



Deepwater News

EXTENDING OUR MARITIME BORDERS



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National Security Cutter Rotational Crewing Concept Approved

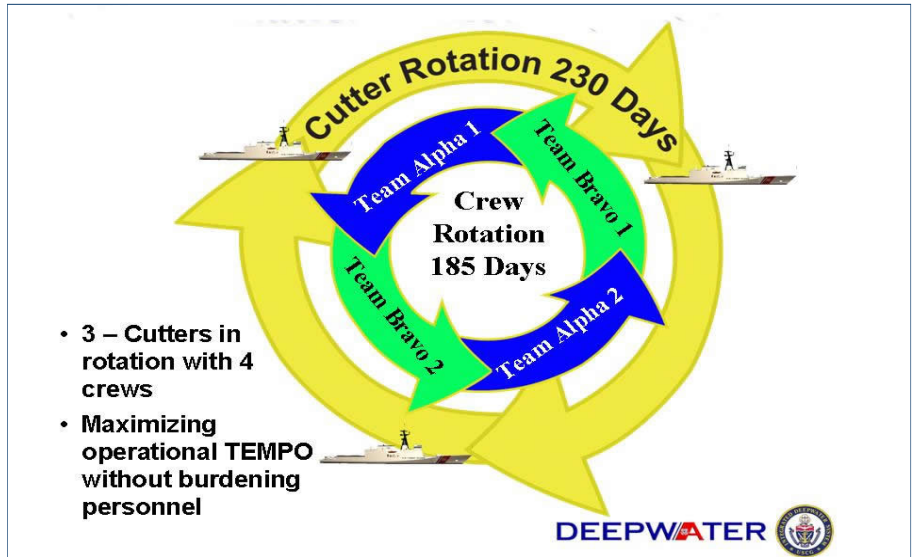
"I got my orders!" exclaimed Petty Officer First Class Travis Forfinski, an operations specialist aboard the cutter USCGC RESOLUTE (WMEC 620). "I am excited to be selected for the first national security cutter [crew]."

The excitement was palpable in the inaugural crew when detailers recently issued 50 orders to Maritime Security Cutter Large (WMSL) Crew Alpha – Alameda, Calif. WMSL Crew Alpha will be the crew that shepherds the first national security cutter (NSC), USCGC BERTHOLF (WMSL 750), from pre-commissioning activities through its initial opera-

"... People perform the Coast Guard's missions, and their assets are there to support them. So we think of the CRC model as assigning ships to crews instead of crews to ships. And it's about time."

tional patrols. The billets are on the 2006 shopping list, and U.S. Coast Guard Headquarters staffs are updating the Staffing Standards to include the newest cutter crew personnel requirements.

With the stand-up of Crew Alpha and the delivery of the Bertholf, the Coast Guard will introduce the concept of multi-crew



The Crew Rotation Concept (CRC) was recently approved for the first three National Security Cutters. The CRC will maximize operational tempo while sustaining an acceptable personnel tempo for cutter crews.

rotation for major cutters, a formidable paradigm shift in cutter crewing. Vice Adm. Terry Cross, vice commandant of the Coast Guard, signed a decision memorandum in late February to approve the Crew Rotation Concept (CRC) as the means of maximizing cutters' time at sea while sustaining an acceptable personnel tempo (PERSTEMPO) for cutter crews. Various directorates at Coast Guard Headquarters have been tackling numerous policy issues such as sea pay and housing affected by CRC to ensure they are responsive to the new NSC crewmembers.

Initially, the Coast Guard will employ four crews for three NSCs at a single homeport, rotat-

ing the cutters among the crews to limit crew PERSTEMPO to 185 days while maintaining each cutter's operational tempo

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(OPTEMPO) at 230 days. The three-cutter, four-crew prototype will be evaluated in 2009 through an operational testing-and-evaluation process. Policy and procedures for CRC are based on the lessons learned by the Coast Guard and the U.S. Navy, as well as consideration of the recommendations made by auditors from the Government Accountability Office.

“For the entire history of the Coast Guard, if you think about it, we have assigned crews to ships,” said Rear Adm. Ken Venuto, assistant commandant for human resources. “In a way, this gave the impression that the ship is the most important contributor to mission performance, and people are there to support it. I think we know better than that today; people perform the Coast Guard’s missions, and their assets are there to support them. In my view, the Crew Rotation Concept is a model that assigns ships to crews instead of crews to ships. And it’s about time.”

With an operational crew size of 108, including officers and enlisted personnel, orders have been or are being issued for the first 65 crewmembers, including several pre-commissioning billets that were filled last year, the engineering officer, the main propulsion assistant, and other key engineering billets. In addition to the operational crew, detachments round out the deployed crew to optimize the cutter’s mission capabilities.

These detachments include maintenance personnel for two embarked Eagle Eye vertical take-off and-landing unmanned aerial vehicles, a five-person aviation detachment during helicopter embarkations, a six-person Command Task Unit detachment (when required) and for out-of-

hemisphere deployments, an 11-person detachment to provide continuous Condition III watch-standing capacity.

Coast Guard Headquarters announced the crew’s prospective commanding officer as Capt. Patrick Stadt, the sponsor’s representative for the Integrated Deepwater System in the Response Directorate at U.S. Coast Guard Headquarters, and executive officer Cdr. Kelly Hatfield, Chief Response Enforcement Branch, District 11.

As hull construction progresses, a Primary Crew Assembly Facility (PCAF) will ensure that all pre-commission crews are ready to accept the ship. Approx-

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mately 65 new crewmembers will report to Alameda by August. The remaining 43 members of the crew will report to Pascagoula, Miss. three months prior to delivery of WMSL 750, to begin WMSL cutter familiarization training.

This summer, the initial Gulf Coast PCAF staff will report to Pascagoula, where they will provide on-site training, logistics, and administrative support to the crews that will take delivery of NSCs and, eventually, the forthcoming fast response cutters (FRC). The PCAF will provide these same services when fast response cutter crews report to

Gulfport, Miss. for cutter delivery in several years. The PCAF building is located at Northrop Grumman Shipyard Pascagoula. Coast Guard Headquarters personnel selected Cdr. Kelly Kachele, Maintenance and Logistics Command Pacific, to lead the PCAF team as prospective commanding officer.

To facilitate introduction of Deepwater assets at Alameda, an initial staff of seven is expected to be assigned to a Deepwater Shore Support Unit there in the summer of 2007 prior to USCGC BERTHOLF’s arrival. The permanent support building on Coast Guard Island should open in late 2008, prior to the arrival of WMSL 751.

“The Crew Rotation Concept is the preferred crewing concept utilized for both the NSC and OPC to meet the required OPTEMPO without violating the mandated PERSTEMPO’, said Lt. j.g. Justin M. Lian, a member of the Human Resources Deepwater Workforce Modeling and Simulation staff at Coast Guard Headquarters.

Coast Guard Area staffs will assign cutters to crews based on cutter availability, crew PERSTEMPO, and operational demands. A crew will typically have a six- to nine-month tour and will conduct both underway and in-port periods until PERSTEMPO requires a crew swap out.

Hypothetically, Crew Bravo would move from an “off-cycle” status to relieve Crew Delta. Crew Delta would turn over the cutter to Crew Bravo after ensuring they are ready to take the cutter on the next patrol. They then would move to an “off-cycle” status, providing opportunities to focus on “crew maintenance,” including leave, team training,

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and a limited capacity to perform maintenance support for cutters in port.

The exact doctrine and policy for the CRC turnover will be fully developed prior to the first crew swap out by a working group composed of representatives from various directorates at Coast Guard Headquarters and staff assigned to Area Commanders, Maintenance and Logistics Command, and "plank owners" from the first crews that will operate the NSCs.

At any given time, one crew will have full responsibility for cutter operations and maintenance, underway and in port. Although none of the crews will permanently "own" a specific hull, a crew will operate and maintain its assigned cutter until such time

that they are swapped out to maintain the crew PERSTEMPO cap. For periods when crews rotate off a cutter, they are considered "off-cycle." The actual rotation cycle will vary from port to port and year to year based on the crew and cutter allocations as well as operational demands.

Once the first NSC successfully completes acceptance trials, Crew Alpha will then conduct limited ready-for-sea activities to ensure the ship may depart the Gulf region for its homeport early in 2009.

"The Crew Rotation Concept is a significant departure from traditional policies for cutter crewing," said Rear Adm. Patrick M. Stillman, program executive officer for the Integrated Deepwater System. "It is imperative that

we embrace our responsibilities to maximize the use of the very capable cutters we are building while keeping our promise for a balanced work-life to the men and women we charge to operate them."

The Crew Rotation Concept is designed to help the first crew achieve those two goals. "From a practical point of view the most important dimension of this new crewing concept is that it decouples the PERSTEMPO of the crew from the OPTEMPO of the cutter," Stillman said. "We can keep the deployment PERSTEMPO for each crew at 185 days while deploying each cutter for 230 days a year."

By PAC Jeffrey Murphy

First Coast Guard Deepwater Aircraft Rolls Off Production Line

Lockheed Martin and aircraft maker EADS CASA recently rolled out the first production airframe of the HC-235A medium-range surveillance maritime patrol aircraft. Produced in Spain with substantial U.S. components, including avionics, propulsion, and integrated subsystems, the HC-235A is the first new aircraft developed for the U.S. Coast Guard's Integrated Deepwater System program under contract to Integrated Coast Guard Systems (ICGS).

The first aircraft was unveiled March 23 at the EADS CASA plant in San Pablo (Seville) at a ceremony attended by the U.S. ambassador to Spain, the vice commandant of the Coast Guard, and senior company executives representing EADS CASA, EADS North America, Lockheed Martin and ICGS, as well as various government offi-

cials from both countries. This ceremony marked a significant milestone in development and delivery of the new aircraft for the Coast Guard.

"The HC-235A is an integral component of the Coast Guard's

plan for achieving enhanced maritime domain awareness," said Leo Mackay, president of ICGS. "Linked with other Deepwater surface, air and shore system assets through a common operating

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The first HC-235A medium-range surveillance maritime patrol aircraft was unveiled at the EADS CASA plant in Seville, Spain, on March 23. (Photo courtesy of EADS CASA)

picture, the aircraft becomes a vital node in the network to help the Coast Guard fulfill its maritime surveillance mission requirements and improve its overall homeland security capabilities.”

“The American people depend on the Coast Guard to save lives, to interdict illegal drugs and migrants, to secure the homeland and more,” said Vice Adm. Terry Cross, vice commandant of the Coast Guard. “Mission success



Vice Adm. Terry Cross signals his approval of the first HC-235A. (Photo courtesy of EADS CASA)

requires reliable ships, boats and aircraft equipped with modern communications and sensor equipment. That is precisely what our Deepwater program is about, and that is what this aircraft will provide. We are pleased to reach this important production milestone and look forward to taking delivery of the first HC-235A in 2007, so we can put the aircraft to work.”

“The entire EADS CASA team is very pleased to celebrate with our partners of ICGS and the U.S. Coast Guard on the roll-out of the first HC-235A aircraft as part of the Deepwater Program,” said Francisco Fernandez Sáinz, chairman and CEO of EADS CASA. “An important milestone has been reached today”.

The Coast Guard will use the HC-235A to perform homeland

security and search and rescue missions, enforce laws and treaties including illegal drug interdiction, marine environmental protection, military readiness, and international ice patrol missions, as well as cargo and personnel transport. The size, range and re-configuration capabilities will fully enable the execution of the multiple missions performed by the Coast Guard.

The current Deepwater plan calls for production and system integration of 36 aircraft through 2017. This first aircraft will be completed and delivered to the Coast Guard's Aviation Training Center in Mobile, Ala, in spring 2007.

Courtesy of Integrated Coast Guard Systems

“A Joint and Interoperable Maritime Force” Navy-Coast Guard National Fleet Policy Updated

Chief of Naval Operations Adm. Michael G. Mullen and Commandant of the Coast Guard Adm. Thomas H. Collins jointly approved a new National Fleet policy statement in early March aimed at strengthening Navy-Coast Guard cooperation and tailored operational integration of each service's multimission platforms, infrastructure, and personnel.

Building on more than two centuries of close collaboration and joint operations in peace and war, this firm commitment to shared purpose directly supports the new *National Strategy for Maritime Security* approved by President Bush in September.

“Security of the maritime domain can be accomplished only

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The National Fleet

The Navy-Coast Guard National Fleet has three main attributes. First, it is composed of ships, boats, aircraft, and shore command-and-control nodes that are affordable, adaptable, interoperable, and possess complementary capabilities. Secondly, these forces will be designed, wherever possible, around common command, control, and communications equipment and operational, weapon and engineering systems, and include coordinated operational planning, procurement, training, and logistics. Lastly, the National Fleet will be capable of supporting the broad spectrum of U.S. national security requirements—from power protection to defense of the homeland.

The Navy's contribution to the National Fleet consists of multimission ships, submarines, and aircraft, as well as Naval Coastal Warfare, Naval Special Warfare, and C4ISR assets designed for the full spectrum of naval operations, from peacetime engagement to global war. The Coast Guard's contribution is its statutory authorities, multimission cutters, boats, aircraft and C4SIR as well as law enforcement and environmental response teams. This contribution, designed for the full spectrum of Coast Guard missions, includes maritime security operations, counterterrorism-crisis response, and filling the joint combatant commanders' theater plans calling for general-purpose warships.

Source: National Fleet Policy Statement, March 2006

by seamlessly employing all instruments of national power in a fully coordinated manner,” the strategy states.

“While we remain separate services, we recognize that full cooperation and integration of our non-redundant and complementary capabilities must be achieved,” Mullen and Collins said. “This continues to ensure the highest level of maritime capabilities and readiness for the nation’s security and investment.” The National Fleet, which originated in 1998, reflects an agreement by the Navy and the Coast Guard to plan, acquire, and maintain forces that support and complement each service’s roles and missions.

As the challenges to U.S. sovereignty and maritime security grow more diverse and complex each year—in part a reflection on regional conflict, arms smuggling,

weapons proliferation, weapons of mass destruction, force protection, and terrorism—Mullen and Collins maintain that the Navy and Coast Guard must be able to deploy forces with greater agility, adaptability, and affordability across the full spectrum of conflict.

“A joint and interoperable maritime force is needed to establish the numerical sufficiency required for effective global operations and to effectively foster and leverage regional international partnerships in order to achieve global maritime domain awareness and maritime transportation security in the era of globalization,” they said.

Improved synchronization is planned for research and development, planning, fiscal stewardship, procurement, doctrine development, training, and operations.

The result, they say, will serve as a force multiplier. Each service will be able to leverage the assets of the other by providing unique

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capabilities for expeditionary warfare and maritime homeland defense and security missions.

In recent months, Mullen and Collins have elaborated on their common vision to operationalize the National Fleet more aggressively. Although each service uses distinct, threat-based platforms tailored to their primary operating environments, the underlying technology and systems use interoperable components to facilitate joint operations. Navy and Coast Guard program executive officers, for example, have agreed to close cooperation in the oversight of their acquisition programs in recent years. Each service seeks to maximize the use and reuse of common sub-systems, as well as commercial-off-the-shelf and government-off-the-shelf equipment to improve interoperability.

This approach is reflected in the Navy’s Littoral Combat Ship program, for example, a high-speed, networked combatant with capabilities optimized to assure naval and joint force access into contested littoral regions. The

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The Navy-Coast Guard National Fleet Policy provides for a full range of capabilities across the entire spectrum of maritime threats and missions. Here, the Coast Guard cutter WRANGELL (WPB-1332) is shown alongside the nuclear-powered aircraft carrier USS RONALD REAGAN (CVN-76) underway in the Persian Gulf in early March. CGC WRANGELL is one of the Coast Guard units currently supporting Operation Iraqi Freedom and other national-defense missions in the region as part of the U.S. Fifth Fleet’s Patrol Forces Southwest Asia. (Photo courtesy of U.S. Navy)

Coast Guard's Integrated Deepwater System of three classes of new cutters, manned and unmanned aircraft, and C4ISR is designed for long-range, independent missions in lower-intensity environments. Despite varied missions, both programs share common infrastructure ranging from communication systems to weapons.

"As the Navy develops shallow water and riverine capabilities," Mullen testified to the House of Representative's Armed Services Committee March 3, "we

will seek increasing synergies with the Coast Guard, at home and abroad, exploring complementary design, acquisition, operations, and training initiatives." He described the new *National Strategy for Maritime Security* as a "very critical and important document" and said he and Collins will build on their strong relationship to achieve the level of maritime domain awareness they think vital for the future.

The Coast Guard agrees. "The other wonderful thing about the strategy," said Collins re-

cently, "is that it is not narrowly constructed as a national counter-terrorism plan; it is an all-threat plan including counter-drugs, migrant issues, fishery enforcement, and other security areas—a system's view of the maritime. There is a lot of work to be done to give meaning and add meat to those plans, and the Navy and the Coast Guard are engaged in doing that."

By Gordon I. Peterson

Deepwater's Capabilities Called "Instrumental" for Port Security

The Deepwater Program's more capable assets and systems have long been seen as being key enablers in building a more ready and responsive 21st-century Coast Guard, but their linkage to improved port security is often not recognized.

"We successfully prosecuted a mission this week and relied heavily on the capabilities provided by the upgrades to coordinate resource allocation, including both surface and air assets, sharing of intelligence, and real-time decision making—all facilitated by the upgraded system."

Adm. Thomas H. Collins, commandant of the Coast Guard, does not make that oversight. In his view, all Deepwater platforms will make essential contributions in this critical area of maritime homeland security.

"While the Deepwater Pro-



Coast Guard legacy aircraft and cutters, modernized by the Deepwater Program, are helping to make U.S. ports safer. This HH-65C helicopter, assigned to Coast Guard Air Station Atlantic City, N.J., flies low over the Atlantic Ocean in January. A total of 25 of the more powerful and capable HH-65Cs, re-engined and upgraded by the Deepwater Program, were delivered by the end of February. USCG Photo by PA2 John Edwards.

gram necessarily invests in capabilities adequate to operate in the often-unforgiving offshore environment," he told Congress in early March, "it is these same capabilities that are instrumental to effective response operations in port and coastal areas as well."

Collins, testifying March 9

on the Coast Guard's fiscal year 2007 budget to the House Appropriations Committee's Subcommittee on Homeland Security, noted that assets scheduled for Deepwater's modernization include every Coast Guard aircraft type. "These aircraft, rotary-wing

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in particular, are critical parts of our port and coastal-response infrastructure as well as extended offshore operations.”

And, contrary to some perceptions that the Deepwater Program is a program aimed primarily at the Coast Guard’s future readiness, Collins emphasized that the progressive conversion or modernization of aging legacy assets are making a difference *now*. “The operational benefits were apparent during the Coast Guard’s response to Hurricane Katrina,” he said. “As an example, three more powerful re-engined HH-65C helicopters flew 85 sorties to save 305 lives.”

Similar benefits were achieved with the Deepwater Program’s upgrades to systems for C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) on legacy cutters. “The C4ISR improvements to high and medium endurance cutters enabled more effective on-scene

coordination of rescue operations in New Orleans, La., and Gulfport, Miss., with local first responders and other federal agencies,” Collins said.

The payoffs for improved connectivity resulting from more highly networked and interoperable Deepwater C4ISR also have been demonstrated repeatedly in more distant waters during counter-drug and illegal migrant interdiction operations. Last year, for example, the Coast Guard prevented more than 338,000 pounds of cocaine from reaching the United States—an all-time maritime record. According to summaries of operational patrols, Deepwater C4ISR upgrades on legacy cutters are playing an important role.

“We successfully prosecuted a mission this week and relied heavily on the capabilities provided by the upgrades to coordinate resource allocation, including both surface and air assets, sharing of intelligence, and real-time

decision making—all facilitated by the upgraded system,” Capt. Michael E. Sullivan, commanding officer of the high endurance cutter CGC *Morgenthau*, said recently.

The cutter’s multi-agency, multinational operation led to the seizure of a foreign vessel carrying 2.5 metric tons of cocaine. “The critical coordination, and tactical and strategic decisions, were greatly enhanced by seamless, instant, and robust communications delivered by the Deepwater C4ISR upgrade,” Sullivan maintained.

The president’s Coast Guard budget request for fiscal year 2007 contains \$934.4 million to advance the Deepwater Program. “The Integrated Deepwater System acquisition program remains the centerpiece of a more ready, aware, and responsive 21st-century Coast Guard,” Adm. Collins told Congress.

By Gordon I. Peterson

New Deepwater Information and Solutions Center Opens

On Monday, March 27, a ribbon cutting ceremony took place signifying the opening of the Deepwater Information & Solutions Center (DISC), a Northrop Grumman Ship Systems and Lockheed Martin facility in Washington D.C. The DISC is an interactive display facility which offers a collective representation of what has been achieved to date on the Integrated Deepwater System program, without requiring travel to distant locations where the work is being done.

Participating in the ribbon cutting were: (From left) Dr. Leo Mackay, president, Integrated Coast Guard Systems; Fred Moosally, president, Lockheed Martin MS2; U.S. Coast Guard Rear Adm. Patrick Stillman, USCG Integrated Deepwater System program executive officer; Philip Teel, president, Northrop Grumman Ship Systems and I. Lanier Avant, Chief of Staff for U.S. Representative Bennie Thompson (D-Miss), who serves on the Homeland Security Committee.



Each of the five Deepwater Program Domains - Surface, Air, C4ISR, System-Of-Systems, and Logistics - is addressed, including key program details such as assets and capabilities delivered, operational effectiveness, total operating cost, customer satisfaction and technology infusion. (Photo and cutline courtesy of Integrated Coast Guard Systems)