Second California-based FRC Arrives at Coast Guard Base Los Angeles-Long Beach

SAN PEDRO, Calif. — The Coast Guard received the second California-based 154-foot fast response cutter (FRC) in San Pedro, Oct. 31.

Robert Ward, a Sentinel-class fast FRC, arrived at its new homeport at Coast Guard Base Los Angeles-Long Beach, where the crew will begin training to become certified in law enforcement and rescue operations.

Robert Ward is the second of four FRCs to be homeported at Base Los Angeles-Long Beach and is scheduled to be officially commissioned in February.

Two additional FRCs are scheduled to arrive and be commissioned by summer. While these ships will be based in San Pedro, they will operate throughout the 11th Coast Guard District, which includes all of California and international waters off Mexico and Central America.

FRC's are 154-foot multimission ships designed to conduct: drug and migrant interdictions; ports, waterways and coastal security operations; fisheries and environmental protection patrols; national defense missions; and search and rescue.

Each cutter is designed for a crew of 24, has a range of 2,500 miles and is equipped for patrols up to five days. The FRCs are part of the Coast Guard's overall fleet modernization initiative.

FRCs feature advanced command, control, communications, computers, intelligence, surveillance and reconnaissance equipment as well as over-the-horizon response boat deployment

capability and improved habitability for the crew. The ships can reach speeds of 28 knots and are equipped to coordinate operations with partner agencies and long-range Coast Guard assets such as the Coast Guard's National Security Cutters.

FRCs are named in honor of Coast Guard enlisted leaders, trailblazers and heroes. The four California-based FRCs are scheduled to be:

- Forrest Rednour (WPC 1129) Rednour aided in the rescue of 133 people during the sinking of the U.S.A.T. Dorchester, Feb. 3, 1943. He was awarded the Purple Heart and Navy and Marine Corps Medal for his actions. Rednour lost his life in the sinking of the Coast Guard Cutter Escanaba in June 1943.
- Robert Ward (WPC 1130) Ward operated beach-landing boats during the Normandy invasion. He landed his craft on the Cotentin Peninsula and rescued two stranded boat crews in the face of a heavily fortified enemy assault.
- Terrell Horne III (WPC 1131) Horne was murdered by suspected drug smugglers who intentionally rammed the boat he and fellow Coast Guardsmen were aboard during law enforcement operations near Santa Cruz Island off the Southern California coast in December 2012. Horne pushed one of his shipmates out of the way of the oncoming vessel attack and sustained fatal injuries.
- Benjamin Bottoms (WPC 1132) Bottoms was part the Coast Guard aircrew that rescued an Army aircrew from a downed B-17 off the west coast of Greenland in 1942. Bottoms and the pilot conducted the first landing of a cutter plane on an icecap and commenced a two-day rescue over a rugged Arctic terrain that required multiple flights. During the second day of rescue operations, radio contact with Bottoms' plane was lost and he was declared missing in action.

Navy Task Force Promotes Increased Knowledge of Ocean Environment

ARLINGTON, Va. — In a keynote speech to attendees of the 2018 Oceans Conference — held Oct. 22-25 in Charleston, South Carolina — Chief of Naval Research Rear Adm. David Hahn discussed the goals of the U.S. Navy's Task Force Ocean (TFO), a signature program of Chief of Naval Operations Adm. John Richardson. TFO is designed to reinvigorate the Navy's commitment to ocean sciences, advancing its tactical advantage through a better knowledge of the ocean environment and its impact on sensors, weapons and operations.

Hahn, who leads the Office of Naval Research (ONR) and serves as the director of TFO, began his comments by highlighting the critical role of ocean commerce to global prosperity, and the need to provide order and security to that commerce for the good of the nation and the world, according to an Oct. 29 release from ONR.

"Fundamentally, that is the role of your Navy — it's what we do every day," Hahn said.

He pointed out, however, that in this era of increasing "great power competition," the Navy needs to maintain an advantage, and the time to prepare for that is now. Hahn quoted James Forrestal, appointed the first secretary of defense in 1947, who said in a Congressional testimony, "The tempo of modern war has reached the point where this nation will probably never again have the opportunity to arm itself successfully after the start of hostilities."

That message bolstered the one given at a Tactical Oceanography Symposium held a week earlier at the Undersea Warfighting Development Center in San Diego. Hahn highlighted

the importance of furthering ties between the Navy, academia and industry.

"The Navy needs your help," he told attendees at the three-day symposium, the first in a series designed to highlight Navy ocean science issues. "We need a committed partnership between government, academia and industry to ensure the U.S. remains the world leader in ocean science, especially Navy-relevant science. Our competitors are gaining on us."

"Our decades-long competitive advantage in the undersea domain is eroding. This is not a Navy problem — it is our nation's problem," said Oceanographer of the Navy Rear Adm. John Okon during a presentation at the symposium. "As Task Force Ocean continues to evolve, we must remain focused on advancing ocean science and uniting our nation's intellectual capital to increase our competitive advantage."

A recent report prepared by the Consortium for Ocean Leadership, an umbrella organization that includes over 100 public and private ocean research organizations, highlights the mounting pressure on the Navy's advantage over global competitors.

To accelerate the recovery of that advantage in these critical areas, Hahn announced that ONR will increase research and sponsor an additional 50 graduate students and 50 post-doctorates under TFO, primarily in the areas of physical oceanography and acoustics, in addition to ONR's ongoing support for academia.

According to Dr. Tom Drake, director of ONR's Ocean Battlespace Sensing Department, "ONR will revitalize the 'Scientist-to-Sea' program, which provides opportunities for selected scientists and engineers to visit submarines and submarine training facilities, undersea warfighting training centers, Navy laboratories and engineering centers to better understand the needs and priorities of the Navy."

The Navy's commitment to revitalize its ocean science efforts will have very positive benefits to the national ocean science program, as well as the Navy. "This is a most welcome turn of events for Navy oceanographic research," said Prof. Arthur Baggeroer, the secretary of the Navy and chief of naval operations Chair for ocean science at the Massachusetts Institute of Technology.

Latest Aegis Combat System Demonstrates Success During At-Sea Test

ABOARD USS JOHN FINN — The latest evolution of the Aegis Combat System, Baseline 9.C2 (BMD5.1), successfully supported a Missile Defense Agency-led at-sea Ballistic Missile Defense System test event, Lockheed Martin said in an Oct. 26 release. During the test, the Lockheed Martin-built Aegis system detected, tracked, engaged and launched a missile to intercept a medium-range ballistic missile target.

The test, called Flight Test Standard Missile-45, demonstrated the integrated capabilities of the system and how it has continually evolved to counter advanced threats. This test demonstrated the new engagement assessment functionality, bidirectional missile communications and sensor improvement algorithms.

"This test authenticates the strengthening global security of the United States and its allies as we deepen the defense capabilities with the Aegis Ballistic Missile Defense System," said Paul Klammer, director, Aegis BMD. "This exercise showed that Aegis is the most advanced combat system and the proven choice for a layered defense."

This test builds upon joint research investments by the United States and Japan and comes on the heels of a successful test with the JS Atago in September. Lockheed Martin is developing a Baseline 9/BMD 5.1 variant computer program, for deployment on Japan's Aegis destroyers.

StandardAero Awarded Option Year for P-8A Engine MRO Support Contract

SCOTTSDALE, Ariz. — StandardAero has been selected as the U.S. Navy's primary engine depot for support of the CFM56-7 engines used on the P-8A aircraft, the company announced in an Oct. 24 release.

This is the second straight year StandardAero has been selected to perform this work, which is carried out under a U.S. federal government indefinite delivery/indefinite quantity-type contract that is competed and awarded each year among the U.S. Navy's approved sources. The contract supports the U.S. Navy, the government of Australia and other foreign military sales customers.

The P-8A is the replacement for the P-3 maritime patrol aircraft, which was introduced into service in the early 1960s. The CFM56 engines, used on the P-8A aircraft, are a commercially developed platform, capable of generating more than 27,000 pounds thrust.

StandardAero has been supporting the U.S. Navy for more than

20 years, providing maintenance, repair and operations (MRO) support across a number of engine and aircraft platforms. Under the P-8A award, StandardAero will provide depot-level repair and overhaul for the propulsion systems used to power this critical U.S. Navy mission.

"StandardAero appreciates the Navy's continued confidence in our ability to carry out this work," said Scott Starrett, president of StandardAero Military & Energy division.

Port Hueneme SeaSparrow Launcher, Platform Being Upgraded for Future ISEA Work

PORT HUENEME, Calif. — Work has commenced on the refurbishment and modification of the NATO SeaSparrow Missile System (NSSMS) platform and Mk132 Guided Missile Launching System (GMLS) located at the Surface Warfare Engineering Facility aboard Naval Surface Warfare Center, Port Hueneme Division (NSWC PHD).

The surface-to-air ship defense system is being upgraded to support the deployment of the Evolved SeaSparrow Missile (ESSM) Block 2, which employs an active and semi-active guidance system to meet current and expected future threats.

"The effort is in support of ESSM Block 2 integration efforts for the CVN, LHD and LHA ship classes," according to Son Nguyen, electronics engineer. "NSWC PHD is the In-Service Engineering Agent [ISEA] leading the testing of a new servo motor, launcher cell extensions and qualification of ESSM Block 2 loading and operations."

The project is one of many current and future endeavors launched by NSWC PHD in support of the ISEA of the Future, which builds upon key innovation milestones and actions to support the next-generation Navy.

"The modification, known as MIN-MOD, will include an overhauled launcher that will bring together all of the program elements to prove and verify required changes as well as demonstrate that the change is fleet ready," said Robert Barrett, NSSMS customer advocate and program manager. "This also provides the ISEA with the latest launcher that is in the fleet, allowing us to better execute our jobs in both fleet support as well as obsolescence management."

The NATO SeaSparrow Project is now in its 50th year and is the longest running, most successful cooperative weapons program in NATO.

"Over the years I worked various details through the NSSMS program, learning all aspects of what it takes to be an ISEA and supporting the fleet both technically and logistically," said Barrett.

"The MIN-MOD program came about when the program office and NAVSEA could not come to a contractual agreement with the design agent for a replacement launcher for the NSSMS Mk57 system," he said. "The replacement launcher had to have the ability to be able to fire the ESSM Block 2. This situation also drove a new requirement to make the contractual process competitive, which meant a minimum of at least two to three years were needed before a first article replacement would be seen by the fleet.

"This effort also delivers ESSM Block 2 capabilities to large flat decks three years in advance of their original fleet issuance. The added bonus with this program is that it is reverse compatible, so current ESSM shooters will get the advantages of improved readiness and affordability of the LRUs [Lowest Repairable Units] long before they get the mechanical modifications to shoot the ESSM Block 2," he said.

The NATO SeaSparrow Project is an international consortium of 12 nations consisting of Australia, Belgium, Canada, Denmark, Germany, Greece, the Netherlands, Norway, Portugal, Spain, Turkey and the United States. The 12 member nations are partners in engineering, development, production and sustainment of the missiles and supporting equipment. NSWC PHD provides advanced technical training to partner allies in support of NSSMS.

Coast Guard Responds to Vessel Collision Near California-Mexico Maritime Border

SAN DIEGO — The Coast Guard medevaced an injured person via helicopter and rescued 17 passengers after a vessel collision near the maritime boundary line, the 11th Coast Guard District said in an Oct. 27 release.

The crew of the 332-foot yacht Attessa IV contacted Coast Guard Sector San Diego's Joint Harbor Operations Center watchstanders at approximately 7:50 p.m. reporting a collision with the 65-foot sportfisher Prowler approximately nine miles offshore of Imperial Beach that resulted in extensive damage to the starboard quarter of the vessel and multiple injuries.

A Coast Guard Sector San Diego MH-60 Jayhawk helicopter crew and a Coast Guard Station San Diego 45-foot response boat-

medium crew were dispatched to respond. The Coast Guard Cutter Sea Otter was also diverted to assist.

Crews arrived on scene at approximately 8:45 p.m. The Jayhawk crew hoisted a critically injured passenger and returned to Sector San Diego where awaiting EMS took the man to UC San Diego Medical Center—Hillcrest in critical condition.

The RB-M crew transferred 17 passengers, two reporting injuries, from the Prowler and took them to Sector San Diego.

The remaining 10 passengers were transferred to the Attessa IV and are scheduled to return to San Diego, while the captain remained aboard the Prowler.

The Sea Otter remained on-scene with the Prowler awaiting commercial salvage. The cause of the collision is under investigation.

Coast Guard Signs for Newest Fast Response Cutter

MIAMI — The Coast Guard signed for the newest Coast Guard Fast-Response Cutter, Terrell Horne, Thursday during a signing ceremony in Key West, Florida, the Coast Guard 7th District said in an Oct. 26 release.

Lt. John Beal, commanding officer of Coast Guard Cutter Terrell Horne, signed documents to take possession of the cutter Terrell Horne on behalf of the Coast Guard at the signing ceremony.

Members of Coast Guard Sector Key West, cutter Terrell Horne crew and the Horne family attended the ceremony.

The cutter Terrell Horne is named after Senior Chief Terrell Horne, who placed himself in harm's way to protect a shipmate from being struck by a non-compliant vessel near Santa Cruz Island, California, on Dec. 2, 2012 while conducting countersmuggling operations.

The fast-response cutters are named after Coast Guard enlisted heroes and are replacing the Island-class 110-foot patrol boats.

Navy Awards Next-Generation Jammer Low Band Contracts

NAVAL AIR SYSTEMS COMMAND, PATUXENT RIVER, Md. — The U.S. Navy awarded Demonstration of Existing Technologies (DET) contracts Oct. 25, valued at approximately \$36 million each to L3 Technologies Communications Systems West and Northrop Grumman Corp. Mission Systems in support of the Next Generation Jammer Low Band (NGJ-LB) capability, the Naval Air Systems Command said in an Oct. 25 release.

The Airborne Electronic Attack (AEA) Systems and EA-6B Program Office (PMA-234) headquartered here manages the NGJ-LB program.

NGJ-LB is an external jamming pod that is part of a larger NGJ weapon system that will augment and, ultimately, replace the aging ALQ-99 Tactical Jamming System currently in use on EA-18G Growler aircraft.

"NGJ-LB is a critical piece of the overall NGJ system in that it focuses on the denial, degradation, deception and disruption of our adversaries' abilities to gain an advantage in that portion of the electromagnetic spectrum," said Capt. Michael Orr, PMA-234 program manager. "It delivers to the warfighter significant improvements in power, advanced jamming techniques, and jamming effectiveness over the legacy ALQ-99 system."

Each DET contract has a 20-month period of performance, during which the NGJ-LB team will assess the technological maturity of the industry partners' existing technologies in order to inform future NGJ-LB capability development, as well as define the NGJ-LB acquisition strategy.

Aerojet Rocketdyne Propulsion Critical to Successful Intercept Test for SM-3 Block IIA Missile

SACRAMENTO, Calif. — Aerojet Rocketdyne's propulsion systems supported a key intercept test of Raytheon's Standard Missile-3 Block IIA guided missile, the company said in an Oct. 26 release.

During the FTM-45 flight test, conducted by the U.S. Navy and Missile Defense Agency, the SM-3 Block IIA interceptor was launched from USS John Finn (DDG 113). The intercept test was designed to further prove the effectiveness of the larger and faster SM-3 Block IIA variant in intercepting a medium-range ballistic missile.

Aerojet Rocketdyne's Mk72 booster provided the first-stage propulsion on the SM-3 Block IIA, and the company's Throttling

Divert and Attitude Control System (TDACS) maneuvered the kinetic warhead to successfully impact the ballistic missile target.

"We are proud that our TDACS and Mk72 booster played key propulsion roles in demonstrating the capabilities of the SM-3 Block IIA to defend our nation," said Eileen Drake, Aerojet Rocketdyne CEO and president. "We are excited to support the transition to production for the advanced SM-3 Block IIA interceptor that provides increased range, velocity and capability."

This second intercept for the SM-3 Block IIA is a success we share with the Missile Defense Agency and the country of Japan, our cooperative development partners," said Dr. Taylor W. Lawrence, Raytheon Missile Systems president. "Together, we are building the most advanced solutions for ballistic missile defense."

The SM-3 Block IIA represents the newest generation of U.S. missile defense capabilities and is a key component of the European Phased Adaptive Approach for deployment at sea and ashore. Deployment of larger rocket motors and key technology improvements increases the area that can be defended and improves the probability of intercept against a larger threat set.

Coast Guard Cutter Dauntless Returns Home After Seizing

Approximately \$27 Million of Cocaine

PENSACOLA, Fla. — Coast Guard Cutter Dauntless is scheduled to return home to Naval Air Station Pensacola, Florida, Oct. 27 following a 54-day patrol in the Eastern Pacific Ocean, the Coast Guard 8th District said in an Oct. 27 release.

The 76-person crew interdicted two vessels with an estimated combined total of over 2,000 pounds of cocaine, which is worth more than approximately \$27.2 million dollars.

The crew departed Pensacola in September for a patrol in support of Operation Martillo. The operation sends Department of Defense and U.S. Coast Guard crews to work with partner nations to curtail the flow of drugs coming to the U.S. from Central and South America.

The crew of Dauntless assisted with dismantling transnational criminal organizations as part of the Department of Homeland Security's Southern Border Campaign Plan and the U.S. Coast Guard's Western Hemisphere Strategy.

The cutter patrolled over 7,000 nautical miles and transited the Panama Canal.

"Dauntless once again demonstrated the value of the U.S. Coast Guard to the nation as a military service, law enforcement agency and member of the intelligence community in securing our borders and protecting our national security interests," said Cmdr. Timothy Sommella, the commanding officer of Coast Guard Cutter Dauntless. "The interdictions and apprehensions were the result of months of preparation and hours upon hours of training and maintenance followed by precise mission execution at a moment's notice. The crew did a phenomenal job keeping the 50-year-old ship at the highest state of readiness while overcoming enormous logistic and engineering challenges,

including at-sea repairs to critical equipment to keep us in the fight."

Operation Martillo is a Joint Interagency Task Force South (JIATF-S) led multi-national detection, monitoring and interdiction operation conducted by U.S. Navy, Coast Guard, and Customs and Border Protection vessels and aircraft working in cooperation with military and law enforcement agencies from various Central and South American nations, Canada, the United Kingdom and the Netherlands.