

Maritime Domain Awareness Center Opens

Integrated Coast Guard Systems (ICGS), the systems integrator for the Integrated Deepwater System Program, and Lockheed Martin hosted a ribbon-cutting ceremony for the Maritime Domain Awareness Center (MDAC) at the Lockheed Martin facilities in Moorestown, New Jersey on April 23rd.

Adm. Thomas Η. Collins, Commandant of the U. S. Coast Guard joined Bob Executive Vice-Coutts. President, Lockheed Martin Electronic Systems; New Jersey Congressmen Jim Saxton and Frank LoBiondo; ICGS Vice-President Jamie Anton; and Fred Moosally, President of Lockheed Martin Maritime Systems and Sensors, making featured remarks during the ceremony.

Adm. Collins told the gathering the opening of the MDAC was a "significant milestone" in ensuring the Coast Guard has "the capabilities it needs to stop threats to our homeland before they arrive, and the effective response capability to deal with maritime security needs."

The new \$9.4 million MDAC, one of nine labs housed in the Maritime Systems Engineering Center (MSEC), is a 46,000 square foot state-of-theart facility that will develop test and integrate assets and systems being produced to support the Coast Guard's Integrated Deepwater System and other Homeland Security programs.



ADM Thomas Collins views systems undergoing testing at the Maritime Domain Awareness Center in Moorestown, NJ. Collins was at the MDAC for the center's ribbon-cutting ceremony on April 23, 2004. Rep. Frank LoBiondo (behind Collins) and Rep. Jim Saxton (not pictured) also participated in the ceremony. Lockheed Martin/JOE MANCINI

The MDAC will house and provide support for future CANDI equipment and software during developmental integration

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and test activities at various third tier subcontractors' locations as well as activities of the early C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) assets upgrades.

The Center is configured to have the capability to perform development, integration, installation, checkout and acceptance testing of C4ISR components and equipment for Deepwater's surface and air assets as well as shore units. It also houses the Communications System Integration and Test facility that will provide the facilities, equipment, systems, software, development environments and tools necessary to develop, test and integrate the Deepwater's communications equipment.

"Maritime domain awareness is my most significant strategy to reduce risk to our nation," noted Adm. Collins.

"I wholeheartedly welcome the Maritime Domain Awareness Center into the Coast Guard's portfolio of critical assets and look forward to spectacular outcomes."

by LCDR Andrea Palermo

DEEPWATER

Aging Assets Insufficient for Expanding Mission

The importance of the Integrated Deepwater System to the U. S. Coast Guard's expanding mission - including new homeland security programs implemented since the September 11 terrorist attacks were highlighted during a Congressional oversight hearing.

The Coast Guard's Integrated Deepwater System is intended to replace or modernize more than 90 ships and 200 aircraft

used in the Coast Guard's deepwater missions, which generally occur more than 50 miles offshore.

During his opening statement, U.S. Rep. Frank LoBiondo (R-NJ), the Chairman of the House Subcommittee on Coast Guard and Maritime Transportation, outlined the importance of the Deepwater project.

"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," LoBiondo said. "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 11. 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 pro-



the importance of the Deepwater project. "Deepwater will Vice Adm. Thomas J. Barrett, Vice Commandant of the Coast Guard, testified on the Integrated Deepwater System before the House Subcommittee on Coast Guard and Maritime Transportation on April 26, 2004. House of Representatives/JUSTIN HARCLERODE

gram 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 two to seven years behind the original 20year 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 re-

spond to terrorist threats and conduct its other vital missions," LoBiondo said.

Coast Guard Vice Adm. Thomas J. Barrett told the Subcommittee that "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, multi-mission and maritime responsibilities," Barrett said.

"The terrorist attacks of *continued on page 3*

DEEPWATEReus

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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 month, 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," Barrett said.

"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 our mission.

"The Integrated Deepwater System is essential to allow the Coast Guard to meet our current and emerging operational requirements."

Barrett added "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 Integrated 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 air-

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craft, boats and cutters are aging, technologically obsolete, and require replacement and modernization.

The Integrated Deepwater System, planned since the mid-1990s, addresses these concerns," Barrett said.

Find more information on Deepwater Online at www.uscg.mil/deepwater

Commandant Highlights IDS in Testimony, Speech

During Congressional testimony March 4 on the FY 2005 budget, Adm. Thomas H. Collins, Commandant of the Coast Guard, emphasized the critically important role that the Deepwater Program will play in addressing worrisome trends in the Coast Guard's operational readiness.

"Our greatest threat to mission performance continues to be that our aircraft, boats and cutters are aging, technologically obsolete, and require replacement and modernization," Adm. Collins said.

Two weeks later, during his "State of the Coast Guard" address at the National Press Club in Washington, D.C., the Commandant elaborated, "There are storm warnings along our projected track line.

"There are clear warning signals that our ability to sustain our readiness into the future is increasingly at risk. We are experiencing system failures at a steadily increasing rate."



the U.S. Coast Guard, delivers the "State of the Coast Guard" address at the National Press Club in Washington, D.C. SCG/PA2 Faiq El-Amin

Adm. Collins explained how the HH-65 Dauphin helicopter, a mainstay in the Coast Guard's inventory, has had 70 in-flight power losses over the fiscal year, requiring operational flight restrictions for safety.

The Commandant said that Coast Guard cutters also experienced 676 unscheduled maintenance days—a 41 percent increase over the past year and the equivalent of losing the operating hours of four cutters.

The 110-foot Island class cutters, are well beyond their planned service lives and have experienced 20 water penetrating hull breaches, resulting in emergency dry dockings.

According to the Commandant, Deepwater is the answer to these concerns.

"Our biggest challenge is the condition of our Deepwater legacy systems and the need to move ahead smartly with modernization," he said.

by Gordon I. Peterson



Deepwater Adjusted to Sustain Legacy Assets

Responding to indications of eroding readiness as the result of the effect of a sustained high operating tempo on its aging legacy assets, the Coast Guard has adjusted the Deepwater Program's near-term priorities to expedite the reengining of the workhorse HH-65 helicopter fleet and the design of the Fast Response Cutter (recently redesignated the Maritime Patrol Coastal Cutter) as the replacement for 110-foot Island-class maritime patrol boats.

"We recognized that safety of flight issues defined the necessity of re-engining our mediumrange helicopter fleet today, rather than 2006 when it was scheduled," said Rear Adm. Patrick M. Stillman, Deepwater's program executive officer at the Navy League's Sea-Air-Space Exposition in Washington, D.C., April 7.

Stillman also said that, based on deterioration in the hull condition



Rear Adm. Patrick Stillman, PEO of the Integrated Deepwater System Program discusses Deepwater at the Sea-Air-Space Exposition. USCG/GORDON I PETERSON

of 110s overall, it has become apparent that conversion of the 110-foot cutter to the upgraded 123-foot maritime patrol boat "... may not be the best operational and business decision for the Coast Guard.

"We have to build a boat that will last for the life cycle of this enterprise—40 years," Stillman said.

Composite hulls, as opposed to those built of steel, are more resistant to salt-water corrosion—a major concern given the high salinity common to many of the patrol boat fleet's routine operating areas.

Read more of Rear Adm. Stillman's remarks at the Sea-Air-Space Exposition on Deepwater Online. The full text of Stillman's remarks and a copy of the presentation given can be found at www.uscg.mil/deepwater

On April 7, 2004, Vice Commandant VADM Thomas Barrett Approved New IDS Cutter Designators

Current Nomenclature National Security Cutter/NSC Offsore Patrol Cutter/OPC Fast Response Cutter/FRC 87'/110'/123' Patrol Boats <u>Classification</u> Maritime Security Cutter, Large Maritime Security Cutter, Medium Maritime Patrol Coastal (>or= 140 ft) Maritime Patrol Boat (< 140 ft) Designator WMSL WMSM WPC WPB

Maritime Security Cutter Preparations Continue

Preparations continue for the keel laying of the lead hull in Deepwater's new class of Large Maritime Security Cutters (formerly the National Security Cutter), scheduled for the end of the year.

Steel has been rolled and transported to the Pascagoula, Miss. shipyard of Ingalls Operations, Northrop Grumman Ship Systems, in preparation for construction to begin. The keel laying is scheduled in December.

Two contracts were

awarded to Northrop Grumman in 2003 for the detail design and purchase of long-lead materials to enable delivery of the first cutter in the class in late 2006. Initial operational capability is projected for the following year.

During the past year, several adjustments were made to the cutter's initial design to accommodate post-9/11 operational requirements. Chemical, biological, and radiological defense design features were modified to incorporate a onezone "citadel" to enable the cutter to operate in a contaminated environment.

Similarly, the size of the WMSL flight deck will be enlarged to allow it to operate Navy, Army, and Customs and Border Protection Agency models of the H-60 helicopter designed with a tail wheel.

The cutter's flight-deck traversing system will also be upgraded to improve aircraft handling and safety during higher sea state operations.

by Gordon I. Peterson