

Since 1790, the Coast Guard has been protecting the lives and property of the American people on the high seas. To continue to do so effectively in the 21st century, we need modern assets that can operate in an increasingly challenging maritime environment. Legitimate maritime activity and potential maritime threats were on the rise even before 9/11. As a result, the Coast Guard's area of operations and operational tempo continue to grow substantially.

However, the Coast Guard's current fleet of deepwater assets, which operate from our ports to the high seas as the front line of our layered defense, are aging, technologically obsolete, and prone to frequent system failures. These assets do not possess the speed, interoperability, sensors, and communication capabilities required to respond effectively to America's diverse and growing maritime needs. To provide needed levels of capability and capacity, the Coast Guard established the Integrated Deepwater System Program.

INTEGRATED DEEPWATER SYSTEM

The Integrated Deepwater System (IDS) Program is an innovative modernization program that will transform the Coast Guard, America's "Shield of Freedom." The IDS Program is not just new ships and aircraft but an integrated approach to upgrading existing assets while transitioning to newer, more capable platforms with improved systems for command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) and innovative logistics support. This new "system of systems" will significantly contribute to the Coast Guard's maritime domain awareness, as well as the improved ability to intercept, engage and deter those activities that pose a direct challenge to U.S. sovereignty and security. Deepwater will provide the means to extend our layered maritime defenses from our ports and coastal areas hundreds of miles to sea. To fully realize the IDS Program, the Coast Guard is partnering with an industry leader — Integrated Coast Guard Systems (ICGS), a joint venture established by Lockheed Martin and Northrop Grumman.



The Coast Guard's top capital priority is to recapitalize its aging and technologically obsolete aircraft and surface platforms. Most current assets will reach the end of their projected service lives by 2010, and the Coast Guard is experiencing system failures at a steadily increasing rate. The terrorist attacks of 9/11 and the resulting homeland security and military operations have fundamentally changed the demands placed upon the Coast Guard. There are clear indicators that the Coast Guard's ability to sustain current readiness and today's tempo of operations into the future is at risk. The Integrated Deepwater System (IDS), planned since the mid-1990s, addresses these concerns. It is the centerpiece of Coast Guard efforts to improve current and future readiness by delivering the platforms and systems needed to close existing capability gaps.

At full implementation, the IDS will be composed of three classes of new cutters and their associated small boats, a new fixed-wing manned aircraft fleet, a combination of new and upgraded helicopters, and both cutter-based and land-based unmanned aerial vehicles (UAVs). All of these highly capable assets will be linked with state-of-the-art command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems, and are supported by an integrated logistics network. The objectives for the IDS are to maximize operational performance while minimizing total ownership costs. Recognizing the dynamic nature of Coast Guard operations and missions, the ICGS implementation plan provides a flexible range of fully interoperable assets that can be adjusted in number and mix to

accommodate current, emerging and potential future mission requirements.

The Coast Guard and ICGS have made considerable progress in converting the IDS vision into reality. Among the program's many milestones, ICGS has begun delivery of the 110-foot to 123-foot Maritime Patrol Boat conversions. The USCGC MATAGORDA, the first of the 123-foot Maritime Patrol Boats, was delivered on March 1, 2004. The delivery of the first Short Range Prosecutor, the new seven-meter deployable small boat, coincided with the MATAGORDA delivery.

In February 2003, ICGS was awarded a concept and technology development contract for the Coast Guard's first UAV, the vertical take off and landing Bell Helicopter "Eagle Eye." In March 2004, the Eagle Eye passed a critical milestone with the successful completion of its Preliminary Design Review. In February 2004, Lockheed Martin and EADS CASA signed a contract that formalizes the acquisition of the CASA 235-300M Medium Range Maritime Patrol Aircraft. The first C4ISR upgrades to legacy cutters began in October 2003 with the installation of Secret Internet Protocol Network and secure Local Area Network capabilities on the 270-foot Medium Endurance Cutters. C4ISR upgrades have also begun on the 378-foot High Endurance Cutters and shore facilities.

The fully implemented system includes three new cutter classes, recently designated as the Maritime Security Cutter, Large; Maritime Security Cutter, Medium; and the Maritime Patrol Coastal. Through design and technology advances, the new Maritime Security Cutters will launch

small boats, helicopters, and UAVs to perform the Coast Guard's multiple missions more effectively and with a smaller crew.

Deepwater will replace the Coast Guard's existing fleet of air assets with a mix of UAVs and more capable manned aircraft. Deepwater will significantly improve Coast Guard C4ISR capabilities through better commercial satellite communications systems, broadened situational awareness provided by improved sensor systems to detect, classify, and identify targets, instantaneous, real-time voice, data, and video information exchange. These improvements will significantly enhance Coast Guard interoperability with other Department of Homeland Security agencies, as well as with the Navy and other military, federal, state, and local agencies.

These new assets, which possess common systems, technologies, operational concepts, and logistics, will give the Coast Guard a significantly improved ability to detect and identify all activities in the maritime arena, a capability known as "maritime domain awareness." These same assets will also provide an improved ability to intercept and engage those activities that pose a direct threat to U.S. sovereignty and security. Because these assets have been designed around the task sequence – surveil, detect, classify, identify and prosecute – used to perform all of the Coast Guard's missions, the system's components will have the flexibility to respond to not only the full range of current Coast Guard responsibilities, but emerging threats and missions as well.

The IDS Program will ensure that the Coast Guard – and America – has the right system of cutters, aircraft, command-and-control, and logistics systems to capably defend against maritime threats far out to sea, before they reach U.S. citizens, territory, or vital interests. This flexible and agile system of assets will not only meet our current mission demands, but future threats and challenges as well. The Integrated Deepwater System is critical to the Coast Guard's future and to America's ability to safeguard homeland and maritime security for generations to come.



Homeland Security

The Coast Guard's cutters and aircraft comprise the first line of the Service's layered defense against threats to America's maritime homeland security. While the deepwater area of operations is typically defined as beyond the normal operating range of single-crewed shore-based small boats, approximately 50 miles from shore, these missions occur in ports, waterways, coastal areas, and extending seaward to anywhere the Coast Guard needs to take appropriate maritime action. These missions are characterized as requiring powerful C4ISR capabilities, extended on-scene presence, any mission using Coast Guard aviation assets, or requiring significant prosecution power. The Coast Guard and the Integrated Deepwater System are key contributors to each of the three objectives of the *National Strategy for Homeland Security*:

- Prevent terrorist attacks within the United States;
- Reduce America's vulnerability to terrorism; and
- Minimize the damage and recover from attacks that do occur.

The Coast Guard's IDS assets will improve border and transportation security, improve intergovernmental law enforcement coordination, and guard America's critical infrastructure; all elements of the *Strategy*. As a result, recapitalization of the U.S. Coast Guard is specifically cited as a major initiative of the *Strategy*.

"The fiscal year 2005 budget request of \$678 million for the Integrated Deepwater System reflects the high priority that the administration and the Department of Homeland Security attach to achieving our goal of modernizing and recapitalizing today's Coast Guard. Deepwater is key to our ability to improve the Coast Guard's operational capabilities and capacity. It remains one of my highest priorities, because it provides the most effective way for the Coast Guard to improve maritime security and performance in nearly all of our many mission areas."

Admiral Thomas H. Collins, Commandant,
U.S. Coast Guard, 2004



The Coast Guard is a military, maritime, multimission service, with a proud history as America's "Shield of Freedom." The security of America's maritime domain – including 95,000 miles of coastline and nearly 3.4 million square miles of ocean – is a vital element of America's economic prosperity and homeland security. Even before the 9/11 terrorist attacks, the Coast Guard faced an array of maritime security challenges – countering terrorist threats, rescuing mariners in distress, interdicting drug smugglers and illegal migrants, enforcing fisheries, and protecting the marine environment – that posed direct threats to American safety and security. These critical missions demand forces with the capability to detect and intercept potential threats on America's maritime front lines before they reach our shores.

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