



preparedness program seeks to substantially expand our health-care system's capacity to respond to a bioterrorism event or other public health emergency.

MEETING THE CHALLENGE

Response to every bioterrorism incident or other public health emergency begins at the

local level. It is the mission of the new office to reach out to the nation's public-health community and help ensure that HHS fulfills its pledge to protect the health of all Americans.

"We have moved with unprecedented speed and determination to prepare for a bioterror attack or any other public health crisis since the terrorist attacks of September 11," said Secretary Thompson. "While our public health infrastructure is stronger than ever and getting stronger every day, there is much work to do, and our Office of Public Health Emergency Preparedness will continue to move as quickly and aggressively as possible to meet the challenge of this important mission." ROA

The Integrated Deepwater System: Coming Now to Waters Near You

BY CAPT GORDON I. PETERSON, USN (RET.)

The U.S. Coast Guard, long recognized by the American people for its multi-mission performance as the nation's maritime guardian, recently celebrated the first anniversary of the contract award for the largest recapitalization effort in its 213-year history—the Integrated Deepwater System (IDS).

Deepwater's modernized force of new or upgraded patrol boats, cutters (and their associated small boats), manned and unmanned aircraft, and support systems will benefit the Coast Guard in all mission areas. The program's impact will be felt most dramatically, however, in terms of the improved capabilities and increased operational capacity that the Coast Guard will bring to higher levels of maritime homeland security during the ongoing war on terrorism.

ADM. Thomas H. Collins, commandant of the Coast Guard, noted that "the Deepwater program will ensure that the Coast Guard can continue to fulfill its mission of safeguarding the sovereignty, security, and safety of our homeland waters." The IDS acquisition will replace or modernize obsolete and maintenance-intensive assets that are not capable of meeting the current mission demand."

URGENTLY NEEDED CAPABILITIES

As the lead federal agency responsible for maritime homeland security, the Coast Guard has recorded several key milestones during

the past year. In March, it was formally aligned under the new Department of Homeland Security (DHS), a move that has strengthened the nation's unity of effort and lines of authority for homeland security.

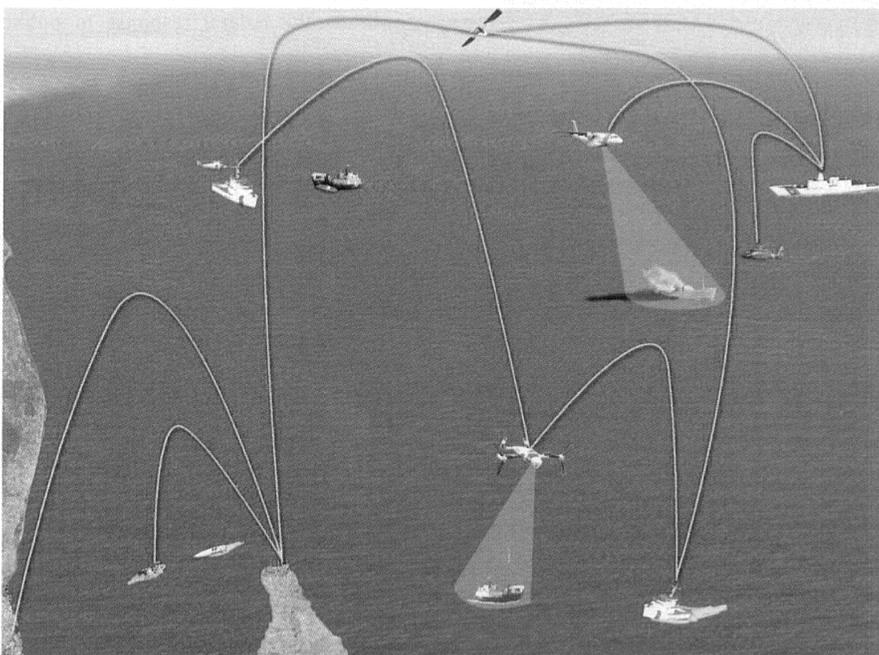
Earlier, in December, the Coast Guard unveiled its new Maritime Strategy for

Homeland Security. This strategy follows a time-proven approach that pushes America's maritime borders outward—away from ports and coastal waterways—so that layered security operations can be conducted hundreds of miles to sea. Maritime domain awareness—the knowledge of all activities and elements in the maritime domain—is critical to attaining improved levels of maritime security.

The Integrated Deepwater System is closely linked to these developments. Its platforms and systems will provide capabilities urgently needed to bolster homeland security and achieve maritime domain awareness offshore and in U.S. ports, waterways, and coastal regions.

This recapitalization of the Coast Guard's increasingly obsolete inventory of aging patrol boats, cutters, and aircraft is urgently needed. By way of comparison, with an average age of more than 30 years, the Coast Guard's fleet of high- and medium-endurance cutters is older than all but two of 39 worldwide naval fleets of similar size and mission. The venerable cutter USCGC *Storis* remains in service in Alaskan waters 63 years after her commissioning!

As Admiral Collins has testified to Congress, today's antiquated platforms are unequal to the task, expensive to operate, and increasingly unreliable. Legacy Deepwater cutter maintenance costs, for example, have increased by a factor of 30 percent to 110 per-



The Integrated Deepwater System's "system of systems" force structure of helicopters, aircraft, unmanned aerial vehicles, patrol boats, cutters, and C4ISR systems will be key contributors to the Coast Guard's ability to execute a strategy for maritime homeland security that calls for layered defenses extending hundreds of miles to sea. (Drawing by Rich Doyle, USCG.)



Top officials from the Department of Homeland Security and Department of Defense at Patuxent River Naval Air Station, Md., observe a demonstration of modern unmanned aerial vehicles (UAVs). Shown here, from left, are Deputy Secretary for Homeland Security Gordon England, Coast Guard Commandant ADM Thomas H. Collins, and RADM Jack Chenevey, the Navy program executive officer for Strike Weapons and Unmanned Aviation.

cent since 1998. Fully 22 of 49 110-foot Island-class patrol boats have experienced significant hull degradation (17 hull breaches since FY01, requiring more than \$11 million in emergency repairs and averaging three months out-of-service per hull).

Frequent and severe mechanical breakdowns and casualties lead to degraded readiness and the requirement for more funding to sustain today's current fleet, money that is better spent recapitalizing.

Because the Coast Guard performs its 14 statutorily mandated missions in all maritime regions—inland, coastal, and the high seas—Deepwater's new aerial and surface platforms must be designed for a wide range of operating environments. Unlike Coast Guard operations in coastal and inland waterways, so-called deepwater missions typically require a long-term, continuous, on-scene presence at sea—often, as was demonstrated during *Operation Iraqi Freedom* this year, with deployments away from home stations lasting several months.

Other deepwater missions—the interdiction of illegal aliens and drug smugglers, for example, or oceanic fishery patrols—also demand the ability to operate in severe environments ranging from Arctic to tropical and equatorial climates. The Coast Guard must be ready, 24 hours a day, every day, wherever the demands of national security require its humanitarian, law-enforcement, marine-environment, maritime-safety, or military presence.

DEEPWATER: THE COAST GUARD'S NEW LOOK

Each area of the Integrated Deepwater System's recapitalization of the Coast Guard has recorded significant progress during the past year.

Surface

- Two contracts were awarded to Northrop Grumman's Ship Systems Sector in April for the detail design and purchase of long-lead materials to enable delivery of the first National Security Cutter in late 2006.

- Three 110-foot Island-class patrol boats have entered Bollinger Shipyard in Lockport, La., for conversion to 123-foot vessels. All 49 boats in the class will be upgraded. Conversions and operational upgrades will continue this autumn.

- Deepwater's new seven-meter Short Range Prosecutor (SRP) will add to the 123-foot patrol boat's capabilities and also will be deployable on all new classes of cutters. The SRP prototype was delivered and conducted underway trials in April. Delivery of the first SRP to the fleet is anticipated late this year.

Aviation

- Deepwater will transform Coast Guard aviation through the selected upgrade of legacy fixed-wing aircraft and helicopters, and the progressive introduction of new and more capable platforms and UAVs. Delivery of two stock airframes for the CASA CN235-300M maritime patrol aircraft (MPA) is scheduled for early 2006; modification for Coast Guard use will be completed later that year.

- In February, Bell Helicopter was awarded a contract for its Eagle Eye tilt-rotor, vertical-launch unmanned aerial vehicle (UAV) for the first phase of the UAV portion of the Deepwater program. Bell will also design, develop and build prototype Eagle Eyes for testing.

- Also this year, the Coast Guard awarded a contract for eight Agusta A-109 helicopters for assignment to Helicopter Interdiction Tactical Squadron Ten (HITRON).

Command, Control, Communications, Intelligence, Surveillance, and Reconnaissance (C4ISR):

- Deepwater's C4ISR system will bring important new capabilities to the fleet and serve as both a force multiplier and critical enabler for maritime domain awareness. Upgrades to C4ISR systems on Deepwater legacy cutters will begin late this year.

- Last December, Lockheed Martin broke ground for its new Development, Integration, and Test Center in Moorestown, N.J. Scheduled to open late this year, the facility will allow more efficient systems integration and cost-effective C4ISR development. When combined with the synergies of other centers, the center will provide an unmatched capability to conduct surface system integration, testing, and interoperability testing across the full range of Deepwater systems.

Logistics

- Deepwater's Integrated Logistics System (ILS) will support the transformation of operational capabilities in all IDS domains. ILS will improve the Coast Guard's ability to provide totally integrated logistics support over the entire Deepwater system and for all of its platforms.

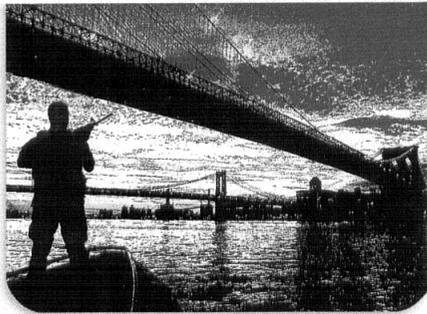
- ILS places logisticians at the heart of the IDS acquisition process by ensuring that platforms will be designed to be reliable, maintainable, and supportable—and with optimum crewing levels.

Of course, the inherent mobility, flexibility, and utility common to all naval platforms allow Coast Guard cutters and aircraft to be reassigned quickly for new operational tasks. A cutter deployed on a fishery patrol hundreds of miles from U.S. shores one day, for example, could be redeployed the next day

to domestic coastal waters to perform a homeland-security mission.

"NATIONAL PRIORITY"

Deepwater's robust surface and air platforms, linked seamlessly with modern systems for



C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance), will allow the Coast Guard to implement its homeland security strategy across the entire maritime domain, spanning merchant shipping's overseas port of departure to port of arrival in the United States.

IDS will be fully interoperable with all Department of Homeland Security agencies, the Department of Defense, and other federal, state, and local agencies in furtherance of Secretary Tom Ridge's rallying cry: One team, one fight! Fully interoperable C4ISR systems will deliver the means to develop a networked, common operating picture and enhanced maritime domain awareness.

Deepwater's platforms will also allow the Coast Guard to increase its presence at sea—contributing to stronger deterrence of terrorist attacks and a more effective response, should they occur. The IDS mix of modern or upgraded aircraft, cutters, and patrol boats will be designed for increased endurance, range, stability, and mission hours. The IDS plan for new manned and unmanned aircraft, for example, will deliver 80 percent more flight hours than existing legacy platforms.

Deepwater's more capable, reliable assets also will enable better risk management, faster response to incidents, and lower total-ownership costs over the service life of individual platforms.

President George W. Bush said last year that it is a "... national priority to recapitalize the Coast Guard." This emphasis is consistent with what he has described as his "highest and most urgent priority: To protect the homeland for the American people."

Deepwater's partnership with industry also extends to the 21 other agencies of the new Department of Homeland Security and, in support of the National Fleet policy, the U.S. Navy. A joint Navy-Coast Guard working group ensures that IDS platforms and systems will be totally interoperable, non-redundant, and absolutely compatible to meet U.S. maritime security and defense needs.

The Coast Guard officer responsible for guiding the Deepwater program to a successful conclusion, RADM Patrick M. Stillman, the IDS program executive officer, offers an



PHOTO COURTESY OF BELL-TEXTRON

The Integrated Deepwater System's mix of modern sea and aerial platforms will greatly improve Coast Guard operational capabilities for homeland security and other traditional missions. In February, Bell Helicopter, a subsidiary of Textron, Inc., was awarded a contract for its Eagle Eye tilt-rotor vertical-launch unmanned aerial vehicle (UAV) to begin preliminary design work for the first phase of the Deepwater program.

upbeat assessment of the program's first year of execution.

"Since contract award a year ago," Admiral Stillman said recently, "we have made significant progress in many important areas. It has been a total team effort in every respect, and I am immensely proud of every member of the Deepwater team."

Deepwater is on track to recapitalize and transform the Coast Guard in new and exciting ways. Given the enormity of the homeland

security challenge facing the United States, Admiral Stillman's watchwords for the Integrated Deepwater System ring true: "The need is real; the time is now!"

CAPT Gordon I. Peterson, USN (Ret.), a technical director for the Anteon Corp.'s Center for Security Strategies and Operations, is a contract employee assigned to the Coast Guard's Integrated Deepwater System program.

Coast Guard Remains Ready With Mobile Units

BY CDR MIKE GIGLIO, USCG

Always ready for the call. This maxim has guided Coast Guard operations for more than 200 years, and, since the tragic events of 11 September 2001, our mission has become more significant and—more—and more challenging. We All of us are all now painfully aware that "the call" can occur at any time, at any place, and be caused by a faceless enemy whose actions can impose far-reaching damage and devastation. Now, more than ever, the Coast Guard must be ready to combat new and emerging threats, with little or no warning.

One way in which the Coast Guard has risen to meet today's unique challenges is the establishment of new Maritime Safety and Security Teams (MSSTs). These domestic, highly mobile units, comprised of that include both active-duty and Reserve personnel, provide special-

ized law enforcement and force protection capabilities to meet heightened port security requirements. Modeled after existing Coast Guard programs—the Port Security Unit (PSU) and the Law Enforcement Detachment (LEDET)—the MMSSTs provide specialized skills and capabilities to detect, deter and prevent terrorism. MSSTs were specifically designed to protect vital commercial and military shipping and critical infrastructure against maritime threats. Possessing multi-mission adaptability, MSSTs will surge to support security requirements for major marine events, such as the Olympics and *Operation Sail*, and will support Coast Guard and other interagency forces performing more traditional missions, including search and rescue, counter-drug operations, and alien/migrant interdiction operations.