results we are already demonstrating, and we hope you share in the pride we have in delivering the right tools to the Coast Guard men and women who every day serve our homeland security and maritime safety needs. Thank you.

Mr. LoBiondo. Thank you.

Dr. Dur?

Mr. Dur. Good morning, Mr. Chairman and distinguished members of the subcommittee and members of Congress present in the chamber. Thank you for the opportunity to appear before you today and to discuss the Integrated Deepwater System program on behalf of ICGS, a joint venture of Northrup Grumman Ship Systems and Lockheed Martin, and the system integrator for the Deepwater program.

At the outset, on behalf of ICGS and all of the men and women working in support of this program, we would like to thank you, Mr. Chairman and members of this committee, for your stewardship and your unwavering support of the Coast Guard, of the Deepwater program, and your continuing commitment to funding this critical initiative.

The Deepwater program was conceived several years ago with the realization that an aging and obsolete fleet of ships, aircraft patrol boats, commanding control and communications equipment had increasingly limited the Coast Guard's ability to perform their mission. The Deepwater program is consistent with the time honored tradition of giving our seagoing service members the best tools available to get their jobs done. In short, the service that defines itself by the motto "Semper Paratus," or always ready, has been hobbled far too long by platform and system readiness problems.

When, after a long and spirited stepped competition, the Coast Guard announced that it had selected ICGS, the partnership forged between Northrup Grumman and Lockheed Martin, to manage and execute the Integrated Deepwater System contract, we realized an opportunity to modernize the entire Coast Guard and to infuse it with state-of-the-art technology. Most importantly, we saw the urgency in this transformation, and we are ready to apply our combined knowledge and the skill sets of two world-class defense companies to provide the Coast Guard with the instruments and the systems to take the security of our coastline and Nation into the next century. We take this mission seriously, Mr. Chairman, with the full support of our parent corporations and in partnership with the Coast Guard.

ICGS is managing an integrated team in collaboration with the Coast Guard at every level every day. We are working over 23 joint industry-Government integrated product teams, or IPTs, executing this contract to meet common goals. The contract requirement to attain a given level of operating effectiveness, while minimizing total ownership cost, will ensure that the Deepwater system delivers best value to the Coast Guard for the life of the program. We are committed to an open business model and to taking full advantage of dynamic markets as a business imperative.

We believe the program is working well, and we assert that this partnership between systems integrator and operator is the reason why. ICGS has the industrial expertise and the knowledge of the markets, and the flexibility to manage myriad complexities to identify the systems attributes and solutions, to evaluate alternatives that contribute to improved mission effectiveness at the lowest total ownership cost, to engineer the system-wide operational and support relationships across all asset classes, ships, aircraft, and shore stations, across multiple missionaries in the full partnership with the Coast Guard.

Without a system integrator like ICGS, this program would require multiple prime level contracts that would be managed separately. This would invariably result in multiple industry management and engineering schemes, with multiple and duplicative costs, and there would not be a single responsible point of contact were these separate acquisitions not to intersect into a systems approach.

In the final analysis, what counts are results. The 22 months since this program was awarded, we have achieved 60 major program milestones systems-wide, across five domains, and affecting seven new asset classes and six legacy asset areas. I would like to spend a few moments highlighting some of our accomplishments in

the surface side or the cutter portion of this program.

In what is referred to as the surface domain in the IDS budget, we have recently delivered the first reconfigured 123-foot island class cutter, Matagorda, with its 7-meter short-range prosecutor. In the next day or two, Mr. Chairman, we will deliver the second 123-foot cutter, the Matompkin, and the third, Padre, will be undergoing builder's trials in two weeks. Matagorda has a new stern ramp, a new pilot house, enhanced C4ISR electronics, and improved crew habitability. She is certainly faster, smarter, quieter, and more agile a ship than she was before.

And to follow in the next few months, we will begin construction of a new class of heavy endurance cutter, the national security cutter, at our Ingalls operations in Pascagoula, Mississippi. We have nearly completed detailed design and, as I speak, steel for the ship

is being delivered from the mills in Gary, Indiana.

In consideration of the accelerated up tempo and the ensuing degradation of the legacy fleet, and at direction of the Coast Guard, we are accelerating the design for the fast response cutter. As announced by the Commandant, the fast response cutter prototype will represent a step in technology that will provide benefit to the Coast Guard. That shift is the construction of a ship made entirely of composites, lightweight and user-friendly, a ship that will break the tyranny of rust and corrosion so much in evidence as we endeavor to modernize the earlier generation of steel cutters.

Discussion has been ongoing to accelerate Deepwater to bring badly needed and improved capabilities to the Coast Guard sooner. We will attest that the capabilities are certainly needed now. That need is not imagined, it is based on new mission requirements and the stark realization that legacy assets are well past their prime and difficult and expensive to modernize. Acceleration will also

maximize production efficiencies across the board.

Mr. Chairman and distinguished members of the subcommittee, I am confident that you see the benefit of our Government and industry partnership in the tangible results we are already delivering. We hope you share in the pride we have in delivering the right tools to the Coast Guard men and women, who every day serve this Nation, our homeland security, and maritime safety.

Again, thank you for your support of Deepwater and thank you for this opportunity to personally update you on the progress of

this very important program.

Mr. LoBiondo. Thank you, gentlemen.

We have been talking a lot about our great interest in acceleration, and I know that you certainly have the industrial expertise, as you have been testifying to, but if we and those who are understanding the critical importance of acceleration are successful and the appropriators can be enlightened, do you have the industry capacity to handle this? I would like each of you comment on that.

Mr. Dur. Let me start. Yes, the answer to the question, Mr. Chairman, is yes. Obviously, the pace of that acceleration needs to be understood, but I cannot envision any responsible argument for acceleration that I have read that would exceed the capacity of Northrup Grumman Ship Systems and its partners in the surface domain, a joint venture between Halter and Bollinger, to accommodate the demands that an accelerated program could put on the system.

Mr. Moosally. I would say the same thing on our end, Mr. Chairman. You saw the facility we have up in Moorestown, the MDAC, you saw the fact that is is very expandable. As a matter of fact, we have some empty space because we basically built for the future, hoping that there would be acceleration, because we saw that early on when we did the systems analysis of this program. And we certainly have the capacity with the industry in this Country to accelerate this program and to give the Coast Guard what they need.

Mr. LoBiondo. The facility that we are referring to, MDAC, were

you technically obligated to build that?

Mr. MOOSALLY. No, we were not technically obligated to build it. Mr. LOBIONDO. Just comment for a brief moment on motivation.

Mr. Moosally. That was a motivation. Based on our experience in our company, we built the AEGIS system up in Moorestown, as you are well aware, and the understanding that basically, and the way we propose this program, which was a system-to-systems approach, how do we optimize the Coast Guard's infrastructure and not suboptimize on any one platform or any one system. We knew you had to do a lot of system analysis, a lot of development testing and integration to reduce risk, and so our experience told us that. We thought it was something we had to do. It is something we decided to invest in at Lockheed Martin. We made a rather large investment in that facility because, once again, we knew that in order to get this interoperability that we had to to get the assets interoperable, the helicopter assets, the maritime patrol assets, the surface assets, that we had to do a lot of development and tests at a land-base facility. So that drove us to build that building and to put the resources in there with the hardware that you saw with the people to link all those things together.

Mr. Lobiondo. Thanks. I think I can ask the question and anticipate your answer, that I certainly encourage any of the subcommittee members or anyone who is interested in seeing what this state-of-the-art facility can do, that you would welcome them to come in and visit.

Mr. Moosally. We would visit all visitors.

Mr. LoBiondo. They are inviting you now, Mr. Filner.

The system integrator, the Integrated Coast Guard Systems, has had several opportunities to employ IPTs and other military construction projects, yet the GAO has expressed several concerns about the Deepwater IPTs, citing inadequate training, excessively high staff turnover rates, and overinvolvement by contractors. Our impression is that these issues are maybe not merely growing pains. Do you concur with the GAO's assessment of Deepwater integrated product teams?

Mr. Dur. Probably answer this also. I think we are in general agreement, though I think, like any new startup organization with as wide a scope of activity as this, there clearly were imperfections. But I think we have addressed those sequentially. I think the experience level of the people that we have working in these IPTs is certainly adequate for what it is they are asked to do, and organizationally I think the measures that were outlined earlier by the Vice Commandant taken by the Coast Guard, and that we have taken ourselves as industry partners to ensure that the IPTs are staffed with capable, responsible, and determined and dedicated people. I think that is something that we keep working on to ensure that they stay at that level.

Mr. MOOSALLY. I will comment. Like Phil said, we take all criticism very seriously. We like to get the feedback. We took the GAO criticism very seriously. I think what we can say now is all 23 IPTs are trained. I think we have a partnership here. I believe it is necessary to have us collocated with the Coast Guard in a partnership. I believe that we are making tremendous progress. I think there are startup issues in a program of this size and complexity that we had to overcome, and I think we have. Today I feel very good about the track we are on. You are going to see tremendous progress in the months ahead of doing things that the GAO recommended and others have recommended as far as putting systems in place that allow us to properly metric this program to make sure we are making progress and meeting the goals of operational effectiveness and total ownership cost that we set out when we put our proposal in.

Mr. LoBiondo. Thank you.

Mr. Filner?

Mr. FILNER. Thank you, Mr. Chairman.

Mr. Dur, about the fifth to the last sentence of your testimony, I just took a few notes, you will recognize it, about "legacy assets are difficult to modernize." Can you just read that for me again? Mr. Dur. What does that mean?

Mr. FILNER. No, just read it. I didn't get the whole sentence down. It is right near the end. I think it started with legacy assets

Mr. Dur. I mentioned legacy assets several times.

Mr. FILNER. It ended with "are difficult to modernize."

Mr. Dur. I did not read the statement verbatim, I did a little bit of ad-libbing, but let me try to reconstruct I think from the portion. That shift is a construction of a ship made entirely of composites, lightweight and user-friendly, a shift that will break the tyranny of rust that is very much in evidence as we endeavor to modernize the earlier generation of steel cutters.

In the course of your—

Mr. FILNER. I just want you to finish the sentence.

Mr. Dur. Well, I did finish that sentence. Let me see where else I can go.

Mr. FILNER. OK, look, what you said—

Mr. Dur. We have begun to limit-

Mr. Filner. I will get it from the transcript.

You said, and I just took six words of it, "legacy assets are difficult to modernize," and you elaborated on that a little bit in that sentence.

Mr. Dur. Right. Right.

Mr. FILNER. You heard my discussion with the Admiral about the modernization of the Dolphins. So why are you not applying that philosophy to that process?

Mr. Dur. I think we are.

Mr. FILNER. Well, why are you modernizing as opposed to buying a new one?

Mr. Dur. Well, I think that the fast response cutter, which is the example that I cited, the design of which has been accelerated—

Mr. FILNER. Well, what about the helicopter?

Mr. Dur. Well, see, I am going to defer to my colleague, Mr. Moosally, because that domain is within his responsibility.

Mr. FILNER. Would you apply that philosophy to the helicopter? Mr. MOOSALLY. Yes, sir. Let me address that. If I can, I would also like to address the fact—you asked the question of the Vice Commandant about Turbomeca and whether there was a relationship. As far as I know, and Lockheed Martin is a big corporation, we have no agreements with Turbomeca. We have no current agreement with Turbomeca nor any relationship with Turbomeca.

Mr. FILNER. Or the Eurocopter? Mr. MOOSALLY. Or Eurocopter.

Mr. FILNER. You have no marketing agreement, nothing?

Mr. Moosally. Nothing.

Let me go back. When we set up the proposal and how we were going to do Deepwater, if you go back and look at this program, we were looking at a \$500 million a year flatly funded program plus escalation in \$98. So what we had to do is put together what we call the system-to-system approach and do an operational analysis. How could we get the best, most effective force for the Coast Guard? And that requires legacy and new assets.

Mr. FILNER. But 9/11 occurred. Now we are after that, right?

Mr. Moosally. Now we are in 9/11. Yes, sir. Now we are in 9/11, and those requirements are going to change. And I think there has been discussion today about the gap analysis that the Coast Guard has done, about the Rand report that has come out, and clearly the requirements are changing, the need for more funding, acceleration of funding is there.

Mr. FILNER. OK, you are the business people. I asked the Admiral; he didn't have it. Is there a cost-effective study made about modernizing the Dolphins versus buying a new multimission helicopter?

Mr. Moosally. Yes, sir, there was. Based on the budget we had,

there was a cost-effective

Mr. FILNER. Can we see that?

Mr. Moosally. Yes, sir. We did an overall effectiveness-

Mr. FILNER. Do you know how much it would cost to modernize the HH-65?

Mr. Moosally. With the plan we had, it is between 5 and \$6.5 million.

Mr. FILNER. To buy a new one?

Mr. Moosally. That was to re-engine. And the new helicopter, I think is around 9, \$10 million, so double that.

Mr. Filner. So let us say it is 6 versus 10. I have heard it is higher than 6, but, again, what is the cost-effectiveness of that difference versus getting the asset in place now and having, in fact, not a 40-year helicopter at the end of it? I would like to see that. It just boggles my mind that you chose one versus the other.

Mr. MOOSALLY. Well, I think the answer is, Congressman, we chose both, because you can't, as I think the Vice Commandant said, you can't take all your assets out immediately, your legacy assets, and replace them overnight with new assets.

Mr. FILNER. So have you recommended a multimission helicopter for the Coast Guard?

Mr. Moosally. In our plan there is a multimission helicopter. We have

Mr. FILNER. Which one is that, did you made a recommendation?

Mr. Moosally. We have not made the final decision on that.

Mr. FILNER. All right.

Mr. Moosally. We will compete that based on the needs of-

Mr. FILNER. So you haven't chosen—I read somewhere that the Augusta Bell 139 was recommended by you.

Mr. Moosally. Yes, sir. That was the notional helicopter in our plan. The notional plan we gave the helicopter-

Mr. FILNER. Notional plan versus?

Mr. Moosally. That we gave the—well, it was in the out-years. I think the first procurement of that helicopter was around 2010.

Mr. FILNER. Why not today? Mr. MOOSALLY. Well, with the new requirements, we will have to sit with the Coast Guard, who is going to set out the requirements, to see if that requires acceleration. We will go back and look at the plan that we gave the Coast Guard in our proposal and see if those requirements require a change or a different kind of helicopter or a different competition.

Mr. FILNER. It seems that you better speed up that process.

Mr. Moosally. We are ready to speed it up, sir, when we get the

Mr. FILNER. When the Coast Guard selected the engine for the HH-65 replacement-

Mr. Moosally. We selected the engine for the HH–65.

Mr. FILNER. You did. Mr. Moosally. Yes, sir. Mr. FILNER. And that was part of your contract to do all that, and you get 10 or 12 percent of the cost to do that, or what?

Mr. MOOSALLY. I can't say it is 10 to 12 percent. That went through the JV. As a matter of fact, I think one of the springs of our joint venture is we have a very low overhead rate compared to other programs that are going on. Our pass-through—

Mr. FILNER. What did the note say that you just got?

Mr. MOOSALLY. He is not telling me about the percentage; something I already know.

Mr. FILNER. All right. But you don't know whether it is 10 or 12

percent?

Mr. MOOSALLY. I can't quote that right here and right now, no. I don't have that information. I can provide that for the record, though.

Mr. FILNER. When you built this facility that you should have invited me to the ribbon-cutting for, I wasn't here when the contract was awarded. How were you reimbursed for that?

Mr. Moosally. I am not. This is a Lockheed Martin investment.

Mr. FILNER. You weren't reimbursed for that at all?

Mr. Moosally. No.

Mr. FILNER. How much did that cost?

Mr. Moosally. It is part of our investment on the program.

Mr. FILNER. How much did that cost, do you know?

Mr. MOOSALLY. Pardon?

Mr. FILNER. How much did that cost?

Mr. Moosally. It is a little north of \$9 million.

Mr. FILNER. One helicopter. OK. So that is your gift to the United States Government as part of your investment.

Mr. Moosally. I wouldn't put it as a gift, no, sir. It is a way for us to get risk reduction to test assets that are going to go on C4ISR that are going to go on Coast Guard platforms.

Mr. FILNER. One last question, if I may, Mr. Chairman.

You described several times the open business model, your commitment to competition and all that. You told me that you were the ones that selected the engine replacement. How did you go through that process?

Mr. Moosally. We got a call from the Coast Guard, it was an emergent requirement, safety requirement to re-engine the HH–65s. I think you heard testimony today of what is going on with HH–65s. And we put the RFI, what is called an RFI, request for information, out to industry, and in that RFI there were time requirements that, because of safety reasons, we had to get something out there very quickly. We had, I think, four responses from industry, and when we went through that analysis, the only company that could meet the timelines required by the Coast Guard was Turbomeca, and that is who we selected.

Mr. FILNER. And they had significantly more power in their engine than the other three?

Mr. Moosally. But they also have a Cadillac engine off the shelf, in production, can be delivered rather quickly.

Mr. FILNER. But time was your main—

Mr. MOOSALLY. Safety of flight and time were our considerations.

Mr. FILNER. Does the fact that we selected a higher power engine lead to any further problems, now we have to do something else to

that helicopter?

Mr. MOOSALLY. No, sir. There is actually some benefits, I think, because now you can actually arm those helicopters, as you were talking about the need to arm helicopters. The more powerful engine gives you the means to do that.

Mr. FILNER. I appreciate that.

Again, you are stating for the record that nobody in ICGS has any relationship with the Turbomeca or Eurocopter that would make it in your financial interest to choose that engine for the re-

building of the Dolphin.

Mr. MOOSALLY. That is correct, sir. In this program, our corporations are very much aware we are serving our Coast Guard customer. We have to have open competition, and we know that we are not in a position, nor would we ever, do things to benefit our companies that would hurt the Coast Guard, and do anything but bring best value to the Coast Guard.

Mr. FILNER. Thank you very much.

Mr. Lobiondo. Just a follow-up question on Mr. Filner's interest on this engine replacement versus new. What is the timeline for getting questionable engines out of an HH-65 and getting it up to snuff with a replacement? How long a period of time would that take?

Mr. MOOSALLY. To re-engine?

Mr. Lobiondo. Get the new engine into the helicopter.

Mr. Moosally. The first new engine will be there in May, next month, and this work will be done at the Coast Guard depot in North Carolina. And since these engines are in production, I think this is going to be a program—I am not sure of the exact numbers. The first one will be flying by the end of June. So May delivery, so you are looking about a month or six weeks from the time the engine shows up, it is installed, and the helicopter is out flying again.

Mr. FILNER. Six weeks?

Mr. Lobiondo. Six weeks.

Mr. Moosally. Month to six weeks.

Mr. LoBiondo. How many HH-65s are in question with this engine?

Mr. Moosally. There are 96 of them in the inventory.

Mr. LoBiondo. Ninety-six. Production of a new helicopter timeline under best scenario circumstances?

Mr. Moosally. I would have to provide that for the record.

Mr. FILNER. There are none already off the shelf?

Mr. Moosally. There certainly are helicopters. I am sure they don't produce these and then put them in inventory. There are probably customers waiting for those. There are helicopters like the Augusta 139, I think you talked about, that was in our notional plan going forward. If there is money available to buy those and the Coast Guard determines, when they do this new requirements analysis, that they need to accelerate that, then we would look at that. But right now that is not in the current plan to buy those near term.

Mr. LoBiondo. Thank you. Just following up on the point of information on the urgency of the problem, in the reporting that we require the Coast Guard to do, for all of 2003, with 100,000 flight hours, there were apparent power loss incidents of 62 per 100,000 flight hours in all of 2003. The most recent reporting has 351, the same amount of flight hours, 100,000 flight hours. We are putting courageous men and women of the Coast Guard who are in these helicopters at tremendous risk. As I stated earlier, we are putting into harm's way not only the crew, but anything that is underneath the crew, and I think it is important for us to continue to ask these tough questions from a timeline and from a construction standpoint. But I think I am understanding, and I am going to be interested to hear some follow-up information that, with an off-the-shelf engine that we can put in, we are making sure we are doing the right thing first, and that is protecting the men and women who are expecting to be put into harm's way. We had tremendous testimony a little bit earlier today from one of our heroes, a commander who almost had to land a helicopter in Syria, and I wonder what the implications of that would have been. I wonder what the implications of network footage with a Coast Guard as a prisoner of war from Syria, and how that could have possibly escalated what is already a very difficult situation in Iraq. I think we sort of have to spend a few minutes thinking about some of these things as we understand the tough decisions that are being made with limited re-

Mr. FILNER. If the Chairman would yield. That is exactly the point. What is the cost-effectiveness, and that includes timelines, of replacing versus buying. And what the testimony seems to be is they made a decision early in this program, and now the immediacy has changed and we haven't rethought that; they are still going along what the previous analysis was. And we keep asking for this analysis and they say they are going to give it to us. But the situation has changed.

Mr. Lobiondo. Well, we have got assurances from the Admiral that we are going to get some follow-up answers. The committee will continue to try to do this. I think they are legitimate questions. I think we have had some testimony as to the flexibility component and factor that is built into that, which I think we are going to continue to see. Something could happen next month that is going to require a rethinking of what is already on the books, and I would fully expect that the Coast Guard and private sector partners are going to respond to that in an appropriate way. We will continue to ask these questions and we will do follow-up hearings if we need to, and we will expect to take a close review of the answers that are provided to us, because I think you have raised some very important issues.

But overall I don't think there is any question in anyone's mind to the need of these assets to be replaced and to be upgraded. I think that we can look to the partnership that has been developed here, and I hope we can, in a few years, look back and see that this is a model—has this model been tried before?

Mr. Moosally. Not that I am aware of.

Mr. LoBiondo. So we don't have Department of Defense who can say they have done it or not done it. This is a totally new system,

totally new military procurement system that I think we are going to look back and see that this will be a model for Navy and Department of Defense in their procurement strategies into the future because of the flexibility.

So, with that, I thank our panel members for coming in today. You can listen and look for a lot more on this particular issue in the future

Committee is adjourned. Thank you.

[Whereupon, at 11:55 a.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

DEPARTMENT OF HOMELAND SECURITY UNITED STATES COAST GUARD STATEMENT OF VICE ADMIRAL THOMAS J. BARRETT ON THE INTEGRATED DEEPWATER SYSTEM

BEFORE THE

SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION U.S. HOUSE OF REPRESENTATIVES APRIL 28, 2004

Good morning, Mr. Chairman and distinguished members of the Subcommittee. Thank you for providing this opportunity to discuss the Integrated Deepwater System (IDS) and its importance to the recapitalization and transformation of the Coast Guard. As always, your past and current support of the Coast Guard is greatly appreciated.

Recapitalizing aging and technologically obsolete assets is the Coast Guard's top capital priority. The performance of our men and women in addressing national priorities—in home waters and overseas—serves as a compelling reminder why the Deepwater Program is so important to the Coast Guard's future ability to sustain operational excellence in all of its military, multimission, and maritime responsibilities.

On Station: Military, Multimission, and Maritime

The terrorist attacks of 9/11 and the resulting homeland security and military operations have fundamentally changed the demands placed upon the United States Coast Guard. The Coast Guard is currently on station today in U.S. ports, waterways, coastal regions, and on the high seas providing for homeland security, national security, and maritime safety, while still protecting our environment. As the General Accounting Office testified earlier this month¹, the Coast Guard has generally improved or maintained performance results in our traditional and new homeland security missions since 9/11, despite a 40 percent increase in resource usage and an exponential expansion of homeland security requirements and foreign deployments.

Although the men and women of the Coast Guard are long accustomed to doing more with less, it is our collective duty to properly equip those at the tip of the spear with the tools needed to accomplish their mission. The Integrated Deepwater System is essential to allow the Coast Guard to meet our current and emerging operational requirements.

Since our realignment under the Department of Homeland Security (DHS) just over a year ago, the Coast Guard has promulgated a new strategy for maritime homeland security that is fully aligned with the Department's new strategic direction. We have reduced security risks in our ports and waterways by conducting thousands of port security patrols, air patrols, security boardings, and vessel escorts. We are maintaining security zones under various alert conditions, instituting new capabilities such as sea marshaling, airborne use of force, and Maritime Safety and Security Teams and, most importantly, instituting a comprehensive security regime for ships and ports.

¹ GAO-04-636T

Cutters, boats, and aircraft are also maintaining high operating tempos in our other mission areas. Three weeks ago, for example, the venerable Cutter STORIS, homeported in Kodiak, Alaska, returned from a patrol marked by 36 boardings and inspections in the Gulf of Alaska, along the Aleutian Chain, and in the Bering Sea. The STORIS, now in her 62nd year of commissioned service, issued 10 fishing and five maritime safety violations during its patrol. You may recall STORIS as the cutter that experienced a failure of its boat davit two years ago owing to metal fatigue—sending her boat crew into frigid waters.

During fiscal year (FY) 2003, the Coast Guard, working closely with our interagency and international law-enforcement partners:

- Interdicted over 6,000 undocumented migrants attempting to illegally enter the country by sea.
- Prevented more than 136,800 pounds of cocaine, over 14,000 pounds of marijuana and more than 800 pounds of hashish from reaching U.S. shores.
- Aggressively conducted more than 36,000 port security patrols, including 3,600 air patrols, 8,000 security boardings and over 7,000 vessel escorts.
- Deployed the largest contingent of Coast Guard personnel overseas since the Vietnam War to support Operation Iraqi Freedom, including 11 cutters, two shoreside support units, and over 1,200 personnel.
- Saved the lives of nearly 5,100 mariners in distress and responded to more than 31,500 calls for assistance.
- Boarded more than 3,400 fishing vessels to enforce safety, environmental and economic laws.

Despite these accomplishments, there is still much to do. The last few weeks paint a clear and vivid picture of the breadth, scope and national importance of all Coast Guard missions. Deepwater assets are critical to the safe and successful execution of these missions. The following operational examples highlight the performance of six different air and surface Deepwater assets (C-130, HH-60, 378', 270', 210', and 110'). Rescue personnel from our mid-Atlantic units responded to the distress call from the burning and sinking Singaporean tanker BOW MARINER, and six crewmen were saved from 44degree water. The Coast Guard continues to ensure the environmental clean-up and the accident investigation are followed through to completion. Coast Guard cutters are vigilant conducting law enforcement missions; a west coast cutter interdicted a "go fast" vessel in the Eastern Pacific and seized 10 thousand pounds of cocaine while another Coast Guard cutter, off the coast of New England, issued a violation and seized the entire catch from a fishing vessel for having 7 times the legal limit of scallops. Our search and rescue, law enforcement, and living marine resource response capability was sustained even as 4 cutters with full-time air support and approximately 600 personnel deployed south positioning from the coast of Haiti to the approaches to South Florida as part of Homeland Security Task Force-Southeast, and interdicted 1,075 Haitian migrants. Simultaneously, we have four Patrol Boats, two Port Security Units, and 377 personnel deployed in support of operations in Iraq. As you can see, demand for Coast Guard resources continues to expand, while our ships and aircraft continue to age. The Coast Guard is the nation's lead federal agency for maritime homeland security and marine safety. Critical new resources are required to establish a new level of maritime security while continuing to perform the full range of Coast Guard missions.

Such performance illustrates how *your* Coast Guard serves our citizens and the nation day in and day out, operating often under the most arduous and challenging at-sea conditions. I know you share my pride in our peoples' demonstrated professionalism and steady commitment in serving as America's maritime shield of freedom. We owe them nothing less than to ensure they have the most capable and reliable platforms and supporting systems to enable them to conduct their demanding missions as effectively, efficiently, and safely as possible. The Deepwater Program is designed to do just that. The need to move the program forward with an appropriate sense of urgency has never been so apparent.

Threats to Mission Performance

Just as 9/11 has altered the strategic focus of the Coast Guard, it has also impacted the immediate needs and long-term capabilities required of the Deepwater system. As Admiral Collins testified before this Subcommittee in March, the greatest threat to the Coast Guard's mission performance and hence to the American Public continues to be that our aircraft, boats, and cutters are aging, technologically obsolete, and require replacement and modernization. The Integrated Deepwater System, planned since the mid-1990s, addresses these concerns. It entails an integrated approach to upgrade existing legacy assets while transitioning to a newer and more capable system of platforms—including three classes of cutters and their associated small boats, manned and unmanned aircraft, highly improved systems for command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), and integrated logistics support.

There are clear indicators that our ability to sustain current readiness and today's tempo of operations into the future is at risk. Most cutters and aircraft will reach the end of their projected service lives by 2010. We are now experiencing system failures at a steadily increasing rate. For example, the Coast Guard's fiscal year 2003 annual safety review revealed a mishap rate for reported in-flight engine apparent power losses at 62.74 per 100,000 flight hours for all of FY03. This rate is unacceptable and far exceeds the FAA definition of probable event occurrences of 1 per 100,000 flight hours or U.S. Navy Safety Center guidelines of no more than 10 mishaps per 100,000 flight hours. In FY04, as of 20 April, 2004, we have experienced 101 reported in-flight loss of power mishaps in 28,711 flight hours (compared to an already alarming 32 incidents for all of FY03) corresponding to a rate of 351 mishaps per 100,000 flight hours. Operational flight restrictions have been instituted to maintain safety

To address this urgent situation, in January, the Coast Guard directed the Deepwater acquisition program's systems integrator, Integrated Coast Guard Systems (ICGS), a partnership of Lockheed Martin and Northrop Grumman, to take immediate and definitive action to re-engine the HH-65 fleet to ensure safe and reliable operations. Per a General Accounting Office March 2004 report, the Coast Guard made a decision that was both fact-and risk-based for replacing the engine on the HH-65 helicopter. In the long-term, the Deepwater plan is still to convert the HH-65 to the Multi-mission Cutter Helicopter (MCH). While power increases were not the focus of this acquisition, the

² GAO-04-595

engine chosen, while addressing the safety and reliability concerns, also has sufficient power margins to be used with the MCH. Airborne use of force and vertical insertion are currently not an MCH requirement. There is, however, the potential to include these requirements under future contract modifications. The Turborneca engine being installed does meet the anticipated airborne use of force and vertical insertion power requirements should these become part of the future MCH mission profile.

Last year, we experienced 676 unscheduled maintenance days for our cutters-a 41 percent increase over 2002. This was the equivalent of losing over three and a half cutters. These lost cutter days include our 110-foot Island-class cutters that are suffering from accelerated hull corrosion and have experienced 20 hull breaches that resulted in emergency dry dockings for repairs. These "workhorses of the fleet" are showing the effects of their hard use. One 110-foot cutter alone, KEY LARGO, is scheduled to be in drydock for an entire year while its hull is being replaced.

Halting and reversing such worrisome trends in the sustainment of our legacy assets is a challenge, but we have made necessary decisions to adjust priorities for Deepwater's modernization plan to account for the circumstances we face today. Although the accelerated deterioration of legacy assets was not immediately evident when the Deepwater recapitalization effort began, the IDS Program was designed with the flexibility to enable rapid adjustments to such circumstances.

Owing to the continued deterioration of the materiel condition of our Island-class 110-foot patrol boats, we also decided to accelerate the design and development of the Fast Response Cutter (FRC) to replace existing 110s. The Coast Guard has contracted for eight 110s to be converted to the more capable 123-foot cutter. The first, the Cutter MATAGORDA, was delivered in early March. Four more 110s will be converted in FY-2005. The FY-2004 appropriation provided funds to accelerate the design of the Fast Response Cutter, and the Deepwater Program is conducting a business-case analysis to determine the appropriate number of 123-foot conversions to complete prior to the transition to the FRC; a decision is expected later this year.

The Deepwater Program's system for C4ISR also has been adjusted to be responsive to the emergent requirements of our operational commanders. In response to a request from our Pacific Area Commander in March, for example, we accelerated Deepwater's planned C4ISR upgrades on the Cutters MUNRO and RUSH to support upcoming out-of-hemisphere deployments. The upgrade provided each cutter with access to the Department of Defense's Secure Internet Protocol Routing Network (SIPRNET) and a classified local area network. Concurrent with these command-and-control upgrades, we completed Deepwater's C4ISR upgrade at the Communications Area Master Station Pacific (CAMSPAC) facility at Point Reyes, Calif. The first shore-based communications upgrade under the Integrated Deepwater System was completed in September 2003 at Communications Area Master Station Atlantic (CAMSLANT).

Additional Capacity and Capability Needed

Looking ahead, it is clear that attaining additional capacity and capability is critical to the Coast Guard's ability to achieve the levels of future readiness needed to perform its expanded homeland-security tasks while concurrently carrying out its other

responsibilities. The Deepwater Program is the centerpiece of our efforts to attain Admiral Collins' expressed *Commandant's Direction* to improve current and future readiness. It will deliver the platforms and systems needed to close the capability gaps found in today's Coast Guard.

Deepwater's comprehensive system of systems will recapitalize our entire inventory of aging cutters and aircraft, as well as C4ISR systems at sea and ashore — all supported with integrated logistics. Deepwater will provide the means to extend our layered maritime defenses from our ports and coastlines many hundreds of miles to sea, increasing maritime domain awareness. When Deepwater is fully implemented, our cutters and aircraft will no longer operate as independent platforms with only limited awareness of their surroundings in the maritime domain. Instead, they will have improved capabilities to receive information from a wide array of mission-capable platforms and sensors—enabling them to share a common operating picture as part of a network-centric force operating in tandem with other cutters, boats, and both manned aircraft and unmanned aerial vehicles.

Consistent with the traditions of our 214-year history, the Coast Guard is playing a leading maritime role in achieving the Department of Homeland Security's mission of preventing, protecting against, and responding to threats and hazards to the nation while ensuring a safe and secure maritime border and promoting the free-flow of commerce. The centerpiece of the Coast Guard's *Maritime Strategy for Homeland Security* is improved maritime domain awareness (MDA). The Coast Guard's strategy, fully aligned with the vision, mission statement, and strategic goals and objectives of the Department's new strategic plan, is built on the main pillars of preventing terrorist attacks, reducing U.S. vulnerabilities to attack, and recovering from those attacks should they occur.

Deepwater, with its key enabling role to achieve MDA by providing integrated afloat, ashore, and airborne C4ISR, is focused on meeting both the information needs of decision makers and the tactical needs of operational commanders. From a risk-mitigation perspective, important contributions to MDA will be realized through Deepwater's transformation of today's Coast Guard. Simply put, MDA is possessing comprehensive awareness of the vulnerabilities, threats, and all matters of interest on the water in order to prevent and protect against all manner of threats. It means having extensive knowledge of geography, weather, position of friendly vessels and potential threats, trends, key indicators, anomalies, intent, and the activities of all vessels in an area of concern

The Coast Guard urgently needs Deepwater's improved platforms and systems if we are to have the means to develop, fuse, and assess all manner of information from a broad range of sources. Maritime power is about awareness, leveraging, and synthesizing large amounts of information and specific data from many disparate sources to gain knowledge of the entire maritime. If knowledge is power, and MDA provides us the requisite knowledge of the maritime, then MDA is the key to maritime power—and Deepwater, in conjunction with other Coast Guard acquisition programs like Rescue 21, provides one of the important means to that end.

Steady Progress

Attaining Deepwater's operational transformation mandates an acquisition strategy of comparable vision and innovation. Deepwater's system of interoperable platforms and supporting systems is designed to meet performance-based requirements. The program's overarching goals are to maximize operational effectiveness while minimizing total ownership costs and delivering best value to our customers—the men and women of the Coast Guard and the American public.

The \$668M Deepwater appropriation for FY 2004 includes \$143 million for aircraft, which covers the purchase of a CASA 235 maritime patrol aircraft and the continued development of a vertical takeoff-and-landing unmanned aerial vehicle that will deploy from IDS cutters; \$303 million to be used in part for construction of the first 424-foot National Security Cutter; \$101 million for the development of a network-centric command and control system; and \$45 million for a common logistics information system.

The Coast Guard's FY 2005 federal budget request that the President delivered to Congress in February identifies \$678 million in funding for the Integrated Deepwater System (IDS)—an increase of \$10 million over the program's funding for FY 2004. The funding proposed for Deepwater during the upcoming fiscal year is part of an overall Coast Guard budget request of \$7.5 billion, continuing the trend of recent years in providing the Coast Guard with the resources it needs to meet the nation's present and emerging maritime safety and security needs.

The \$678 million Deepwater funding in the FY 2005 budget request is apportioned across all of the program's principal categories, including: \$147.3 million for aviation programs supporting the CASA CN235-300M Maritime Patrol Aircraft, the tiltrotor HV-911 Eagle Eye vertical take-off-and-landing unmanned aerial vehicle (VUAV), other enhancements to legacy assets, and re-engining of HH-65 helicopters; \$354.3 million for surface platforms for production of the NSC, continued conceptual development of the Offshore Patrol Cutter, and support of other surface programs, including acceleration of Deepwater's Fast Response Cutter; \$53.6 million for continued C4ISR design for a common operating picture, upgrades to legacy cutters and shore installations, and other capability enhancements; and \$39.9 million for continued funding for common systems development for integrated logistics support and upgrades to shore facilities.

Each of the Integrated Deepwater System's principal domains has recorded significant progress since the program's contract award to Integrated Coast Guard Systems in June 2002. The delivery of the first surface asset in the Deepwater program occurred in early March with the delivery of the first 123-foot converted Island-class patrol boat, the Cutter MATAGORDA, at the Bollinger Shipyards facility in Lockport, La.

During the past year, the cutter's hull was lengthened by 13 feet to accommodate a new stern ramp and seven-meter Short Range Prosecutor small boat, a larger pilot house with a 360-degree bridge and C4ISR suite were added, interior spaces and hull sections were renovated, and a new digitized system for engine control, alarm, and monitoring functions was installed in the engine room. The MATAGORDA will complete additional post-delivery maintenance availabilities before returning to its homeport in Key West

later this summer. The commanding officer and crew are impressed with the cutter's improved capabilities, and are anxious to return to operations.

A year ago, two contracts were awarded to Northrop Grumman for the detail design and purchase of long-lead materials for the first National Security Cutter. Steel is being rolled now to permit the first cutter's keel laying at Northrop Grumman Ship Systems' Ingalls Operations shipyard in Pascagoula, Miss., this July. Delivery is slated for late 2006, and initial operational capability is projected for 2007. During the past year, we have made several adjustments to the NSC's initial design to accommodate post-9/11 operational requirements. For example, chemical, biological, and radiological defense design features were modified to enable the NSC to operate in a contaminated environment. Similarly, the size of the NSC's flight deck will be enlarged to allow it to operate Navy, Army, and Customs and Border Protection Agency models of the H-60 helicopter.

Deepwater's work to transform Coast Guard aviation provides for the selected upgrade of legacy fixed-wing aircraft and helicopters, and the progressive introduction of new and more capable platforms and unmanned aerial vehicles (UAVs). This February, EADS CASA and Lockheed Martin signed a contract to formalize EADS CASA participation in the Deepwater program. The initial contract between Lockheed Martin and EADS CASA is for the procurement of two CN-235-300M medium-range surveillance maritime patrol aircraft. Delivery is scheduled in 2006. The contract also includes an option for spare parts and integrated logistic support (ILS), as well as an option for six additional aircraft.

In 2003, Bell Helicopter, Textron Inc., was awarded a contract to commence concept and preliminary design work on the Eagle Eye tiltrotor, vertical takeoff-and landing unmanned aerial vehicle (VUAV). Follow-on efforts will see Bell design, develop, and build a prototype Eagle Eye VUAV for testing. In March, the Eagle Eye VUAV successfully completed its Preliminary Design Review (PDR). In meeting mission requirements, the system is well within margins for risk, performance, supportability, and cost allocations. Other branches of the armed forces and overseas allies are following Eagle Eye's development with interest.

As I have noted, Deepwater's system for C4ISR will bring important new capabilities to the fleet, serve as a force multiplier, and be a critical enabler for maritime domain awareness. Deepwater's C4ISR domain has marked several important milestones since the time of the IDS contract award. During 2003, the Cutter NORTHLAND received the first in a series of enhancements and communication-system upgrades for 270-foot medium endurance legacy cutters. As the first cutter to receive this Deepwater C4ISR upgrade, NORTHLAND now lauds the improved performance within existing communications systems and has additional access to a variety of intelligence and data sources previously unavailable. Deepwater C4ISR upgrades to other legacy cutters and shore installations are continuing.

This month, Lockheed Martin opened its new Maritime Domain Awareness Center in Moorestown, N.J. This facility will allow more efficient systems integration and cost-effective Deepwater C4ISR development. The center, when combined with the synergies of other technical centers, will provide an unmatched capability to conduct surface

system integration and interoperability testing across the full range of Deepwater systems.

Deepwater's Integrated Logistics Support domain will help to transform and improve the Coast Guard's ability to provide totally integrated logistics support over the entire Deepwater system. ILS places logisticians at the heart of the Deepwater acquisition process by ensuring platforms will be designed for reliability, maintainability, supportability, and affordability—and with optimum crewing levels. At the asset level, ILS requirements have been incorporated into the system requirements specification during design review for the 123-foot patrol boat, National Security Cutter, C41SR system, and Eagle Eye VUAV.

Deepwater's new Logistics Information Management System (LIMS) will automatically collect and process logistics data to project support requirements and trends. LIMS, which is under development, fielded its first iterations in conjunction with the MATAGORDA's delivery. With its ability to bring the right information to the right people at the right time, LIMS will provide the backbone and software applications to make Deepwater's vision of network-centric logistics a reality.

Program Management

Unlike past Coast Guard acquisition programs, Deepwater's system performance requirements must be viewed in their entirety. All IDS platforms and systems are being designed to be compatible and interoperable, while providing high levels of operational effectiveness and a best-value solution to U.S. taxpayers.

Partnering opportunities are being pursued within the Department of Homeland Security, with the U.S. Navy and Department of Defense, and with industry when it makes good business and operational sense. The Deepwater Program's strong collaborative relationship with the U.S. Navy in support of the *National Fleet Policy Statement* is a noteworthy example. This cooperation reflects our obligation and determination to ensure that the Integrated Deepwater System is interoperable, wholly compatible, and completely seamless with the work of the Navy's acquisition and fleet-support organizations.

Toward this end, Deepwater's Program Executive Officer has signed Memorandums of Understanding with the Navy's Program Executive Officer Ships and the Commander of the Naval Air Systems Command in an effort to specify common technologies, systems, and processes critical to the Navy's future platforms and the design and development of Deepwater's new assets. Close cooperation and collaboration will allow our two future forces to obtain common benefits as our design and development programs mature. We seek similar opportunities for cooperation within the Department of Homeland Security and with our friends and allies around the world. New processes within DHS have been established to create Joint Operational Requirements beginning with aviation and boats. Joint strategies are being written and implemented to integrate operations and enhance performance. Coast Guard's world-class Aviation Logistics System is being integrated with other DHS partners to improve support. Commodities Councils are identifying means to improve acquisition of common requirements.

As the Deepwater acquisition has moved forward, international interest in the program has grown. The strategic advantages of the Deepwater International Program Office pursuing foreign military sales contracts range from achieving interoperability with these navies and maritime services, strengthening of the U.S. military-industrial infrastructure, and reducing domestic acquisition costs through economies of scale -- resulting in lower per unit costs to the U.S. Coast Guard and the U.S. Government. The Deepwater International Program Office is presently reviewing five letters of request from allied and friendly governments.

As one of the largest and most challenging performance-based acquisition programs in the federal government, translating Deepwater's vision to reality is, understandably, a challenging task. The Coast Guard has never worked with a systems integrator on this scale before. We have not simultaneously employed integrated product teams across multiple acquisition product lines, nor have we employed a performance-based strategy for such a long-term undertaking. In many ways, Deepwater is paving a new approach to systems acquisition, and I fully expect its strategy will serve as a model for other major programs of comparable scope.

Of necessity, the Coast Guard must rely on this public-private partnership with Integrated Coast Guard Systems if we are to navigate Deepwater safely to successful execution. The past 20 months have afforded many lessons learned in such areas as improved management, the need for increased competition, and the desirability of enhanced ways to measure contractor performance.

In May 2003, the General Accounting Office (GAO) began a detailed assessment of Deepwater contract management and program oversight. During GAO's nine-month audit, Deepwater program officials arranged interviews at Coast Guard Headquarters and in the field, and provided more than 150 responses to requests for information (including approximately 1,300 files of data). In addition, the program provided the GAO with a synopsis of planned changes to operations and steps taken to address challenges. GAO issued its final report last month and recommended that the Coast Guard improve program management, improve contractor accountability, and facilitate cost control through competition.

The Coast Guard advised the Department of Homeland Security and GAO that it concurs with the report's recommendations, and is actively addressing those issues not in place and improving and maturing processes for those that are already in place. The Deepwater program instituted many GAO recommendations by the time of its final report, and a plan of action and milestones is guiding the implementation of all of the audit's other findings.

The GAO report makes an important contribution to the Deepwater program's ongoing efforts to improve management structure and management, refine metrics for total ownership cost and operational effectiveness, advance planning alignment with the Department of Homeland Security, foster cost control through competition, and increase communication with the field as Deepwater assets are delivered.

Conclusion

I have gone to some lengths to paint a detailed picture of where the Deepwater Program stands today as legitimate questions are often raised regarding its status, execution, and future direction. Deepwater's progress in achieving our vision of transforming the Coast Guard for the 21st century means nothing less than keeping it the world's best—properly equipped and fully prepared to meet every maritime challenge. Deepwater's progress in achieving this vision flows from its commitment to our people, partnerships, and performance. In all of our endeavors, we will keep the protection of the American people and the needs of Coast Guard people foremost in our minds. We owe them our full commitment.

In summary, the Deepwater Program has achieved numerous milestones in a short timeframe. The program is fully aligned with the *Commandant's Direction* and the goals and objectives of the Department of Homeland Security. We have embarked on a unique partnership with industry aimed at nothing less than recapitalizing and transforming today's Coast Guard so that it may sustain its operational excellence into the future. We have adjusted the acquisition program to respond to growing high-priority operational requirements, confronted and surmounted numerous technical challenges, controlled cost, and are engaged in the ongoing process of improving performance in all of Deepwater's product lines and processes. We are intent on the achievement of stewardship through performance measures and are committed to full and open accountability. We are determined to keep the Deepwater Program on a steady course of successful execution.

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

JOINT STATEMENT FOR THE RECORD

Dr. Philip A. Dur, Chairman Mr. Fred P. Moosally, Vice Chairman Integrated Coast Guard Systems LLC

TESTIMONY BEFORE THE HOUSE SUBCOMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

WEDNESDAY, APRIL 28, 2004 10:00 AM 2167 RHOB Committee Room

Good morning, Mr. Chairman and distinguished members of the Subcommittee.

Thank you for the opportunity to appear before you today to discuss the Integrated Deepwater System Program on behalf of Integrated Coast Guard Systems, a joint venture of Northrop Grumman Ship Systems and Lockheed Martin. As you know, we are the system integrator for the Deepwater Program.

At the outset, on behalf of ICGS and all of the men and women working in support of this program, we would like to thank you, Mr. Chairman, and members of this committee for your stewardship and unwavering support of the Coast Guard, of the Deepwater Program and for your continuing commitment to funding for this critical initiative.

The Integrated Deepwater Systems Program was conceived several years ago with the realization that an aging and obsolete fleet of ships, aircraft, and patrol boats increasingly limited the Coast Guard's ability to perform its mission. As retired Naval Officers, destroyermen by trade, we would be the first to stress that Deepwater is consistent with the time-honored tradition of giving our sea going service members the best tools available to get their jobs done. In short, the service that defines itself with the motto, "Semper Paratus," or "Always Ready," has suffered too long from platform and system readiness problems.

When the Coast Guard announced it had selected Integrated Coast Guard Systems, the partnership forged between Northrop Grumman Ship Systems and Lockheed Martin, to manage the IDS contract, we realized a real opportunity to modernize the entire Coast Guard and infuse it with state-of-the-art technology. Most importantly, we saw the urgency in this transformation and we were ready to apply our combined knowledge and skill sets as two world class defense companies to provide the Coast Guard with the instruments and systems to take the security of our coastline and nation to the next level.

ICGS is managing an integrated team in concert with the Coast Guard at every level. We are now working over 23 joint government and industry Integrated Product Teams, or IPT's, executing this contract to meet common goals. The contract requirement to maximize operating effectiveness and reduce total ownership cost drives us to open up the Deepwater system to competition throughout the lifetime of the program and to take advantage of dynamic markets so as to deliver best value and best performance.

The goal is to provide a rapid modernization of the Coast Guard Deepwater force structure, providing three new classes of cutters and their associated small boats, a new fixed-wing manned aircraft fleet, a combination of new and upgraded helicopters, and both cutter-based and land-based unmanned aerial vehicles, in what is the largest re-capitalization effort in the history of the Coast Guard. These assets will communicate and operate seamlessly with the integration of highly advanced command, control, communications and computers, intelligence, surveillance and reconnaissance systems. This maritime domain awareness, which is the complete capability to detect and identify all activities in the relevant maritime arena, will provide the Coast Guard the best advantage possible in the interception and engagement of threats to our sovereignty and security...away from our own shores. There will also be exceptional interoperability between the Coast Guard, the U.S. Navy and other government agencies due to the integration of systems that can more readily share information.

Beyond providing the critical first line of protection in the Department of Homeland Security's layered defense model, the Deepwater Program will bring increased capacity and capability in the performance of <u>all</u> of the Coast Guard's missions, including fisheries enforcement, search and rescue and ensuring the safety and security of mariners, counter drug interdiction and alien interdiction patrols.

We need to say a few words about this performance-based contract and how the Deepwater Program is taking shape. This approach is atypical and requires interaction between the Coast Guard and industry to work side-by-side. The program execution through the IPT's enables Deepwater's system performance requirements to be viewed and addressed as a whole. System integration ensures that all platforms and systems are compatible and interoperable, providing high levels of operational effectiveness and yielding best-value to U.S. taxpayers. Change is inherently difficult, and Deepwater entails organizational, acquisition, and technological change that will encourage public and private sectors to collectively execute a program of this significant scope, duration, and complexity.

We believe the program is working well and we assert that this partnership between system integrator and operator is the reason why. ICGS has the industrial expertise and flexibility to manage myriad complexities, to identify system attributes and solutions, to evaluate alternatives that contribute to mission effectiveness at the lowest total ownership cost, to engineer the system-wide operational and support relationships across all asset classes, across multiple mission areas—all with the full partnership with

the Coast Guard. Without a system integrator, this program would require multiple prime-level contracts that would be separately managed; there would be multiple industry management and engineering schemes, with multiple (and duplicative) costs. And there would not be a single responsible point of contact where these separate acquisitions intersect to warrant a system approach. Based on program analysis, the Deepwater system-based acquisition will save 15% of total ownership cost over a traditional non-integrated asset acquisition approach—a savings of \$12.8 billion over an estimated 40 years. The program is being engineered at a cost that is less than half of traditional system engineering and integration costs for a program of this size and type. Additionally, our performance on this contract is being closely monitored by our partner, the Coast Guard, and measured under the widely accepted earned value management system. There are 37 task orders underway, valued at over \$750 million and 11 integrated baseline reviews have been completed, for close control of cost, schedule and program risk.

In the 22 months, since this program was awarded, we have achieved well over 60 major program milestones system-wide, across five domains and affecting seven new asset classes and six legacy asset areas. We have delivered our first cutter—a 123'foot island class cutter, the *Matagorda*, the first of the *Island*-class patrol boats to undergo this modernization. This extensive overhaul includes a new stern ramp, a new pilothouse, enhanced C4ISR electronics and improved crew berthing spaces. We have eight of these boats under contract now. Delivered with the *Matagorda* was another vessel, the Short Range Prosecutor, which will follow the delivery timetable of the 123-foot cutters. Soon we will begin the construction phase on the first new National Security Cutter at the Northrop Grumman Ship Systems Pascagoula facility. In fact we just broke ground on a new build area for these 421-foot cutters at Pascagoula and we are very excited to get this new ship's construction underway this summer. We have also begun preliminary design studies on the Fast Response Cutter and the Offshore Patrol Cutter.

We have begun legacy fleet upgrades—completing two vital shore station Command and Control upgrades, CAMSLANT in Virginia and CAMSPAC, operating out of California, and we have begun interim Command and Control upgrades to the 378-foot and 270-foot cutter classes. We are giving them access to SIPRNET and Classified LAN networks, so the Coast Guard can have unprecedented access to the intelligence and defense communities. And last week, we celebrated the opening of the Maritime Domain Awareness Center—a state-of-the-art facility to develop, test and integrate assets and systems being produced to support the Deepwater program before these systems are delivered.

In the Aviation domain, we have achieved key milestones for the Maritime Patrol Aircraft—awarding a contract and reaching preliminary design review for the first two aircraft; there is an option for six more. For the Vertical Unmanned Air Vehicle we have achieved preliminary design review and are working toward critical design review later this fall. In response to an urgent requirement ICGS has accepted the task to rapidly re-

engine the HH-65 helicopter fleet, to assist the Coast Guard to return the fleet to full and unrestricted flight in as efficient and timely a manner as possible.

In Logistics, we have established site representatives in Maryland, West Virginia, North Carolina and Florida, to support delivery of new Deepwater systems and assets.

The Deepwater program is a "national" program, providing jobs and supply opportunities. The Coast Guard, ICGS and its subcontractors have effectively used competition to obtain the lowest overall cost, technically compliant, on-time, quality products and services. Competition was used to select ICGS and its first tier contractors, Northrop Grumman and Lockheed Martin, for the baseline contract award. Currently we have almost 30 suppliers from 16 States—and the list is growing, as the program moves from design to production. Both Lockheed Martin and Northrop Grumman have used competition to obtain best value at all levels of the program – from platforms to propulsion to electronics to support and services to machinery and equipment and to parts and raw materials. As new asset classes are designed and produced, additional suppliers are being added through competition all the time. We are continually reaching out to world-class global suppliers to bring best value to the Coast Guard and the nation.

Finally, we would like to reassure you that in order to maintain this level of activity and efficiency, we rely heavily on the benefits of open and robust competition throughout the program. Illustrations abound of how we are collectively reaping the benefit of vendor competition and continuous access to innovative ideas and cutting-edge technology, while evaluating total ownership cost.

Both Tier 1 contractors, Lockheed Martin and Northrop Grumman, have well documented and approved purchasing procedures which require competitive bids on all initial procurements. We require and have institutionalized processes to access the lowest overall cost with technical competency and ability to deliver on time with the required quality standards for all subcontracts. These systems have been formed with and monitored by longstanding relationships for our Navy customer through SUPSHIP and/or DCMA and DCAA, who have onsite facilities and ongoing surveillance for all government contracts. Furthermore, oversight is routine by these organizations through the Contractor Purchasing System Reviews (CPSR). We also participate in periodic audits or review by the Government Accounting Office—for all of our government programs, including Deepwater. We solicit competition on an ongoing basis through our web-based supplier registration and database, which are used to fuel annually-hosted purchasing "Industry Days." The site has been live and active since contract award and referrals come from Deepwater advertisements running in trade and defense media as well as trade show activity. We have recently redesigned our website to make registration even more accessible. Our next industry day is scheduled for late August this year.

Discussion has been ongoing to accelerate funding of Deepwater, and we are very hopeful that you will continue to support bringing value to the taxpayers by maximizing production efficiencies and bringing more efficient platforms to the service

sooner. We will all benefit by getting these critical assets into the hands of the men and women sworn to protect our interests at home.

Mr. Chairman and distinguished members of the Subcommittee, we are confident that you see the benefit of our government and industry partnership and the tangible results we are already demonstrating, and we hope you share in our excitement to grow this program to its full potential. Our Coast Guard men and women, as well as every American, are the better for it. Our strong partnership with the Coast Guard is vital to our nation's security. Thank you for this opportunity to personally update you on the progress of this very important program.

This is the end of our joint statement. We welcome your questions.

STATEMENT OF THE HONORABLE FRANK A. LoBIONDO, CHAIRMAN AT THE SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION HEARING ON INTEGRATED DEEPWATER SYSTEM

April 28, 2004

Today we are meeting to review the status of the Integrated Deepwater System and to examine concerns outlined in the GAO report that was released last month.

Deepwater will replace or modernize more than 90 ships and 200 aircraft currently utilized by the Coast Guard to carry out missions more than 50 miles from shore. The new assets procured under this program will greatly expand the Coast Guard's capabilities to perform the many and varied homeland security and traditional missions that the American people have entrusted to the Service.

The duration and magnitude of the Deepwater program require continued oversight and adjustment of the acquisition plan to meet the ever-changing conditions that the Coast Guard faces in its operational environment. The original Deepwater plan was formulated well in advance of the events of September 11th. Therefore, the designs of assets to be acquired under Deepwater have been reviewed and, in some cases, revised to provide the Coast Guard with the capabilities necessary to carry out the Service's increased role in protecting our maritime security. The Subcommittee understands the importance of this ongoing review; however, we are concerned with impacts on costs, complexity and procurement delays that may result as the program is "re-baselined".

These adjustments to planned assets have combined with multiple years of underfunding to result in the situation that we find ourselves in today. The Coast Guard has estimated that the Deepwater program is now running at 2 to 7 years behind the original 20-year schedule. This is simply unacceptable. We should be accelerating not decelerating.

This committee recently voted to authorize funding to accelerate the program to 15 years, partly because the need is so compelling. The Coast Guard operates the second oldest naval fleet in the world with some currently operating vessels commissioned in WWII. Most disturbing though are the recent operational asset failures. Over 20 110 foot Patrol Boats underwent emergency drydocks for breached hulls this past year and the rest of the fleet is in immediate need of repair for structural deterioration. On average, the High Endurance Cutter fleet suffers a fire, or fuel and oil leak in their main engineering space on every patrol. Over the past year, the HH-65 helicopters have suffered more than 115 in-flight main engine power losses, robbing the asset of its ability to hover and placing the lives of its crew, passengers and those below in grave danger. These failures are increasing total ownership costs and are resulting in the direct loss of several hundred patrol days annually, severely effecting readiness and diminishing the service's ability to respond to terrorist threats and conduct its other vital missions.

I understand the Vice Commandant has brought a special guest here from Air Station Atlantic City, located in my District, who's heroic experience will illustrate the very real life threatening conditions confronting our coast guardsmen operating these failing legacy assets. I look forward to the Vice Commandant sharing this story with us.

Chairman Young and I have requested the General Accounting Office evaluate the current status of the Service's legacy fleet of ships and aircraft and the impact the assets failures have had on readiness and mission performance. We have also asked the GAO to ascertain the total amount that the Coast Guard has spent in repairing these aging assets and how much of these costs fell outside of the Service's scheduled maintenance operations. I think we'll find the costs and benefits associated with replacing these ships and aircraft much better than continuing the process of doing stop-gap repairs.

In a report released last month, the GAO expressed concerns over the management of the Deepwater program and the Coast Guard's oversight over the principal contractors and award of subcontracts. The questions raised in this report are valid and I look forward to hearing the witnesses' testimony as to how both the Coast Guard and the system integrator, Integrated Coast Guard Systems (ICGS), plan to move forward with the GAO's recommendations.

Finally, last Friday I was pleased to join Commandant Collins and the ICGS team led by Fred Moosally of Lockheed Martin and Jamie Anton of Northrup Grumman at the ribbon cutting for the new Deepwater Maritime Domain Awareness Center in Moorestown, NJ. The MDAC represents some important progress in the program and we expect that progress will continue.

This Subcommittee has long recognized the importance of the Deepwater program and has supported its acceleration. We are committed to working with the Coast Guard and ICGS to ensure the timely delivery of assets under the Deepwater program. I thank the witnesses for appearing before us today and look forward to their testimony.