

## \$24-Billion, 25-Year, Post-9/11 Deepwater Implementation Plan Approved by DHS, Administration

Testifying before the House Appropriations Subcommittee on Homeland Security in late July, Adm. Thomas H. Collins, the commandant of the Coast Guard, released new details on a single Deepwater post-9/11 implementation plan now projected to total \$24 billion over 25 years. "It is the number one Coast Guard priority and the cornerstone of our maritime capabilities now and in the future," said Collins.

During congressional hearings in June, congressional lawmakers asked that a single Deepwater funding stream be developed instead of a range of funding alternatives. Subsequently, with the full support of the Department of Homeland Security and the Bush administration, Deepwater's implementation plan was refined to provide a single long-range funding plan for the Coast Guard's progressive sustainment, modernization, and recapitalization.

"Together with the other information we forwarded to the Subcommittee in recent weeks," Collins said to House members, "it addresses the key issues that you and other Subcommittee members highlighted during last month's Deepwater hearing, including the sustainment of air and surface legacy assets and the program's overall performance standards and measurement."

The Deepwater Program's



Machinists prepare to align a propeller shaft on the medium endurance cutter USCGC TAMPA (WMEC 902) during a nine-month major systems refurbishment of the cutter at Coast Guard Yard, Baltimore, Md. The Mission Effectiveness Project, directed by Coast Guard Headquarter's Acquisition Directorate and funded by the Deepwater Program, will eliminate many of the problems associated with the cutter's obsolete and unsupportable equipment. (Photo by Gordon I Peterson)

long-range plan now details the asset deployment schedule and delivery timeline for each air and surface asset over 25 years. Some increases in the number of aviation assets, notably C-130 long-range maritime patrol aircraft, are projected under the refined plan to improve the Coast Guard's aerial surveillance and long-range transport capabilities.

Initially, the Integrated Deepwater System was designed to perform at the level that the Coast Guard's legacy Deepwater fleet performed at in 1998. "The tragic events of 9/11 and the stand up of the Department of Homeland Security changed the performance requirements of the Coast Guard," Collins said. Revisions to the original baseline began almost immediately after the contract was signed with Integrated Coast Guard Systems to reflect post-9/11 requirements and ensure that the assets had the capabilities to meet system requirements.

In response to this need for change, the Coast Guard engaged in a series of internal and external third-party reviews of the Deepwater acquisition. In 2003, the Center for Naval Analyses completed a three-part study and the Coast Guard's Performance Gap Analysis (PGA) was conducted. These and other studies,

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### The "Yin and Yang" of the Deepwater System

On April 16, the crew of the Coast Guard Cutter Forward, along with the crew of USS Doyle—a Navy guided-missile frigate with Coast Guard Law Enforcement Detachment 408 embarked—interdicted a go-fast vessel in the southeast Caribbean Sea. The crew detained one suspected Mexican and five suspected Colombian narcotics traffickers. During the operation, 77 bales of contraband retrieved from the water tested positive for cocaine.

This successful interdiction mission is representative of the close Navy-Coast Guard collaboration in the war on drugs. It also reflects the growing impact the Deepwater Program's progressive sustainment and modernization of legacy assets are having in improving the operational effectiveness of an aging fleet.

Direct, manned communications in a SIPRNET (secure internet protocol network) chat room allowed Forward's crew to request its own "statement of no objection" for warning shots and boarding immediately after the go-fast began to out run the Doyle-even though the Forward was not yet in sight of the go-fast. "The time from granting the statement of no objection to rounds out of the barrel was six minutes," Forward's commanding officer said. "If the statement of no objection had been 10 minutes later, the go-fast would have eluded us also."

According to the cutter's patrol summary, "The use of a separate chat room for cutter Forward, USS Doyle, District Seven Law Enforcement Detached Office, and Joint Interagency Task Force (JIATF) South for our go-fast intercept case was valuable to maintain battlespace awareness."

The SIPRNET was installed on Forward as part of a Deepwater Program command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) upgrade to improve readiness and enhance early threat identification abilities.

Recently, Senior Chief Petty Officer Eric W. Gallett, an operations system specialist and Deepwater C4ISR team member, visited crews aboard renovated 123foot Island-class cutters in Key West, Fla., to see firsthand how the new communications suite was faring at sea.

"The crews kept telling me, 'This is what we've been waiting for," recalled Gallett, who works in Moorestown, N.J. with Lockheed Martin, one of Deepwater's industry partners. "The patrol boat crews and operators are out there working in concert with one other and able to communicate on chat lines as well as visually through common operating pictures (COP) with the newly installed phase one C4ISR upgrades. This is Nirvana for operators. This is the first phase, and it's only going to get better!"

Deepwater's system relies on commonality and interoperability between assets. In addition to 123-foot cutters, the legacy 378foot, 270-foot, and 210-foot class cutters and Communications Area Master Stations (CAMS) Pacific and Atlantic Areas are also receiving new Deepwater core capabilities, including: interoperable communications connectivity with the Departments of Homeland Security and Defense; a common Coast Guard command and control system; the ability to develop, compile and share law enforcement case files and to systematically screen vessels. These upgrades began in 2004 and will be completed in 2009. (See map for status of upgrades.)

Further Deepwater C4ISR upgrades scheduled from 2008 to 2011 will improve interoperability for joint operations and decision support, with a focus on Sector Command Center integration and local and port level intelligence tools.

Upgrades projected for installation from 2010 to 2013 will extend maritime domain awareness. incorporate all-source (national, internal and non-classified) intelligence information, enhance Rescue-21 interoperability, and improve the COP for effective blue force (i.e., "friendly") tracking. Expanded communications capabilities will center on integrated law enforcement radios, and chemical, biological, radiological, nuclear, explosive (CBRNE) standoff detection and tracking for containment and response.

The system will be completed from 2012 to 2017 via wider communication paths for increased network capability and embedded training to improve operator performance.

"Training on the new equipment and capabilities is a concern to the fleet," Gallett noted. "Units are given new tools to complete their mission and provided training, but there's room for continued improvement."

According to Lt. Cdr. Paul Baker, Office of Training, Workforce Performance & Development, "Sector Key West units will

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#### Communications Area Master Station (CAMS)/ Legacy Upgrades Status

have the opportunity to provide input on the training just provided to operators on the new 123s. [Training Center] Petaluma is currently being modified to support national security cutter C4ISR equipment and will be completed by August 2006, with training to commence in the late August-September 2006 timeframe. We are currently looking at the possibility of installing a 123-foot cutter C4 component out there as well, but that is still in progress."

An Integrated Product Team (IPT), located at the Deepwater system integrator's office in Virginia, is finalizing a training plan for each system. "Training will consist of training the trainers at the unit initially," said Gallett. "Eventually, C4ISR will be incorporated into an 'A' School course at Training Center Peta-

luma, Calif. Train the operators on capabilities aboard the cutters and you'll see magic. There are so many possibilities when it comes to the new assets. We're getting smarter on how best to use the new equipment and the crews continue to discover new features."

The Commanding Officer of the 123-foot cutter Matagorda, Lt. Jose Bolanos, echoed Gallett's enthusiasm for the upgrades his ship received. "The information available on the bridge from the COP, chat, SeaFLIR (a fully marine prepared, gyrostabilized thermal imaging system for maritime and airborne use) and automatic identification system (AIS) allows us to more efficiently employ the ship," he observed. "When hull strength issues are corrected, the 123-foot patrol boats will clearly be an improvement over the 110foot patrol boats. The new capabilities have dramatically improved the way we conduct dayto-day operations," Bolanos asserted.

Gallett summed up the progress to date this way: "The Yin and Yang of the Deepwater system enhancements are a lot of technological break-through with constant improvements, creating more successes. However, the material conditions of the boats are holding us back. I can't imagine what it will be like when the Offshore Patrol Cutters and National Security Cutters enter the fleet."

By PAC Jeffrey Murphy

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along with other inputs—such as deterrence considerations, affordability concerns and modeling results-influenced the final force structure selected in the \$24 billion, 25-year plan, Collins related.

Under the revised plan, Deepwater cutters and aircraft will be equipped with the systems and enhanced capabilities needed to operate successfully in the post-9/11 threat environment. Deepwater's interoperable, networkcentric system for C4ISR, for example, will serve as a valuable force multiplier by providing a common operating picture and increased maritime domain awareness.

Improved maritime-security capabilities (such as anti-terrorist/ force protection, helicopter airborne use of force, vertical insertion and delivery, increased surveillance, and integrated weapons systems on selected Deepwater cutters) also have been incorporated in the plan. These are necessary for higher security levels during a terrorist attack, opposed boarding, and other high-risk operations.

Similarly, improved asset capabilities for detection and defense for chemical-biologicalradiological (CBR) threats are essential to survival and continued operations during an attack involving a weapon of mass destruction. "These and other Deepwater capability enhancements are absolutely critical to ensuring the Coast Guard's future ability to maintain the maritime security of America and to protect its \$750 billion marine transportation system," program officials say.

Deepwater's program executive officer, Rear Adm. Patrick M.

Asset	1998 Legacy Fleet	2002 Contract Baseline	Post 9-11 Plan
NSC	12	8	8
OPC	32	25	25
FRC	49	58	58
LRI	45	40	33
SRP	102	82	91
LRS Aircraft (HC-130)	30	6	22
MRS Aircraft (CN- 235)	30	35	36
MRR (HH-60)	42	0	42
MCH (HH-65)	95	93	95
VTOL Recovery & Surveillance Helo (AB-139)	0	34	0
VUAV	0	69	45
HAEUAV	0	7	4

Stillman, strongly echoed the commandant's views on the strengths of the revised Deepwater implementation plan. "The Coast Guard has made significant progress since 9/11 to secure our homeland," he said, "but maritime safety and security gaps remain. Admiral Collins has said many times that these gaps present risks that must be reduced. In this sense, the Deepwater Program is very much focused on *reducing risk* in the maritime domain."

Stillman said that revisions to the Deepwater Program's Mission Need Statement and implementation plan also were guided by the Coast Guard's strategy for maritime homeland security and the Department of Homeland Security's strategic goals and priorities. "Continued risk reduction is contingent upon improving the Coast Guard's capability, capacity, and readiness" he said. "Without these basic building blocks, successful implementation of maritime security strategies will not be sustainable."

"The refinements we have made to Deepwater's revised post-9/11 implementation plan will, with your support, allow the Coast Guard to restore readiness and safety through progressive sustainment, modernization, and recapitalization of our Deepwater fleet," Collins told the House Subcommittee in July. "With its enhanced capabilities and capacity, this post-9/11 plan will ensure that our men and women are provided with the modern, more-capable platforms and systems necessary to meet the full spectrum of Coast Guard mission requirements."

By Gordon I. Peterson