

Where We Go From Here

By LCDR John Fitzgerald, LantArea

A small group of dedicated individuals at headquarters is working hard to transform the Coast Guard's future and make things easier for you. Here's how they plan to do it.

Deepwater. You've probably heard the name, but you may not know what it is. However, it may be the way the Coast Guard does business in 10 years. By 2008, your job may be a lot different. You'll still be doing the same types of missions; you'll just be doing them with better equipment. Tools like unmanned aerial vehicles, satellites, ships and sophisticated computer and communication systems will replace our current, outdated equipment.

Deepwater is an acquisition project consisting of ships, aircraft, communications and sensors designed to work together to increase our service's operational effectiveness. It is not a one-for-one replacement of Coast Guard aircraft and cutters with more modern versions. Instead, it is a complete system designed to ease the workload of Coast Guard men and women so they can effectively carry out their units' missions.

"The only reason we execute our mission [today] and do what we do is because the people are willing to exhaust themselves or break their backs to make things work," said CAPT Craig Schnappinger, Deepwater project manager. "The attitude of doing more with less has always been bad. In this case [Deepwater], we're going to do the job with the right assets."

Where We Are Now

Currently, the Coast Guard's deepwater fleet (deepwater is defined as 50 miles off shore and beyond) is the 39th oldest of 41 similar fleets in the world. Based on other countries' building programs, that ranking will soon fall to 40th. Many of the Coast Guard's air frames will reach the end of their service life early in the next century. And the age of these assets is starting to show.

"I remember when I reported on board the Steadfast as an ensign straight out of the Academy. The main propulsion assistant told me that every pump on board the 10-year-old ship was already obsolete. We couldn't get parts for it," said CAPT Richard Kelly, the operations representative for Deepwater.

While the age of Coast Guard assets is becoming more evident every day, another less visible but just as frustrating problem is the inability of ships and aircraft to operate together.

"We bought the H-60. It's a good helicopter, but you can't land it on a 210. You can't land it on a 378. You can't deploy it on anything except a B-class 270. It would be a lot more effective if we had platforms that were designed to work together," Kelly said.

These realizations, combined with future mission analyses, led to the Deepwater Project.

Deepwater began to take shape in the early 1990s. At the same time that operators realized their assets were nearing the end of their service life, personnel at headquarters began to re-examine the way the organization replaced them. But this time, planners decided to look into the future and examine Coast Guard operating areas, missions and needs for the year 2004 and beyond.

Using Coast Guard 2020: Ready Today ... Preparing for Tomorrow as a basis, headquarters sponsored a number of studies by both governmental and private organizations to try to predict what would be expected of the Coast Guard in the next century.

“Predicting the future is an art, not a science. And no one can do that very well. But I think we have done the best we can [with the studies],” said RADM Ernest Riutta, assistant commandant for operations and the Deepwater project sponsor.

Based on those studies, the Deepwater team had a reasonably good idea of what the threats of the 21st century were and where they would be located, Riutta said. But the team didn’t stop there.

Designing From Scratch

Rather than design this system within the service, the team decided to tap the expertise of private industry to develop the entire Deepwater package.

“O[perations] told us, ‘these are your requirements.’ We said, ‘Industry, this is what we must be capable of doing. Now you tell us, based on your knowledge of technology, what is the best approach and the right mix of assets to accomplish that mission?’” Schnappinger said.

Consequently, various teams with aeronautical, engineering, marine and communications expertise have created partnerships to develop the Deepwater designs.

In August, three teams of companies were awarded \$7 million contracts to begin the concept development for the Deepwater Program. They included Avondale Industries, working with Boeing-McDonnell Douglas Corp. and John J. McMullen Associates Inc.; Lockheed-Martin Government Electronic Systems, working with Ingalls Shipbuilding Inc.; and Science Applications International Corp., working with Sikorsky Aircraft Corp., Bath Ironworks and Marinette Marine.

“Instead of constraining [the contract] with individual acquisitions, we’ve actually come to realize over time that it would be a lot more sensible if we built a system that was totally compatible from scratch,” Riutta said.

The commandant has placed only three requirements on the Deepwater Project, Schnappinger said. They are known as the three Ms. The Coast Guard will remain:

- a military organization
- multi-missioned
- a maritime organization

“If something is put on the table that breaks one of those Ms, then it won’t be accepted,” Schnappinger said.

A major component of Deepwater that will have a great impact on Coast Guard operations and is critical to the project’s success is the implementation of an extensive Command, Control, Communications, Computers, Intelligence, Sensors and Reconnaissance (C4ISR) system.

C4ISR will allow Coast Guard units to locate, identify and classify targets of interest. Currently, Coast Guard C4ISR capabilities are almost nonexistent, considering current technology or when compared to those of the Navy.

Kelly recalled his time as the commanding officer of the CGC Tampa during Operation Able Manner to demonstrate the weakness in current C4ISR technology. During that time, thousands of Haitians and Cubans were fleeing their homelands and heading for the United States. Every single vessel but one that was intercepted by the Tampa was located not by radar, but by the lookout.

“And those are people who want to be found. Translate that into the go-fast that doesn’t want to be found. How are we supposed to see that?” Kelly said.

C4ISR will also give land, surface and air units instantaneous verbal and computer communications. This will give operational commanders a more up-to-date and complete picture of what is evolving and allow them to make more informed decisions.

“That’s exactly what Deepwater is about. Without that [C4ISR], we’re back to punching holes in the water and in the sky, looking for things without being very efficient at it,” Riutta said.

All these innovations and changes in philosophy could have a profound effect on the future of the Coast Guard.

Looking To the Future

How minimally manned will Coast Guard vessels be? Will engineering petty officers deploy with an afloat unit, or will all their work be done at the pier? Will boatswain’s mates be trained in maneuvering unmanned reconnaissance vehicles? Will the Coast Guard continue to send ships on patrol in known drug corridors, or will it adopt a new “Pouncer Technique” where satellites locate, identify and classify vessels of interest and direct Coast Guard assets in their direction? Will boarding teams be transported by aircraft, smallboat or both? Will Coast Guard deepwater units be centrally located or scattered along the coast?

While no one has the answers yet, the possibilities are endless.

“It’s going to impact us far more than just the way we go to sea or fly our planes. It’s going to have an impact in how we do our training and impact specialties that many of our people hold,” Riutta said. “The impact is like throwing a pebble in a pond, or in this case a big rock. It’s going to have ripples that go out in all directions in the Coast Guard, and some of those are going to be the size of a tidal wave. Some radical changes will be brought about because of this. Some evolutionary changes will be brought about as a result of this. But change it will definitely be.”

In addition to possible impacts on personnel and operations, the project takes into consideration an often overlooked aspect of any new recapitalization project: total life-cycle costs.

“We’re looking at total life-cycle costs from this. Not what is it going to cost to buy the system, but what is it going to cost to operate this system over the course of 30 years or so, whatever the expected life span is. That is where you figure out the most bang for your buck, where you spend your dollar wisely, instead of just being totally focused on how much we are spending today, and make that the smallest number,” Riutta said.

“If you do that [spend for today], your support tail goes off like a skyrocket. Later on, you haven’t been a good steward of the taxpayer’s money. That is what we are trying to do: be a good steward of the money the taxpayers provide us with to do our job,” he added.

Deepwater is so large and encompassing, it may influence the way other communities within the Coast Guard operate as well. Take, for example, inland and coastal Coast Guard operations. The communications system developed for Deepwater must be compatible with coastal and shore-based units.

“The truth is [Deepwater] is a continuum. For contractual or acquisition reasons, we’ve had to define deepwater as 50 miles and beyond. But let’s face it, the command and control systems that we have don’t stop at 50 miles and start at 50 miles. They’re interconnected, and in some cases they probably will be the same. I see Deepwater having a tremendous effect on the near-shore environment,” Riutta said.

To ensure nothing is overlooked, the Deepwater team has a mix of representatives from every headquarters entity, including aviation, marine safety, marine engineering, operations, personnel and training. Together, they are molding Deepwater to ensure no detail is overlooked.

“The training and the people side is a very, very big factor, and W [Human Resources] is getting more heavily engaged as the project goes along. They’re starting to see some of the realities of things that may be considered. For example, if you reduce crews, what does that do for sea-to-shore rotation? More importantly, what does that do for retention?” Schnappinger said.

Going Online

Since the program will have such a wide-reaching effect on the Coast Guard, a stipulation in the contract calls for the Deepwater transition to occur with no degradation to current capabilities or standards.

“We’re very conscious of making sure that what we have has the ability to do the job and then decide what system we’re going to put in place. It’s got to be proven technology or technology that will have been developed and proven by the time it’s fielded. We’re not going to experiment with protecting the nation’s coastline,” Riutta said.

While getting a proven system in place may prove to be a challenge, other challenges exist as well.

Surprisingly, one of the biggest challenges leading to acceptance of the Deepwater concept is internal to the Coast Guard. It involves changing the attitudes and ideas that have developed over the last 200 years. Some people are resistant to the smallest amount of change. For those people, Deepwater may come across like a punch in the face during a cold shower.

“If there is a technology that allowed one person on the flight deck for a helicopter launch and recovery instead of five or 12, wouldn’t that make sense?” Schnappinger said.

Externally, the biggest challenge seems to be funding. While it is too early in the development phase to come up with an exact figure, one thing is for sure: The price tag for Deepwater is expected to be at least several billion dollars. While that may deter most government agencies from proceeding with such an ambitious project, members of the Deepwater team are optimistic.

The Right Timing?

With the ever-increasing demand to cut budgets within the federal government, the Coast Guard might be undertaking Deepwater at just the right time. By making a smart investment today, the Coast Guard hopes to save millions of dollars over the course of the next 10 to 20 years.

“Deepwater is a concept that is absolutely perfect timing for the government with all its desires for reform, improvement and better government. It’s the epitome of better government. The problem is it isn’t free,” Schnappinger said.

Despite the projections in cost, Kelly remains optimistic as well.

“It’s really not that much when you think about the time frame, about how many years it’s going to take to build a project or in terms of some of the other projects the federal government undertakes. [It’s] not even that much in what the return is to the American people,” he said.

Despite the economic and internal hurdles, everyone on the Deepwater team has the attitude of “You know what? The way our people have to get this job done—what they have to go through—is totally unacceptable,” Schnappinger said.

“No acquisition project goes from beginning your concept design to awarding a contract to build or supply the first assets in four years. Most of them are 15 years. And we said that’s unacceptable. It isn’t fair to the men and women to put them through 15 more years. They’re the ones going out in heavy seas and high winds. We sure as hell appreciate what they do, so we need to bust our butts a little bit, too,” Schnappinger said.

Currently, plans call for the Deepwater construction contract to be awarded to one of the three industrial partnerships in 2002.

“I see this as transitioning from an industrial age-based Coast Guard to an information age-based Coast Guard. The problem becomes our transition to that leading edge technology. We want to be on the leading edge, but we don’t want to be on the bleeding edge,” Riutta said.

Assuming that transition goes smoothly, the Coast Guard we know today may look completely different in 10 years.

“Fundamentally, I think it’s going to change the way we do business like nothing ever has done before in the history of our organization,” Riutta said.

Welcome to the year 2008.