LOCKPORT, La. — The U.S. Coast Guard participated in the keel-laying ceremony for the first Sentinel-class Fast Response Cutter (FRC) at Bollinger Shipyards here on April 9. The 154-foot Sentinel-class patrol boat, which will be a key component of the Coast Guard’s recapitalized fleet, is critically needed to replace the aging 110-foot Island-class patrol boat fleet.

To honor past Guardians who distinguished themselves while standing the watch, each Sentinel-class FRC will be named for one of the Coast Guard’s many enlisted heroes. The first FRC is named the Bernard C. Webber, after a coxswain from Station Chatham, Mass. The Bernard C. Webber will be homeported in Miami and is expected to be delivered in spring 2011.

Coast Guard Commandant Adm. Thad W. Allen, Assistant Commandant for Acquisition Rear Adm. Ronald J. Rábago, Bollinger Shipyards Inc. CEO and Chairman of the Board Donald “Boysie” Bollinger, Louisiana Gov. Bobby Jindal, and U.S. Sens. Mary Landrieu (D-La.) and David Vitter (R-La.) were among the many officials who attended the keel-laying ceremony.

“I’m proud to be a part of this historic ceremony, which recognizes the effectiveness of the Coast Guard’s acquisition program and the men and women of Bollinger Shipyards for their continued commitment to build a fine fleet of ships,” Allen said. “Today, we introduced the Sentinel class of multi-mission cutters, which will serve the Coast Guard for many years to come. We’ve honored the spirit and courage of our enlisted heroes by naming these cutters in their honor.”

A Coast Guard Hero

On Feb. 18, 1952, Petty Officer Webber piloted a 36-foot wooden motorized lifeboat through 70-knot winds, 60-foot seas and driving snow to save the lives of 32 crewmen from the sinking tanker Pendleton. Webber and his three-man volunteer crew were each awarded the Coast Guard’s Gold Lifesaving Medal for their “extreme and heroic daring” during the rescue.

Webber died in 2009 but his daughter, Pattie Hamilton, is the ship’s sponsor and his granddaughters, Hilary and Leah Hamilton, are the maids of honor. Pattie Hamilton stamped her initials onto the ship’s keel during the ceremony, which marks the official start of construction.

“I am so proud and honored to be here for the keel laying of the Bernard C. Webber, named after my dad,” she said. “The last time I was with him, we went off on our own to sit and talk. He told me that things may come up after he’s gone and that it would be up to me to make decisions and represent him. I told him he could count on me—I would gladly do whatever came my way. Well, I continued on page 2
computer technology that will be interoperable with the Coast Guard’s existing and future assets, as well as U.S. Department of Homeland Security and Department of Defense assets. The Sentinel-class will also meet American Bureau of Shipping design, build and class standards.

The FRC will be used to conduct Coast Guard missions such as ports, waterways and coastal security, marine environmental protection, maritime law enforcement, search and rescue and national defense. It will save lives and enforce U.S. and international maritime law along America’s 95,000 nautical miles of coastline.

Speaking of heroes, several officials praised the Coast Guard for its effective and rapid response during Hurricanes Katrina, Rita, Gustav and Ike. “When many agencies picked up and left, the Coast Guard not only stayed, but dug deeper,” Landrieu said.

“One of the reasons the Coast Guard stood out was they’ve got a culture that’s focused on getting the mission done. It’s not about taking credit, it’s not about filling out forms, it’s about saving lives,” Jindal said.

FRC Contract & Characteristics

The Coast Guard awarded Bollinger an $88 million contract for the first FRC in September 2008. The Sentinel-class FRC design is based on the Damen Stan Patrol 4708 patrol boat, and the project leverages expertise from the Coast Guard’s highly successful 87-foot Coastal Patrol Boat project, also built by Bollinger.

On Dec. 15, 2009, the Coast Guard awarded a $141 million contract option to Bollinger to begin low-rate initial production on three additional FRCs. The current contract is worth up to $1.5 billion if all options for 34 cutters are exercised. The Coast Guard plans to build a total of 58 FRCs.

The FRC has a required flank speed of 28-plus knots and must be able to perform independently for a minimum of five days at sea and be capable of underway operations for a minimum of 2,500 hours per year.

It will use state-of-the-market command, control, communications and computer technology that will be interoperable with the Coast Guard’s existing and future assets, as well as U.S. Department of Homeland Security and Department of Defense assets. The Sentinel-class will also meet American Bureau of Shipping design, build and class standards.

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The Sentinel-class cutters will fulfill the vision that Alexander Hamilton saw for the Coast Guard more than 200 years ago in Federalist Paper No. 12: “A few armed vessels, judiciously stationed at the entrances of our ports, might be made useful sentinels of the law.”

Pattie Hamilton stamps her initials onto the keel of the Bernard C. Webber named for her father, whose heroic actions saved the lives of 32 crew members from the sinking tanker Pendleton in February 1952. U.S. Coast Guard photo by Petty Officer 2nd Class Thomas M. Blue
WASHINGTON — The U.S. Coast Guard’s Research, Development, Test and Evaluation (RDT&E) Program helps the service make acquisition decisions by conducting pre-acquisition analysis and testing of potential mission solutions.

"RDT&E represents a Coast Guard investment to mitigate risk, understand technologies and best adapt them to Coast Guard use as part of a cogent acquisition strategy," RDT&E Program Deputy Chief Steve Cohen explained.

“It’s about early investment to ensure the success of future acquisitions,” Cohen said. “We make the investment in research and development so that when we execute an acquisition program, we have high confidence in its technical feasibility and what kind of return on investment we’re going to get.”

Subject matter experts evaluate emerging technologies that could improve mission performance at the Coast Guard’s Research and Development Center (RDC) in New London, Conn. The RDC is a key part of the Acquisition Directorate’s RDT&E program, which “connects the people with the proper experience and Coast Guard knowledge with the people who buy things,” Cohen said.

“Our main job is to help the Coast Guard improve what it does,” explained RDC Executive Director Don Cundy. “Part of our function is to understand what is going on in the technological world and what is happening in the Coast Guard world and try to figure out where the marriage is. Our role is to understand the capabilities of a new technology and how it could impact the Coast Guard.”

The RDC also analyzes various potential mission solutions and helps the Coast Guard understand the benefits and costs of each alternative. “Before you buy something, you have to figure out what the alternatives are and what the best value is for the government,” Cundy said.

“Pre-acquisition involves articulating to the Coast Guard that there is a problem and there are potential solutions to help solve the problem, so you need to invest in making those changes,” Cundy explained. “We use our accumulated knowledge about Coast Guard capabilities to look at how we can modify those capabilities to improve performance or reduce cost. [Then] we use our modeling and simulation expertise to help estimate what the value, impact or costs of a particular new capability will be.”

A good example is post-Sept. 11, 2001, when a lot more emphasis was placed on protecting our critical port assets and infrastructure so the Coast Guard invested in acquiring faster, more maneuverable boats and weapons. The RDC undertook a project to quantify the effectiveness of the boats’ systems and look at alternatives to the existing solutions.

In the alternatives analysis stage, the RDC identifies the most important characteristics of an asset or system necessary to achieve the mission and puts a cost on them so that leadership can decide what they’re willing to pay for to achieve which benefits.

“We’re talking about alternative ways of meeting requirements where you can either buy a new one or fix up the...
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one that you have,” Cundy said. “There are tradeoffs for doing that in performance costs, schedule costs, etc. We help the Coast Guard understand those tradeoffs so senior Coast Guard leadership can decide which direction they want to go.”

Sometimes the RDC conducts alternatives analysis in concert with the technical authorities developing the operational requirements for an asset or system.

“The critical issues are, what are the users’ needs, what can the product do, how much does it cost and why would I use it?” Cundy explained. “It’s only through testing and evaluating capabilities with potential end users that you can get an understanding of what the requirements are.”

For example, the RDT&E Program is doing a business case analysis on the Coast Guard’s polar icebreakers, which are at the end of their planned 30-year service lives. The service is taking measures to ensure their continued service while examining the case for additional service life extensions or new acquisition projects.

“It’s not just purely technical analysis, it’s also understanding the cost and logistics impacts—what is the total lifecycle impact of making these acquisitions?” Cundy said.

The program also recently conducted an Arctic communications workshop on how the Coast Guard can create the proper communications infrastructure so the service can operate effectively in the harsh Arctic climate.

“The Research and Development Center is geared toward dealing with risk and uncertainty,” Cundy said. “Integral to our process is understanding and articulating the risks so that we have dedicated the resources to mitigate those risks.”

ASK THE MASTER CHIEF

MASTER CHIEF AYER,

Q. We just picked up our ship from MEP at the Coast Guard Yard in Baltimore and to be honest, we were expecting a little more work to be done. Can you please explain this?

A. I can understand that, though I certainly hope that the work that was completed met your expectations. I believe the answer to this question lies in the word “expectations.” This is an area where we can do better.

For those of you who are not aware, MEP is our Mission Effectiveness Project. We are currently MEPing our 110-foot Island-class patrol boats and our 210-foot and 270-foot medium endurance cutters at the Coast Guard Yard in Baltimore. MEP’s stated goal is to provide selected equipment upgrades and enhancements to increase cutter service life and performance by replacing obsolete and increasingly unsupportable systems with systems that will improve reliability and reduce future maintenance costs.

In English, this means we are doing what we can to extend the useful life of some of our older patrol boats and medium endurance cutters. This project is a bridging strategy to keep our legacy vessels safe and operational until we can acquire replacements. MEP was never intended to return the vessels to “like new” condition.

As with all of our projects, we have to operate within a budget and schedule that meets the Coast Guard’s operational needs. The time and money needed to do a complete ship overhaul are just not available and, quite frankly, not in the Coast Guard’s best interest. Our long-term focus is on acquiring new vessels that meet current and future mission sets while ensuring our crews have safe and mission effective platforms that can continue operating. I believe MEP is a very effective way to meet this goal.

Now back to expectations. Part of our job is to keep the crews on the deck plates fully informed about our projects and what to expect. In this case, it looks like we could have done a better job at managing expectations. In the future, we will do our best to make sure we keep cutter crews informed about what to expect, and more importantly, what not to expect, from the completed product.

— MCPO Brett F. Ayer, Command Master Chief, Coast Guard Acquisition Directorate

[To submit a question for an upcoming Acquisition Directorate newsletter, please e-mail Master Chief Brett F. Ayer directly at: Brett.F.Ayer@uscg.mil or acquisitionwebsite@uscg.mil.]