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DEPARTMENT OF HOMELAND SECURITY

U.S. COAST GUARD

STATEMENT OF

ADMIRAL THAD W. ALLEN COMMANDANT

ON THE

COAST GUARD AND ACQUISITIONS

BEFORE THE

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON HOMELAND SECURITY

U. S. HOUSE OF REPRESENTATIVES

22 APRIL 2009

INTRODUCTION

Good morning Mr. Chairman and distinguished members of the Committee. Thank you for the enduring support you have shown to the men and women of the United States Coast Guard. I am pleased to be here to discuss our Service and the status of our acquisition programs.

I open by sharing my professional views as Commandant on our strategic operating environment and the most immediate challenges facing the service. Despite the global economic downturn and ongoing persistent conflict, the State of the Coast Guard is strong. We have never been more relevant, and growth in maritime trade and commerce is leading to strong demand for services.

The strength of our Service relies squarely on the dedication and courage of our people. Over the past year, Coast Guard men and women – active duty, reserve, civilian and auxiliarists alike – continued a consistent trend of premier service to the public. They performed superbly in the heartland, the ports, at sea and around the globe to safeguard America's maritime interests. Our personnel worked closely with Department of Homeland Security (DHS) partners to respond to last summer's damaging floods in Missouri and North Dakota; conducted 680 domestic icebreaking operations to facilitate over \$2 billion in commerce; operated with other federal partners at sea to prevent nearly 400 thousand pounds of cocaine from reaching America's borders or streets; and continued to support Operations Iraqi and Enduring Freedom on the front lines. We also saved over four thousand lives.

Dedication alone is not enough for our workforce to succeed. They require safe, reliable, and capable assets to fulfill the Coast Guard's multi-mission requirements, and I appreciate your strong support in the Consolidated Security Disaster Assistance and Continuing Appropriations Act of 2009. Moreover, the American Recovery and Reinvestment Act of 2009 furthered this momentum by providing funding to address critical maintenance issues in my aging High Endurance Cutter fleet, offset a portion of my shore infrastructure backlog, and alter and improve bridges.

Challenges remain, but we are moving ahead smartly. Response Boats-Medium (RB-M), the replacement for our disparate collection of small boats, have made immediate impacts across our mission portfolio and continue to roll off the production line on schedule. Just two weeks ago, an RB-M in the Straits of Florida employed the platform's first use of warning shots and disabling fire to successfully halt a go-fast vessel carrying 28 undocumented migrants. Seven Maritime Patrol Aircraft (MPA) have been delivered and are already proving their operational value on the Gulf Coast. The first National Security Cutter, BERTHOLF, is receiving high praise for impressive capabilities during its period of operational test and evaluation.

Equally important is the way we are bringing these assets on-line. Efforts to consolidate the Coast Guard Acquisition Directorate, assume Lead System Integrator responsibilities, and implement the Blueprint for Acquisition Reform have left us better equipped to manage costs, schedules and performance. These business improvements have led to a number of high profile project successes. Consider the recent award of the Fast Response Cutter (FRC) Sentinel-class patrol boat. Initially planned as part of the Deepwater program, to be delivered through Integrated Coast Guard Systems (ICGS), we took this

project back within the Coast Guard to ensure full and open competition and responsible program management. We have followed our reformed acquisition processes, conducting a deliberative proposal review and award determination with integrated participation from technical authorities and the operational community. The FRC's proven parent-craft design will minimize cost and schedule risk and mitigate the patrol boat hour gap in the shortest time possible. Neither ICGS nor the Coast Guard's pre-modernized acquisition program could have accomplished this feat as efficiently or effectively, and I am confident we will build on this record of advances for future acquisitions programs as well.

While the consolidated acquisition directorate is critical, it represents just one piece of my plan to improve service delivery through the establishment of the Deputy Commandant for Mission Support. We are making progress in this regard as well. In the past year, we established the Aviation Logistics Center, Surface Forces Logistics Center and Asset Project Office, all of which markedly improve critical support services to operational assets Coast Guard-wide and are essential elements of my broader modernization effort. Indeed, successfully implementing my modernizations initiatives will lead to a more flexible and agile organization with a sharpened focus on sustained service delivery and enhanced mission execution.

Despite these advances, significant challenges remain. The Coast Guard is a capital intensive organization, and the cost of operating our major cutters is increasing while



their availability continues to decline. Two of my High Endurance Cutters, DALLAS and GALLATIN, had such severe structural deterioration that they had to be removed from operations for immediate repairs. Three weeks ago, an engine-room fire on BOUTWELL damaged one of its main gas turbine engines beyond repair, requiring maintenance period emergency Bahrain and resulting in more lost cutter days. Parts shortages have caused

aircraft availability to dip below our 71 percent target. We are experts at getting the most out of our aging fleet, but to maintain readiness we will have to make difficult financial decisions and manage resources to buy down risk in the most critical areas.

Before discussing our current activities and the details of our acquisition program, I would like to explain how I view the roles and missions of the Coast Guard and our strategic direction.

ROLES AND MISSIONS

The U.S. Coast Guard is one of the five Armed Services of the United States and the only military organization within the Department of Homeland Security (DHS). Today, as in the past, the Coast Guard continues to leverage its multi-mission structure, guardian ethos and established partnerships to protect the American public and global marine transportation system.

Protecting America's Maritime Interests



Responsibilities

With more than 218 years of service to the Nation, the Coast Guard is a multi-mission, military, maritime organization that safeguards U.S. economic and security interests throughout the maritime environment. Unlike its sister services in the Department of Defense (DoD), the Coast Guard is also a law enforcement and regulatory agency with broad domestic authorities. The Coast Guard delivers broad solutions across the entire spectrum of authorities, capabilities, competencies, capacities, and partnerships (ACCCP). As a result, we bring value to the public by effectively executing 11 statutory missions through an adaptive and efficient operating model.

Service to the Public

Broad, Complementary Authorities and an Expansive Network of Partnerships

The Coast Guard's safety, security, and stewardship authorities are fully integrated, providing a suite of capabilities unrivaled in the public sector. Coast Guard Captains of the Port around the country leverage partnerships such as Area Maritime Security Committees, Harbor Safety Committees, and Area Committees to advance interagency objectives and coordination, and improve unity of effort. The Coast Guard also integrates within DHS and across the government by providing personnel to liaison with

other government organizations. These liaisons strengthen national networks, inform partners on DHS and Coast Guard responsibilities, and bring diversity of perspective to major interagency challenges. The Coast Guard also uniquely bridges international gaps among foreign Ministries of Defense, Interior, and/or Transportation to ensure the safety, security, and efficiency of the Global Marine Transportation System (MTS), and by extension, we support the health of U.S. economic interests.

A Bias for Action and Culture of Response

The Coast Guard embraces a culture of response and action, with all of its personnel trained to react to "All Threats, All Hazards." In many cases, front-line operators are encouraged to take action appropriate to the risk scenario presented, without waiting for detailed direction from senior leadership. This model enables swift and effective response to a wide variety of situations. Coast Guard first responders follow National Response Framework protocols daily to respond to oil spills, terrorist threats, natural disasters, disruptions of commerce, and civil disturbances. Active-duty Coast Guard personnel are required to be trained in the National Incident Management System (NIMS). Further, Coast Guard response efforts are bolstered by strong partnerships at the port and regional level with state, local, and tribal agencies as well as non-governmental stakeholders. Pursuant to the SAFE Port Act, the Coast Guard leverages these partnerships to assist the Department in developing Interagency Operations Centers (IOC), a critical element of a DHS-wide solution for regional command and control.

Flexible, Adaptable Operational Capability and Presence

The Coast Guard provides agile, adaptable, and ready operational capabilities best suited to serve the Nation's maritime interests. Throughout the U.S. maritime domain, the Coast Guard provides a recognized maritime presence in the performance of safety, security, and stewardship roles. It is also the only DHS organization that can operate assets for both law enforcement and military purposes within and beyond U.S. territorial limits. This presence, supported by a military command, control, and communications network, gives the Coast Guard both prevention and response capabilities for all threats. The Coast Guard can provide forces from the local level up to a national or international level of involvement, regardless of the contingency. In responding to domestic disasters and emergencies, the Coast Guard can also accept and integrate assistance from the Department of Defense (DoD) and other Federal agencies. Moreover, the Coast Guard can flow its unique capabilities and authorities to DoD for national security contingencies. As both a military service and law-enforcement agency, the Coast Guard "straddles the seam" separating the federal government's homeland-security and homeland-defense missions.

Access, Expertise and Experience in the International Community

The Coast Guard has long fostered U.S. Government engagement in international maritime affairs. The Service's military, law enforcement, and humanitarian functions are closely integrated. The Coast Guard's structure, capabilities, and missions parallel many of the world's navies and coast guards. The Service's broad enforcement and regulatory authorities, coupled with its respected record for humanitarian service, affords access to maritime nations across the world. In August 2008, for example, a Coast Guard 378-foot High Endurance Cutter distributed aid supplies to the Republic of Georgia following the South Ossetia War. The Coast Guard maintains international partnerships that support all of its statutory missions—from North Atlantic Coast Guard Forum efforts to address fisheries management and enforcement, to 25 bilateral agreements that support

counter drug efforts, to the Commandant's role as the Head of the U.S. delegation to the United Nations' International Maritime Organization (IMO). These relationships allow the Coast Guard to forge international partnerships for the peaceful use of the maritime domain. These activities also buttress our Nation's standing on the global stage, enable America to collaborate closely with international maritime partners, and influence cooperative maritime solutions to global threats and challenges.

Member of the Intelligence Community

As a member of the Intelligence Community (IC) with intelligence and law enforcement authorities, the Coast Guard is uniquely positioned to provide accurate, timely, and fused maritime intelligence to our operational commanders and IC partners. The Coast Guard is DHS' primary support component of the Global Maritime Intelligence Integration (GMII) initiative, as outlined in the National Strategy for Maritime Security. The Coast Guard also maintains an established Counterintelligence Service and offers the only signals intelligence capability within DHS. This intelligence capability, combined with the situational awareness, facilitates continually-improving maritime domain awareness (MDA) in the service of our homeland security mission.

CHALLENGES

Demand for Services

The modern Marine Transportation System (MTS) remains the lifeblood of our national economy. It has been reported that over 90 percent of the world's trade is carried on the water. In the United States, the MTS carries 78 percent of all our international trade – including 66 percent of all crude oil consumed - and generates thousands of jobs. ¹

To understand our future world of work, we must expand our view of the maritime domain. Water covers 70 percent of the earth's surface and will continue to be used innovatively to meet modern demands. Massive man-made islands are being constructed off of Dubai to increase living space. A Dutch company is building an island 20 miles off their coast and will use Ocean Thermal Energy Conversion technology to provide sustainable power for two-million homes.² Indeed the future is difficult to predict precisely, but these observations suggest increasing use of the world's vast maritime expanses.

As energy needs grow, production and processing solutions will be sought on sea as well as on land. On- and offshore Liquefied Natural Gas (LNG) terminals are expected to grow significantly over the next 10 years. Interest in undersea resources will continue in the Gulf of Mexico and the Arctic. Each of these activities use Coast Guard resources to maintain navigational safety, provide adequate security, and protect the environment.

Added to this are continuing specters of transnational terrorism, increased sophistication in human smuggling and drug trafficking, steadily declining fish stocks, and expeditionary demands to support persistent conflicts around the globe.

The multifaceted nature of the MTS reinforces the need for Coast Guard to effectively conduct inspections, facilitate safe and efficient vessel movements, and ensure security in

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¹ National Strategy for the MTS: A Framework for Action, Committee on the MTS, July 2008.

² Energy Island to Supply Green Power, The London Times, 10 November 2008.

the increasingly complex port environment. Safety and security are intrinsically linked here, and we need our capabilities and competencies to keep up.

In the past three years, we have seen significant Cuban migrant flow and interdiction numbers in the Florida Straits. The Drug Trafficking Vessel Interdiction Act of 2008 (DTVIA) was a critical step in combating the use of self-propelled semi-submersible vessels by drug trafficking organizations, but smugglers continue to employ new tactics to introduce illicit drugs into the U.S. economy.



In the Pacific Rim, home to approximately 50 percent of the world's tuna stocks, Illegal, Unregulated, Unreported (IUU) fishing vessels use multi-mile long drift nets to take enormous amounts of fish and marine mammals with no regard for the long-term viability of these precious natural resources. IUU fishing costs the world an estimated \$14 billion annually. In concert with the Governments of Canada, Japan, and the

People's Republic of China, the Coast Guard has seized eight vessels illegally fishing on the high seas in the past two years alone, but the threat remains and must continue to be addressed.

Looking forward, we must continue to meet the emerging challenges of the 21st century. A properly equipped and organizationally aligned Coast Guard will preserve our current capability and ensure we continue our trend of enduring value to the Nation.

Our Aging Fleet

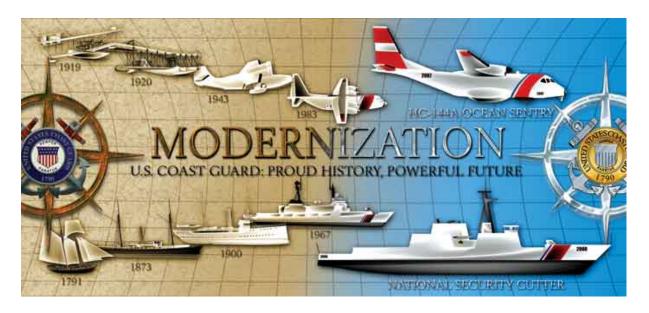
Our readiness is continually challenged by a reliance on outdated, rapidly-aging assets, systems, and shore infrastructure. In fact, during the past 12 months, the Coast Guard spent over \$50M on major unanticipated repairs to cutters and aircraft. These and other casualties have a direct impact on readiness and our ability to execute our missions for the Nation. In FY 2007 alone, High Endurance Cutter operational days were reduced 27 percent due to engineering casualties. Our large deferred maintenance backlogs also present a major challenge to Service readiness, and these backlogs continue to grow.

Stable and Predictable Requirements and Costs

Effectively managing the 20-plus major acquisition programs in our acquisition portfolio requires stable and predictable requirements and accurate cost estimation, among many other factors. We recognize that each project is based on strict multi-year cost, schedule, and performance milestones, and any cost or schedule breaches create significant near- and long-term impacts on our funding streams.

Modernization

The need to functionally align the Coast Guard is driven by changes in our external environment and the need to improve internal business processes. The Modernization Effort will transform command and control structures, maintenance processes and mission support to improve front-line service to the nation. Modernization is not about more resources. Rather, it's about finding better ways to leverage existing resources to maximize mission effectiveness.



ACQUISITION PROGRAMS

Today, I am pleased to discuss our wholly reformed acquisition organization, an organization with processes and procedures in place to ensure successful program management and oversight. I expect further challenges, but I have the utmost confidence that the processes now in place allow us to address those challenges head-on and facilitate delivery of assets and systems with capabilities to meet the mission needs of today and tomorrow.



The most pointed example of the success of our reformed acquisition processes is Fast Response Cutter Sentinel-class patrol boat. With a total potential contract value of more than \$1 billion, it was a highly competitive process, and our selection survived two post-award protests, demonstrating that our robust acquisition process was beyond reproach.

As the yard stick by which to measure the success of our reformed acquisition enterprise, the Sentinel project provides a number of assurances - all built on the cornerstones for successful acquisition - for its own and future acquisition management successes, including:

- Establishment and maintenance of a direct Coast Guard relationship with the contractor, rather than through a separate lead systems integrator;
- Development of detailed technical requirements, and firm adherence to those requirements throughout the proposal design evaluation process and construction;
- Classification of cutters to established and recognized standards (i.e., American Bureau of Shipping and High Speed Naval Vessel Rules);
- Use of parent craft designs where applicable, with parent craft designer and builder co-located on engineering team;
- On-site government staff at production facilities;
- Fixed price contract structure;

- Extensive involvement of technical authority throughout acquisition and delivery process;
- Independent validation (i.e., independent cost estimates and design assessments);
- Leveraging Navy and other government partnerships; and,
- Ability to re-compete thru options for data and licensing.

The Sentinel project has become the model for all current and future Coast Guard acquisition programs. By adopting needed reforms, and guided by this Subcommittee, we've demonstrated the right way to develop and manage an acquisition project. With those reforms solidly in place, the foundation for continued success is firm.

ACQUISITION WORKFORCE

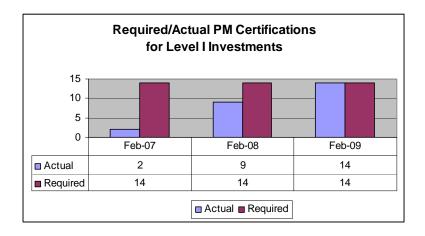
As acquisition policy and process improvements have promoted project successes, one persistent set of challenges has been the recruitment, development, and retention of a highly qualified acquisition workforce. We have accomplished much in our reforms of contracting, business and financial management, program management, systems engineering and other key disciplines. But, like other federal agencies, we must work hard to attract and retain the best and brightest in a highly competitive market.

In the 1990s, the level of investment in Coast Guard acquisition was approximately \$200 million. In FY 2009, we were appropriated nearly \$1.5 billion for our recapitalization programs. This growth in investment has required our professional workforce to grow to ensure adequate program management and contractor oversight and management. We have worked hard to build capacity. Today the Acquisition Directorate has 855 military and government civilian personnel, and is continuing to grow—including 104 added positions in 2008 and another 65 positions in 2009.

With many agencies competing for qualified acquisition professionals, it is critically important for the Coast Guard to remain competitive in the labor market. The Coast Guard must be able to use all hiring and workforce management tools effectively and expeditiously.

Once hired, however, another challenge is ensuring the appropriate training, skills, and career progression for our workforce. As a government manager, I have an obligation to properly equip my personnel with the skills and tools they need to accomplish their missions.

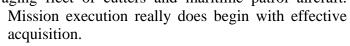
One of the areas where we have placed enormous pressure is on our training and certification programs. A couple of years ago we had a lot of people who might have had the right experience but had not completed required training or certification, so it was difficult to see standardized skills across projects. We have addressed this challenge. Today, of the 14 Level I investments in our acquisition portfolio (valued at greater than \$1 billion total life cycle cost), 100 percent are led by DHS Level III (the highest level) certified program managers.



We have also developed a new *Human Capital Strategic Plan* that outlines several goals aimed at improving the skills of our workforce. An overarching objective is to raise the profile of Coast Guard acquisition as a profession with well-defined career paths for both uniformed and civilian employees. That strategy sets goals for training and educational opportunities, using internal resources as well as reaching out to third parties, such as the Defense Acquisition University and the Naval Postgraduate School, to provide additional support.

The goal in these efforts is to improve the career path that can be followed by uniformed and civilian employees, ultimately narrowing the gap between the complexity of acquisition tasks and the availability of skilled workers to accomplish them.

As the Acquisition Directorate motto states, "mission execution begins here." Success at headquarters has had a real impact on the Coast Guard men and women in the field, giving them the tools they need to serve the nation. Without our acquisition programs, there would be no Rescue 21; no upgraded or armed HH-65C helicopters; no Response Boat-Medium; no upgraded mission systems onboard our HC-130 fleet; and no prospect for replacement for our severely aging fleet of cutters and maritime patrol aircraft.



The news picture of the ditched US Airways flight in the Hudson River, with the RB-M in the foreground, really brings home the notion that it is not just about a paper contract. At the end of the day, when we get those assets deployed, we are

saving lives, or interdicting illegal drugs off our coast, or stopping illegal migrants.

LOOKING TO THE FUTURE

With acquisition reform firmly taking root, the future of Coast Guard acquisition is bright. We have learned from the past, but our focus remains on the future. Reformed processes have already led to acquisition success, but I am confident our greatest successes lay ahead, if we remain committed to the foundational principles and acquisition cornerstones that have driven our reforms. As the Coast Guard's mission support organization is established fully, those principles will become further engrained in our mission support and acquisition culture.

The future will see new requirements for ever new assets and systems. In fact, we will soon begin the largest single acquisition project in our history—the Off-Shore Patrol Cutter. Now that our reforms are in place, I am confident that this and other future projects will be managed effectively and efficiently.

A key element of future acquisition success is the integration of the Coast Guard's Research and Development (R&D) Program with the acquisition community. It is here technologies, assets, and systems can be tested and evaluated prior to initiating a full acquisition program of record. In this way, the R&D Program enables more efficient project planning as developmental efforts are handled by dedicated and objective research and development professionals, rather than project management staff.

The R&D Center recently achieved a major milestone last month when it moved to a new facility. Its new home will better support the growth and additional resources necessary to meet the Coast Guard's current and future R&D needs. And by working to meet those needs, the R&D Center is contributing to today's operational mission demands. Through strategic partnerships with research laboratories—such as John's Hopkins University Applied Physics Laboratory and Sandia National Laboratories—the R&D Center is well-positioned to link operational sponsors and acquisition program managers through preacquisition activities, as well as explore modern real-world concepts and technologies for operational and regulatory programs.

CONCLUSION

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

The men and women of the Coast Guard performed with courage, sacrifice and dignity in 2008, and are eager and prepared to answer the Nation's call now and into the future.

As our Nation faces the long-term struggle against radical extremism in a period of persistent conflict, the Coast Guard must be prepared to conduct operations across a broad spectrum of potential threats and hazards. Mindful of the current economic climate, we must modernize America's Coast Guard to answer the call, to be *Semper Paratus*, and to execute the mission effectively and efficiently. While much has been achieved, developing integrated maritime safety, security, and stewardship regimes for the Nation remains a work in progress. Our acquisition reforms and dedicated modernization efforts are critical steps in the right direction.

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

Appendix - Acquisition Project Update

For Deepwater, the results of our acquisition reform efforts speak for themselves.



In the National Security Cutter project, we've delivered the first cutter, *CGC Bertholf*, which was commissioned in August of last year. We have been actively running *Bertholf* through her paces during the operational test and evaluation process now underway and have received very positive feedback from her crew and the Coast Guard's operational community. Of particular note, *Bertholf* has conducted her first operational patrols and completed

flight deck dynamic interface testing and attained interim flight deck certification. Additionally, *Bertholf* recently conducted towing exercises with *CGC Morgenthau*, a fueling at sea evolution with *USNS Kaiser*, and testing of the 57mm deck gun and close-in weapon system against high-speed maneuvering surface targets and unmanned aerial vehicles. The second National Security Cutter (NSC), *Waesche*, is on track for delivery late in 2009, with fabrication begun and the keel laying for the third cutter, *Stratton*, scheduled for summer 2009.

We continue to see real progress in the areas of Information Assurance, which includes TEMPEST, on the NSC. Our technical authority, with support from the Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) and NSC project managers, conducted TEMPEST certification inspections prior to preliminary acceptance of *Bertholf* in May 2008. Those pre-delivery inspections have contributed to building a TEMPEST baseline, which will serve as a reference point for all future TEMPEST-related activities. Using the test-fix-test methodology, we now have resolved all 122 visual TEMPEST discrepancies identified during that pre-acceptance process. We are conducting additional instrumented TEMPEST surveys using a National Security Agency (NSA) approved contractor to prepare for final TEMPEST testing, which is scheduled to be conducted by SPAWAR in April 2009.

We continue to build on lessons learned and are making some significant improvements to the *Stratton*, including construction process efficiencies, enhanced functionality and better hull design. One of the most notable process improvements is a significant reduction in the number of grand blocks—multiple units stacked together in large assembly halls away from the waterfront—used to assemble the ships hull. We used 29 grand blocks to assemble *Bertholf*, but expect to use as few as 14 to assemble *Stratton*. This will enable more sub-assembly work in each grand block in a controlled environment and potentially lead to fewer construction hours compared to the process for *Bertholf*.

Other improvements include an enhanced replenishment at sea station, which incorporates a redesigned refueling area that will be more efficient and ergonomic for cutter personnel. We are also improving the gas turbine removal route, which will make it easier to remove and repair the gas turbine modules that power the cutter. And we have enhanced the hull fatigue design on *Stratton*, ensuring she will achieve a 30-year fatigue life.

We are currently working toward production award for the fourth NSC, *Hamilton*. In line with accomplished acquisition reforms and our efforts to become the lead systems integrator, the production award for *Hamilton* will occur outside the Integrated Coast Guard Systems (ICGS) LSI construct and include a fixed price contract structure.



Our HC-144A Ocean Sentry maritime patrol aircraft project is also experiencing significant success. We have already taken delivery of seven HC-144 aircraft, with four more on order. We have also taken delivery of three mission system pallets, with nine more on order. We continue working with the contractor to refine software and hardware interface issues and are looking at ways to minimize those issues with future deliveries.

The operational value of this extremely capable aircraft is already being shown. On February 6, 2009, the HC-144A Ocean Sentry officially stood the watch for the first time on a scheduled operational patrol. During that patrol, the aircraft crew was able to respond to a distress notification from a 78-foot fishing vessel approximately 228 miles southwest of Mobile, Ala., in the Gulf of Mexico. The crew received the distress call on the aircraft's new emergency direction finding equipment. Once on scene, the crew quickly established communications with the vessel and determined the boat was not in actual distress—the crew had accidentally activated the vessel's electronic distress beacon. But, the case illustrated the aircraft's ability to quickly hone in on distress signals and respond to the scene.

In another instance, a HC-144A crew in a normal training mission in January 2008 diverted and responded to the crash of two U.S. Air Force F-15 fighters in the Gulf of Mexico. In that case, the crew was able to quickly arrive on scene, locate a survivor using the aircraft's enhanced bubble search window, establish communications with potential Good Samaritan vessels in the area and, as On Scene Commander (OSC), coordinate the search and rescue response between the Air Force, Coast Guard, and other federal and state agencies.



We have installed new surface search radars on five HC-130H Hercules long range surveillance aircraft, and completed the installation of other new mission systems aboard three HC-130Js, with two more in modification.

One example of the capabilities of this upgraded platform occurred on September 4, 2008, when a Coast Guard HC-130H from Air Station Clearwater, Fla., used the aircraft's newly installed Selex radar

system to locate and identify three people atop an overturned 15-foot boat 47 nautical miles northwest of Puerta Plata, Dominican Republic. The boat was carrying four passengers from the Dominican Republic en route to Puerto Rico when it capsized, separating the fourth passenger from the boat. After locating the boat and passengers, the aircrew vectored a Coast Guard HH-65C helicopter. They also used the onboard Automatic Identification System (AIS), which is integrated with the SELEX radar, to identify a nearby Good Samaritan vessel, the cruise ship *Carnival Destiny*. The *Destiny*

made best speed to assist as needed but finally continued to its original course after the Coast Guard HH-65C crew completed the rescue of the three surviving passengers. The Coast Guard returned the survivors to the Dominican Republic, where they received medical treatment for severe dehydration.



Having upgraded the engines and transmissions on all HH-65C helicopters, we are now also delivering MH-65C Dolphin multi-mission cutter helicopters to air stations across the nation with newly installed airborne use of force capabilities. Eventually, all Coast Guard HH-65C helicopters will be upgraded and re-designated as our Multi-Mission Cutter Helicopter.

The Coast Guard's Helicopter Interdiction Tactical Squadron (HITRON) received delivery of its first MH-65C in October 2007. Pilot and crew training began almost immediately and the first MH-65C deployed aboard *CGC Dallas* in January 2008. In March 2008, the MH-65C interdicted a 'go-fast' boat carrying 3,286 pounds of cocaine. Since then, the MH-65C has been involved in 15 interdictions. So far in fiscal year 2009, the MH-65C has successfully interdicted 11 go-fasts, resulting in the seizure of more than six tons of cocaine and more than two tons of marijuana; having a combined estimated street value of more than \$178 million. The MH-65C has cemented its place at the forefront of our nation's efforts to stop illegal drugs from reaching our streets.

Additionally, these helicopters have proven extremely valuable in assisting with identification and stopping of Self-Propelled Semi-Submersible (SPSS) vessels.



The Mission Effectiveness Project, which is completing systems recapitalization for our 110-foot, 210- foot and 270-foot in-service cutters, continues to progress on schedule and on budget. In March of 2008, we completed the MEP availability for *CGC Seneca*, the seventh of 26 total 270-foot Medium Endurance Cutter availabilities (13 cutters with two

availabilities each). In November 2008, *CGC Resolute* completed its MEP availability, the seventh of 14 total 210-foot cutter availabilities. And in December 2008 we completed the MEP availability of *CGC Sitkinak*, the seventh of 20 total 110-foot patrol boat availabilities. Currently, six cutters are at the Coast Guard Yard undergoing MEP availabilities—three 210-foot cutters and three 110-foot patrol boats.

And our reform efforts are directly measured in the recent contract award for the



critically needed Fast Response Cutter Sentinel-class patrol boat. Initially planned as part of the Deepwater program, to be delivered through Integrated Coast Guard Systems, we took this project back within the Coast Guard to ensure full and open competition and responsible program management. We have abided strictly to our reformed acquisition processes, conducting a

deliberative proposal review and award determination with integrated participation from technical authorities and the operational community. Based on the cornerstones for successful acquisition, this project also adheres to *MSAM* guidelines, full reporting, independent assessment and validation, leveraging internal and external partnerships, and robust departmental oversight.

For other programs, those not originally affiliated with Deepwater, adherence to sound acquisition processes likewise has had positive results.

For example, the Response Boat-Medium (RB-M) project is in low rate initial production (LRIP) and has delivered seven of an eventual 180 new boats, with the eighth delivery scheduled for later this week. We have 36 RB-M's on order, with plans in place to order an additional 30 in FY2009. To support those orders, the contractor opened a second production facility outside of Green Bay, Wis. in September 2008. These boats, already making a difference in some high-profile real-world search and rescue cases, are helping Coast Guard Sectors across the nation carry out an operational evaluation to inform future production decisions. For example, a RB-M recently delivered to Coast Guard Sector New York responded to the U.S. Airways passenger jet that ditched in the Hudson River on January 15, 2009. And, the RB-M delivered to Coast Guard Sector Key West was recently featured prominently on the television show *America's Most Wanted* for its dramatic operational capabilities.



The 87-foot Coastal Patrol Boat project is completing delivery of the final cutters of the class, which are replacing the decommissioned fleet of 82-foot Point class cutters. Two 87-foot Coastal Patrol Boats were commissioned in March—*CGC Alligator* in St. Petersburg, Fla., on March 9 and *CGC Reef Shark* in San Juan, PR on March 23.

The Rescue 21 project, our maritime "911" service, is also making good progress, having recently delivered the 19th of 39 sectors, with Sector North Carolina coming online. Once that Sector's Rescue 21 system is fully operational, we will be providing search and rescue radio and direction finding coverage along 27,649 miles of U.S. coastline. Our operational men and women have already reported numerous lives saved due to the increased capabilities the Rescue 21 systems provides.



For example, on January 14, 2009, an 18-foot recreational fishing boat capsized with six men onboard in the frigid waters around the Chesapeake Bay Bridge-Tunnel near Hampton Roads, Va. When the boat began taking on water in rough January seas, the men only had time to grab a handheld radio and call, "Mayday! Mayday! Mayday!" Shortly thereafter, the boat capsized and all six men were plunged into the 43-degree water. Coast Guard

Sector Hampton Roads received the mayday call at 9:09 AM, but was unable to communicate with the men over the radio. Using the recently installed Rescue 21 system, with its improved direction finding capabilities, Coast Guard watch standers were able to quickly pinpoint the vicinity where the mayday call originated using only the lone

mayday transmission. A nearby Coast Guard HH-60 helicopter responded to the location and dropped a rescue swimmer into the water. Overhearing the radio transmissions and seeing the Coast Guard helicopter, a Maryland pilot boat also came to aid in the rescue. The "mayday" call came in at 9:09 AM. The Coast Guard helicopter arrived on-scene at 9:29 AM and all six fishermen were out of the water by 9:42 AM. Four of the men survived the hypothermic temperatures after being rescued. Without Rescue 21, the Coast Guard would have been unable to locate the stricken fishing boat so quickly and more men likely would have died.

ADDRESSING PROJECT CHALLENGES

In addition to enabling current and future project success, our reform efforts are facilitating the successful resolution of past and current project challenges.

One such challenge is the fatigue lifespan of the National Security Cutter—which the Coast Guard insists be at least 30 years—meaning at least 30 years before the onset of major repairs due to normal mission use. In 2007, in accordance with the acquisition success cornerstones and working through our technical authority for engineering and logistics, the Coast Guard arranged to work with the Navy's Naval Surface Warfare Center, Carderock Division to provide independent third party analysis of fatigue design solutions developed by Coast Guard naval engineers. Using the newest available computer fatigue modeling software, Carderock reached two main conclusions in its final report, presented to the Coast Guard earlier this year.

First, Carderock determined Coast Guard-developed design fatigue enhancements for the hulls of NSCs three through eight will achieve the desired 30-year fatigue life, while also recommending monitoring of localized stress in several structural details. Second, the report identifies major improvements with fatigue life after completing identified modifications to hulls one and two, but the Carderock transmittal letter recommends more data be gathered for several areas which are still modeling a less-than 30-year fatigue life.

We agree with Carderock's assessments. In fact, we have already outfitted *CGC Bertholf* with strain gauge sensors to measure actual encountered stresses and collect data to enable more precise design modeling. Our technical authority is also reviewing each area identified by Carderock, based on Coast Guard missions and the planned operational profile of the NSC, and will develop a plan to address those concerns prior to implementing any related design fix. Plans are to gather data and modify design enhancements over a span of multiple years, even after NSCs one and two transition to full operations, as the upgrades are completed over potentially several future yard availabilities. We plan to continue to collaborate with Carderock to conduct further analysis, including possible re-validation of changes to the proposed design as a result of the recommendations in their report.

Another persistent challenge is controlling costs in complex, multiple-year projects - especially those costs driven by economic factors outside the Coast Guard's control, more specifically, those types of cost increases recently impacting the National Security Cutter and Maritime Patrol Aircraft projects. Current economic conditions have seen a steady six-month decline in the cost of commodities such as nickel, steel and copper.

However, when we award production contracts, our contract price reflects commodity prices at the time of award.

In the case of the National Security Cutter we are executing production contracts for NSCs two and three and the long lead time materials contract for NSC four that were priced based on historically high commodity and fuel prices in effect during the summer of 2008. Likewise, when current NSC and MPA contracts were awarded, the value of the U.S. dollar was at a record low when compared to other foreign currencies, meaning all foreign components necessary for production were more expensive.

While the government will never be able to eliminate these types of cost changes completely, we have taken steps to minimize their impact within Coast Guard acquisitions. Once again, by building on the cornerstones for acquisition success, we have established a firm commitment to independent cost estimates within each project to validate projected program costs. We have initiated more rigorous government oversight of contractor performance and cost accounting, including renewed emphasis on Earned Value Management data. And we continue to work with industry to balance risk and ensure affordable acquisition programs at best value for the government.

Within our fixed wing aircraft acquisition projects, we are successfully addressing mission system reliability issues. As we have steadily increased the operational tempo of our three missionized HC-130J aircraft, we have experienced some mission system reliability issues—both software (reboots) and hardware (computer card replacements). While separate, we are addressing similar reliability issues with the mission system pallet aboard the HC-144A. In both cases, we are working within our system of checks and balances directly with our technical authority and operational sponsor to aggressively resolve the issues with the contractors. Where applicable, our efforts include warranty work with the contractor. In both cases, we are working closely with the contractor on minor hardware replacements and software upgrades that we expect to complete this year, and already have achieved significant success. We continue to see improved reliability through our ongoing operator training, updates to operational procedures, and increased operator familiarity with each system.

With regard to the 123-foot patrol boats, the Department of Justice and the DHS-OIG continue their investigation into the project. The qui tam action involving the patrol boats is still on-going. The Department of Justice has not yet made yet made a determination whether it will intervene in that action. The Coast Guard continues its support of the DOJ and DHS-OIG investigation.

Simultaneous to our support of the DOJ investigation, we have also undertaken an independent engineering analysis through the Navy's Naval Sea Systems Command, which we expect to be completed sometime this summer. Additionally, we are working with the Department of Justice to release five of the eight patrol boats to salvage systems, equipment and parts still of value to the Coast Guard. The remaining three cutters would remain untouched for evidence purposes in support of the ongoing investigations.



Further to acquisition reform efforts, the Coast Guard's Research and Development (R&D) Center is an important element of the acquisition program and is now included in the Acquisition Directorate.

For example, after recognizing a need among Coast Guard operational units in 2005, the R&D Center began work on a biometrics project to enhance identification efforts by deployed Coast Guard personnel. As part of a collaborative effort that includes the Department of Homeland Security Science and Technology Directorate, US-VISIT, Customs and Border Protection, Immigration and Customs Enforcement, the U.S. Attorney's Office, and Coast Guard operational community representatives, the R&D Center has led development and delivery of a biometrics at sea program that has had a significant impact on our ability to identify and prosecute persons attempting to re-enter the country illegally, those suspected of being alien smugglers, wanted felons, and known or suspected terrorists. Since the R&D Center's biometrics program began in 2006, the Coast Guard has collected over 2,500 biometrics signatures to date, with over 25 percent of those signatures returning a positive match, resulting in over 250 successful prosecutions. During that same period, we have seen a 75 percent reduction in the migrants trying to navigate the Mona Pass—one of the busiest migrant thoroughfares in the Caribbean.

Additionally, the R&D Center is conducting an evaluation of the capabilities needed in an unmanned aerial system that could potentially operate from the deck of the National Security Cutter. The R&D Center effort on this project includes collaboration with Coast Guard operational sponsors and acquisition program managers, as well as external partners and contractors, including the Navy's Naval Air Systems Command, ABS-G Consulting, the Federal Aviation Administration and Sandia National Laboratories. Specific R&D Center Unmanned Aerial Systems (UAS) activities include: participation in tests with the Defense Advanced Research Projects Agency (DARPA) and U.S. Special Operations Command; participation in shipboard UAS tests aboard the National Oceanic and Atmospheric Administration ship *Oscar Dyson*; and completion of a dry-fit of a UAS on *CGC Bertholf*. We also participated in lessons learned from Navy Vertical Unmanned Aerial Systems experience with the *USS McInerney*. Ultimately, these efforts will enable the R&D Center to objectively recommend those platform attributes that could meet Coast Guard mission requirements.

Another critical contributor to our current and future acquisition success is the Coast



Guard's active Foreign Military Sales (FMS) office. Begun as part of the Coast Guard's Office of International Affairs to handle excess defense article transfers to allied nations, our FMS office completed its first new procurement case in 2001 through the Navy's International Programs Office (IPO). In fact, more than 80 percent of our FMS management and execution is funded through the Navy IPO from the Department of Defense FMS administration trust fund, a pooled fund supplied via

a surcharge assessed to foreign purchasers on every FMS case. In 2005, the Coast Guard's FMS office was transferred to the Deepwater Program Executive Officer and became part of the larger acquisition directorate in July 2007. During the past three years, our active FMS projects have more than doubled to \$100 million, and annual new FMS projects have increased from \$10 million to more than \$50 million.

Recently, our FMS staff reached a major milestone—transfer of the 200th vessel. Those transfers include deliveries to 37 nations of such platforms as 25-foot Defender-class response boats to 210-foot Reliance-class cutters. Delivery of these assets has been critical to the development of allied navies and coast guards around the world. Some of our strategic allies who have received assets include: Argentina, Chile, Columbia, Ghana, Nigeria, Tunisia, Iraq, Yemen, Bangladesh, and Pakistan. In addition to saving the Coast Guard \$25 million in disposal costs, these deliveries are strengthening U.S. national security in the maritime domain by building capacity for our international partners. By continuing these transactions, we are building enduring partnerships that enhance our capability to pursue cooperatively shared maritime safety and security goals.