INTEGRATED COAST GUARD SYSTEMS
DEEPWATER

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Deepwater's Second National Security Cutter Under Contract and First Vessel Ahead of Schedule

Welders work on the NSC1 unit 2300, half of the keel block for the first National Security Cutter.

The U.S. Coast Guard recently awarded Integrated Coast Guard Systems (ICGS) a contract to begin production and delivery of the second National Security Cutter (NSC). Progress on this latest program award is well underway as long lead material has already been ordered to facilitate start of fabrication.

"Since program inception, the ICGS team has continuously raised the bar in design excellence, supply chain management, and quality and process improvements. The team is poised, as has been proven with each accelerated milestone achievement, to build this new fleet at a rapid pace with a commitment to first-time quality standards unprecedented in a new class of warships," said Philip A. Dur, President, Northrop Grumman Ship Systems.

The production contract for the first cutter of the class, NSC 750, was awarded in June 2004, with ship construction getting underway in September 2004. At construction contract award for the first cutter, 75 percent of design drawings were issued, far more than is common for first-in-class ship design and construction. Additionally, 94 percent of major equipment purchases were awarded prior to start of fabrication, and by the end of the first 12 weeks of production, the ICGS Deepwater team was able to achieve the most accurate and error-free work ever accomplished in a first-of-class ship in production today.

"The Deepwater team is reporting First Time Quality results that surpass any previous ship class, demonstrating a commitment of best-in-breed craftsmen and production management to ensure a ship for the Coast Guard that surpasses any first-in-class ship that is in production today," said Jamie Anton, Executive Vice President of ICGS.

The team is working toward an April keel laying for NSC 750. Fifteen out of a total of 45 subassemblies are in production (ahead of schedule by a full two units) and the shipyard has 96 percent of its major equipment suppliers under contract, (35 percent ahead of schedule). These milestones were achieved just 90 days after start of fabrication last September.

The NSC will be a 421-foot vessel with a 4,112-ton displacement at full load. It is powered by a twin screw combined diesel and gas turbine power propulsion plant that delivers a maximum speed of 28 knots. The cutter includes an aft launch and recovery area for two rigid hull inflatable boats, a flight deck to accommodate a variety of rotary wing manned and unmanned aircraft and state-of-the-art command and control electronics.

Deepwater Contracts For Third Maritime Patrol Aircraft

Integrated Coast Guard Systems recently contracted for a third CN-235-300M Medium Range Surveillance Maritime Patrol Aircraft in support of the U.S. Coast Guard. Lockheed Martin, in partnership with Northrop Grumman, announced a $22 million contract award to European Aeronautic Defense and Space Company (EADS) for one aircraft. The first two aircraft were contracted in February; the total contract amount for all three aircraft is $110 million.

The CASA CN 235-300M is a transport and surveillance, fixed-wing aircraft that will be used to perform search and rescue missions, illegal drug interdiction, marine environmental protection, military readiness, as well as cargo and personnel transport. With a 2,000-nautical mile range and 10-hour flight endurance, the CN-235 will bolster the U.S. Coast Guard's maritime patrol mission by replacing older and less capable aircraft.

"We are delighted to have EADS CASA supporting the critical maritime patrol aircraft portion of the Deepwater Program," said Fred Moosally, President of Lockheed Martin Maritime Systems & Sensors.

Delivery of two of these aircraft is slated for mid 2006, with Coast Guard modifications to be completed by late 2006 or early 2007. EADS CASA is a subcontractor to Lockheed Martin for the CN-235 portion of the Deepwater Program.

RADM Kunkel and Dale Bennett visited the first fuselage of the Maritime Patrol Aircraft in January 2005. The CASA CN-235-300M is currently under construction at the EADS CASA facility. It is slated for delivery in mid 2006.

New Deepwater Capabilities Contribute To Remarkable Success In Recent Counter-Drug Missions

New C4ISR capabilities installed aboard several U.S. Coast Guard Cutters through the Deepwater Program dramatically improved counter-drug operations and recently contributed to great successes during a two-month mission this fall.

The crews aboard the Coast Guard Cutters *Gallatin, Rush,* and *Thetis* collectively seized more than 33,949 pounds of cocaine during recent law enforcement deployments. According to the commands, communication upgrades installed on legacy cutters as part of the Integrated Deepwater System played a major contributing role in the success of Coast Guard operations involving multiple cutters, federal agencies, and foreign countries.

The Deepwater Program's newly installed command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities provide improved interoperability and allow crews to maintain a common operational picture and higher levels of Maritime Domain Awareness. The upgrade included provisions for access to classified LAN and SIPRNET (Secure Internet Protocol Router Network), affording the crew access to real-time intelligence information during operations and access to INMARSAT B (DoD satellite). C4ISR upgrades have been completed on six (of nine) high endurance cutters and 12 (of 13) medium endurance cutters.

In seven drug busts made during the mission, "We were able to communicate in the live operations chat room with our operational commander and other entities that we were working with," Capt. Mike Parks, the *Gallatin's* commander, told Defense Daily in a Dec. 6 telephone interview.

Despite recent Deepwater communications enhancements, the overall condition of the Coast Guard's legacy fleet continues to deteriorate. On the same patrols that netted drug seizures, one cutter experienced an engine failure and another encountered other propulsion difficulties.

The *Gallatin,* a 38-year-old, 378-foot cutter homeported in Charleston, S.C., underwent its Deepwater C4ISR Installation in Aug. 2004. The *Gallatin* returned Nov. 22 after making a record eight interdictions of "go-fast" vessels, resulting in seven drug seizures amounting to 29,144 pounds of cocaine worth over $900 million.

The *Rush* is a 37-year-old, 378-foot cutter homeported in Honolulu, Hawaii, and the *Thetis* is an 18-year-old, 270-foot cutter homeported in Key West, Fla.

DEEPWATER ACCOMPLISHMENTS

SURFACE DOMAIN

- The first **National Security Cutter (NSC)** has begun manufacture in Pascagoula, Miss., in September 2004. Keel Laying is planned for Spring 2005 and delivery is scheduled for Spring 2007. The contract was awarded for NSC #2 in early January 2005.
- **Offshore Patrol Cutter (OPC)** business estimate provided and briefed to the Coast Guard, and final requirements decisions are expected Spring 2005.
- Structure enhancements and C4ISR upgrades to **123' Patrol Boats (WPB)** *Matagorda* and *Nunivak* have been completed; they have been delivered to the Coast Guard, and *Matagorda* has returned to operational status. Three 123' patrol boats *(Padre, Metompkin, Attu)* are underway. Three more vessels are in work *(Vashon, Monhegan, Manitou)*.
- **Fast Response Cutter (FRC)** contract to begin design was signed in July 2004. FRC statement of work has been developed, and DTO negotiations are expected to be underway Spring 2005.
- **Long Range Interceptor** scoping is underway and DTO negotiations expected to be forthcoming.
- **Short Range Prosecutors** have been delivered with each 123' patrol boat. Engineering change proposals are being negotiated to accommodate changed requirements.

AVIATION DOMAIN

- Bell Helicopter Textron's "Eagle Eye" **Vertical Unmanned Aerial Vehicle (VUAV)** passed a Program Status Review as well as a successful Integrated Baseline Review in November 2004. The Critical Design Review is planned for January 2005.
- The **HH-65** re-engining effort is progressing with 6 aircraft in WIP. The first helo delivered Oct. 2004, with the second helo to be delivered to the Coast Guard in January 2005. A second production line "proof of concept" is underway at American Eurocopter in Columbus, Mississippi, where a helo was delivered Dec. 15, 2004.
- The **Maritime Patrol Aircraft (MPA)** Performance Design Review "dry run" was presented, very successfully, early December 2004. CDR with the Coast Guard is planned for Spring 2005.
- The **HC-130J** aircraft mission package Program Management and Implementation Plan was submitted to the Coast Guard in December 2004.

COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (C4ISR) DOMAIN

- **MDAC** testing and evaluation center opened in April 2004, supporting all C4ISR deliveries.
- **New C4ISR capability upgrades** installed aboard legacy 378-foot cutters have recently resulted in critical successes and dramatic improvements in Coast Guard counter-drug operations.
- The first phase of upgrades, access to Secret Internet Protocol Network (SIPRNET) and classified networks, has been completed on all 270-foot cutters and 378-foot cutters.
- The program to complete 210-foot, and enter phase 2 upgrades on 270- and 378-foot cutters, continues with great success.
- VUAV Collision Avoidance Design Activity is underway.
- **C4ISR Increment #2** contract award is expected in January 2005.

LOGISTICS DOMAIN

- Single Point Logistics Solution 123 and Logistics Operational Management developed.
- C4ISR Suite Operations Manuals for 123-foot patrol boats has been delivered.
- Draft of NSC support nearing completion; efforts underway to complete analysis of human interface requirements for the NSC.

USCG Matagorda was the first 110-foot patrol boat to receive upgrades through the Deepwater Program. It is homeported in Key West, FL.

'DEEPWATER'

PROGRAM SCORES FIRST OPERATIONAL SUCCESS WITH CUTTER MATAGORDA

The Coast Guard Cutter *Matagorda*, on its first operational patrol after being delivered with Deepwater upgrades, stopped a smuggling boat in the Florida Straits attempting to bring 25 Cuban migrants into the country illegally.

The go-fast boat was traveling at high-speed with no lights when it was spotted by C-130 Hercules airplane from Air Station Clearwater, Fla. *Matagorda* was diverted to coordinate the interdiction effort. After a long chase, the smuggling boat, operated by two suspected smugglers, was safely stopped.

The cutter *Pea Island* (a 110-foot patrol boat homeported in St. Petersburg, Fla.) also identified a second suspect vessel, and relayed information to Customs and Border Protection, whose air and marine units located the boat being operated by two possible smugglers.

The migrants were all repatriated to Cuba. The success of this mission is partially attributed to *Matagorda's* Deepwater upgrades, which have improved communications and control capabilities and extended its service life.

Deepwater In The Holiday Spirit

During the recent holiday toy drive, the Coast Guard's Integrated Deepwater System (IDS) Program Office and Integrated Coast Guard Systems (ICGS) staff donated more than 400 gifts to Project Northstar, a non-profit organization that provides one-on-one tutoring for children who are homeless, living in foster care, or residing in poor, underserved neighborhoods in Washington, D.C.

Shown here at Deepwater's System Integrated Program Office with a portion of the donations are (left to right) Rear Adm. Patrick M. Stillman, Deepwater's Program Executive Officer; Elaine Seavey, an ICGS volunteer who helped coordinate the drive at the SIPO; and Gregory Giddens, Deepwater's Deputy Program Executive Officer. Together with other donations, these new toys and gifts were delivered to nearly 250 homeless youths at Northstar's annual holiday party on Dec. 20.

For additional information on the program, visit www.projectnorthstar.org.

For more information, or to submit articles, photographs, etc., please contact the **Editor: Margaret Mitchell-Jones, margaret.mitchelljones@dwicgs.com**