

9/11 Drives Change to Patrol Boat Solution

Recently, Coast Guard Commandant Adm. Thomas H. Collins made the decision to stop at eight hulls the Integrated Deepwater System's (IDS) conversion of 110-foot Island Class patrol boats into 123-foot patrol boats. The decision to stop conversions at eight hulls reflects the Coast Guard's determination that the 123-foot cutters will not provide homeland security capabilities required to meet current or projected needs of the post-9/11 threat environment, as defined in the revised Deepwater Mission Needs Statement. The original IDS plan, which projected conversion of 49 patrol boats, was a bridging strategy to meet 1998 Coast Guard patrol boat mission performance needs until the Fast Response Cutters (FRCs) were built and delivered into the fleet in 2018.

Conversion of the 110-foot patrol boats involved the addition of 13-feet to the stern for a small boat launch ramp, a hull upgrade, and modification of the cutter's bridge, commandand-control upgrades, and improved crew accommodations. The conversions are being carried out by a joint venture of Bollinger Shipyards and VT Halter Marine, which is under subcontract to Northrop Grumman.

Based on the worse-thanexpected condition of patrol boats entering the conversion



U.S. Coast Guard Cutter Matagorda, the first 110-foot cutter to be converted to 123-feet, at Integrated Support Command New Orleans March 27, 2004. The crew of the Matagorda made a brief stop in New Orleans on the way to their homeport in Key West, Fla. (USCG Photo by PA3 Jonathan McCool)

process and unforeseen difficulties encountered in the conversion and post-delivery process, costs for future conversions were estimated to rise significantly from \$8 million.

Severe deterioration of the 110 fleet, coupled with increased post-9/11 operational hours, the delays in delivery of operational 123-foot cutters, and the continued deployment of 110-foot cutters to the Persian Gulf, created a gap in patrol boat availability. The Coast Guard recognizes that stopping the conversion program requires aggressive implementation of an immediate and sustained strategy to fill badly needed patrol boat mission hours and mitigate the impact on operations. The transfer of five 179-foot patrol craft from the Navy to the Coast Guard will immediately lessen short falls in patrol boat hours. The Coast Guard is also testing a multi-crewing concept for the two 179-foot patrol craft stationed in Pascagoula, Miss., with the goal of obtaining more mission hours per hull.

The Operation Iraqi Freedom FY 2005 budget supplement provides \$49 million to ensure both the 110-foot cutters and 123-foot cutters can continue to operate until replaced by the FRC. Prior-year appropriations laws also contain money that will be critical to sustaining the existing patrol boats while building

continued, page 3

Fast Response Cutter Achieves First Milestone

Moving through its first major milestone with the Coast Guard, the 140-foot Fast Response Cutter (FRC) cleared its systems requirements review on April 27, preparing the way for a preliminary design review in August.

To meet Coast Guard requirements of low maintenance and reduced life-cycle costs, the FRC is being designed with a composite hull and superstructure.

Between now and its next program review, Northrop Grumman, the FRC shipbuilder at its Ship Systems facilities in Gulfport, Miss., and Lockheed Martin, which is responsible for the cutter's C4ISR systems, will be maturing the initial design work. Later this year or early next year the program is slated for its critical design review.

The systems that will comprise the FRC's final design, such as engines, weapons, and related systems, have not yet been decided, and the team is still doing trade studies to strike the right balance between performance, cost, and schedule.

This fall the program expects to have completed the first phase of model testing to determine the resistance characteristics of the FRC hull form, giving the engineers a good idea of the engine requirements and allowing the builder to host a competition for an engine supplier.

Requirements for the FRC include speeds of 30-plus knots, a range of 3,200 nautical miles and seven day at sea mission capability, stern launch and recovery for the 7-meter rigid hull inflatable Short Range Prosecutor, some chemical, biological and radiological protection, either a 25 mm or 30 mm gun, two .50-caliber machines guns as well as small arms capability. The FRC will be interoperable with other Deepwater assets as part of the program's systems of systems.

By Margaret Mitchell-Jones

FAST RESPONSE CUTTER (FRC)

Length: 140 FT Displacement: 320 LT Max Speed: 30-plus knots Endurance: 5 Day Threshold, 7 Day Objective Range: 3,200 nautical miles Propulsion: (4) 3,650 BHP Diesel Engines Aircraft: None Boats: (1) Short Range Prosecutor (SRP) Armament: 25 mm gun, .50-caliber machine gun mounts



The Fast Response Cutter (FRC) is currently in detailed design. It will have the following key capabilities:

- Fast response time (due to speed)
- Ability to maintain a high state of readiness
- Ability to sprint to intercept targets of interest
- Ability to patrol near-shore operational areas
- Enhanced seakeeping through an active fin stabilization system

DEEPWATERews

9/11, from page 1

the future fleet. The Coast Guard is working closely with the Department of Homeland Security to prepare a detailed report to Congress addressing cost and operational tradeoffs between various options to ensure the nation selects the most effective and efficient patrol boat solution.

For the long term, the Coast Guard advanced the design and construction of the new FRC by a full decade. The revised Deepwater implementation plan builds improved post-9/11 capabilities into this cutter's design and advances the FRC's delivery from 2018 to 2007.

"The mitigation steps help, but do not correct, the shortfall in patrol boat mission hours," said Rear Admiral Patrick M. Stillman, program executive officer for IDS. "The final solution to this shortfall is the rapid introduction of the FRC into the Coast Guard's inventory."

By PAC Jeffrey Murphy

The ABC's of the HH-65 Helicopter



Taking advantage of a rare opportunity, Coast Guard pilots at Aircraft Repair and Supply Center (ARSC) in Elizabeth City, N.C., recently flew three different class of helicopters in a tight flight formation. The HH-65A (#6536, one of the last A models) was on a pre-induction Depot Maintenance flight, HH-65B (#6578) was on a post-induction Depot Maintenance flight, and the HH-65C (#6584) was in test flight phase following re-engining at ARSC.

ARSC provides air stations with depot level maintenance, engineering, supply and information services to support Coast Guard missions. Annually, ARSC personnel induct 23 HH-65 helicopters for Depot Level Maintenance and are currently involved with re-engining the helicopter fleet. The HH-65B models are being re-engined to become HH-65C models. This should be completed by February 2007. The Coast Guard's current fleet of 95 HH-65 helicopters are deployed at 17 air stations. The HH-65C reenging process is part of the Integrated Deepwater System.

(Photo by Ed. W. Huntington, ARSC Elizabeth City, N.C.)

DEEPWATERews

Deepwater Draws Crowds at Innovation Expo

The National Defense Industrial Association hosted its 2005 U.S. Coast Guard Innovation Expo May 2-5, in Santa Clara, Calif. This year's theme focused on maritime domain awareness and integration. Adm. Thomas H. Collins, Coast Guard commandant, kicked off the morning ceremonies.

The highlighted features included panel discussion with government and industry leaders on critical Homeland Security issues; emerging requirements and collaboration opportunities between the Department of Homeland Security and Coast Guard personnel; initiative to resolve organizational challenges, and innovative securities.

Integrated Coast Guard Systems, along with Integrated Deepwater System, supported two booths focusing on the industry-Coast Guard partnership and C4ISR. As many as 500 people visited the booths. The majority of visitors were Coast Guard personnel and industry members.

Many questions were fielded



Coast Guard Commandant Adm. Thomas H. Collins visits the Deepwater booth manned by Abby Vernon, Integrated Coast Guard Systems Communications Team. (USCG Photo by PAC Jeffrey Murphy)

about the delivery of the National Security Cutter to Alameda, Calif., and the logistic support to meet pre-delivery, delivery and post-delivery. Additionally, visitors queried if the concept of operations (CONOPS) for Deepwater was significantly different than what was being shown by several Coast Guard command systems.

The 2006 U.S. Coast Guard

Innovation Expo will be held in Tampa, Fla.

By PAC Jeffrey Murphy

People, Partnership, Performance

CWO Scott Maliniemi, a member of the Program Manager's Representative Office Gulf Coast Team, was awarded the Deepwater Excellence Award by the Integrated Deepwater System Program Executive Officer, Rear Adm. Patrick M. Stillman for his exemplary performance in improving the method in which supporting data is gathered to measure labor progressing of the National Security Cutter. CWO Maliniemi took on the challenge of developing a hand-held check sheet system that allows for automated data entry in the field to support progress metric measurements. As a result of his efforts, Deepwater anticipates the use of this system on all classes of cutter acquisitions.



CWO Scott Maliniemi (left) and Mark Necaise, PMRO Gulf Coast Ship Superintendent. (Photo courtesy of PMRO Gulf Coast)