

ATI, NAC Partner with Naval Surface Warfare Center Indian Head to Tackle Energetics Challenges

SUMMERVILLE, S.C. – Advanced Technology International (ATI), in partnership with the National Armaments Consortium (NAC), has signed an agreement to develop the Naval Energetic Systems and Technologies (NEST) Program. The NEST Program is a collaboration executed under an Other Transaction Agreement (OTA) with the Naval Surface Warfare Center Indian Head Division (NSWC IHD) to address the most significant energetics-related challenges facing the Navy and Marine Corps.

This effort is critical in enabling the Navy, Marine Corps and the entire Department of Defense to address current and future threats in the surface, subsurface, air, ground, littoral and expeditionary environments. The partner organizations will foster a collaboration among the engineers, researchers, and technologists at NSWC IHD and NAC's 900+ members from industry and academia. The OTA has a term of six years with a four-year option.

"ATI is delighted to continue its longstanding partnership with the National Armaments Consortium in executing this important Naval Energetics Systems and Technologies Program," said Chris Van Metre, CEO and president of ATI. "NAC members have a proven history of delivering innovative energetics technology solutions and eagerly anticipate the opportunity to continuing doing so in support of NSWC IHD."

"The NAC is honored to partner with ATI and the Naval Surface Warfare Center Indian Head Division to develop a collaborative

partnership focused on solving the biggest energetics challenges facing our nation,” said Charlie Zisette, NAC executive director. “Our members look forward to working with the incredible workforce at Indian Head to accelerate the development, adoption, and deployment of energetics-related technologies to provide our warfighters the decisive edge on the battlefield.”

The NSWC IHD is the Navy’s premier organization for ordnance, energetics and explosive ordnance disposal (EOD) solutions. Its workforce provides energetics R&D, manufacturing technology, engineering, testing, manufacturing and fleet support. Energetics are used in propulsion systems and ordnance, and include explosives, propellants, pyrotechnics, reactive materials, related chemicals and fuels.

NSWC IHD’s capabilities address all aspects of the energetics technical discipline including basic research, applied technology, technology demonstration and prototyping, engineering development, acquisition, low-rate production, in-service engineering/mishaps, failure investigations, surveillance, EOD technology/information and demilitarization.

General Dynamics Delivers First Knifefish Surface MCM UUV to U.S. Navy



The first Knifefish surface mine countermeasure UUV system has been delivered to U.S. Navy six months after final acceptance tests were completed. *General Dynamics Mission Systems* QUINCY, Mass. – General Dynamics Mission Systems recently delivered the first Knifefish surface mine countermeasure unmanned underwater vehicle (UUV) system under a contract awarded by the U.S. Navy on Aug. 26, 2019, the company said in a March 18 release.

The contract, awarded immediately after a successful Milestone C decision and approval to enter low-rate initial production, calls for the procurement of five Knifefish systems (10 total UUVs) and support equipment.

Knifefish is a medium class mine countermeasure UUV intended for deployment from the Navy's littoral combat ship and other Navy vessels of opportunity. Knifefish will reduce risk to personnel by operating within minefields as an off-board sensor while the host ship stays outside the minefield boundaries.

“Together with the U.S. Navy's Program Executive Office for Unmanned and Small Combatants, our Knifefish team has worked to deliver critical mine countermeasure mission capabilities

to protect our Sailors,” said Carlo Zaffanella, vice president and general manager at General Dynamics Mission Systems. “We designed Knifefish using an open architecture concept that can be quickly and efficiently modified to accommodate a wide range of missions.”

General Dynamics Mission Systems is the prime contractor for the Knifefish program. The company designed the tactical UUV using an open architecture concept that can be quickly and efficiently modified to accommodate a wide range of missions. The Knifefish SMCM UUV is based on the General Dynamics Bluefin Robotics Bluefin-21 deep-water autonomous undersea vehicle.

Navy MQ-25A Basing Assessment Finds No Significant Environmental Impact



The MQ-25A Stingray carrier-based unmanned aircraft system, which will be home based at Naval Base Ventura County, Point Mugu, California. *Boeing*

ARLINGTON, Va. – The Navy has released a final environmental assessment (EA) and Finding of No Significant Impact for home-basing the MQ-25A Stingray carrier-based unmanned aircraft system at Naval Base Ventura County, Point Mugu, California, the Navy said in a March 17 release.

The proposed action is to establish facilities and functions at NBVC Point Mugu to support home basing and operations of the MQ-25A Stingray. Under the proposed action, the Navy would home base 20 Stingray systems, construct a hangar, training facilities, and supporting infrastructure, perform air vehicle maintenance, provide training for operators and maintainers, conduct approximately 960 Stingray annual flight operations and station about 730 personnel, plus their family members.

The Stingray will enhance aircraft carrier capability and versatility through the integration of a persistent, sea-

based, multi-mission aerial refueling and intelligence, surveillance, and reconnaissance UAS into the carrier air wing, the Navy said. The Stingray will extend the range and reach of carrier air wings on the West Coast to meet current and future threats and enhance refueling and intelligence, surveillance, and reconnaissance capabilities in support of national defense objectives and policies.

Based on analysis presented in the environmental assessment, which has been prepared in accordance with the requirements of the National Environmental Policy Act, and in consultation with the U.S. Fish and Wildlife Service and California Coastal Commission, the Navy finds implementation of the proposed action will not significantly impact the quality of the human environment. Therefore, an environmental impact statement is not required.

The assessment prepared by the Navy is on file and interested parties may obtain a copy by downloading it from the project website: <https://www.nepa.navy.mil/stingray>.

Coast Guard Cutter Douglas Munro Returns Home from Final patrol



The Coast Guard Cutter Douglas Munro (WHEC 724) is pictured during their last Bering Sea patrol, in which the crew conducted boarding evolutions of the fishing fleet and were available to respond to search and rescue cases in March 2021. The Douglas Munro is the last operational 378-foot Secretary class cutter and will officially be decommissioned on April 24, 2021. U.S. Coast Guard courtesy photo.

KODIAK, Alaska – The crew aboard Coast Guard Cutter Douglas Munro, the service's last operational 378-foot, high endurance cutter, returned home to Kodiak, Alaska, on March 13, following a 49-day deployment in the Bering Sea, the Coast Guard 17th District said in a March 17 release.

While deployed, the crew of the Douglas Munro and its embarked MH-65 helicopter aviation detachment from Air Station Kodiak safeguarded the \$13.9 billion Alaskan fishing industry and provided search and rescue coverage in an area spanning 890,000 square miles. The crew conducted multiple fisheries boardings, ensuring compliance with commercial

fishing vessel regulations that ensure crew safety and the sustainability of fish stocks.

In addition to the operational challenges the crew faced in the Bering Sea, the COVID-19 pandemic required the crew to abide by strict health protection precautions and COVID testing regimens prior to the start of their deployment. While making a logistics stop in Dutch Harbor the crew received their first doses of the COVID-19 vaccinations.

“This has been an extremely exciting and rewarding patrol as it is the end of an era for not only this cutter, but also for all the 378s that have served the Coast Guard since 1967,” said Capt. Riley Gatewood, the Douglas Munro’s commanding officer. “The legacy of Signalman First Class Douglas Munro lives on due to the hard work put forth by the many crew members who spent time away from loved ones to accomplish Coast Guard missions aboard Douglas Munro. It is a great honor and privilege to serve as Commanding Officer of the Coast Guard’s last 378-foot, high endurance cutter.”

Commissioned Sept. 27, 1971, Douglas Munro was named in honor of Signalman First Class Douglas A. Munro, the U.S. Coast Guard’s only Medal of Honor recipient, killed during the Guadalcanal Campaign of World War II on that same date in 1942. The ship is scheduled to be decommissioned later this year. Douglas Munro’s legacy will continue with the National Security Class Cutter, Coast Guard Cutter Munro, homeported in Alameda, California.

Cutter Valiant Returns Home

after 26-Day Law-Enforcement Patrol



The Coast Guard Cutter Valiant crew returns to homeport Wednesday, Oct. 3, 2018, at Naval Station Mayport, Florida. The Valiant crew returned to homeport after a six-week counter-drug patrol in the Caribbean. *U.S. Coast Guard / Petty Officer 3rd Class Ryan Dickinson*

JACKSONVILLE, Fla.— The USCGC Valiant (WMEC-621) crew returned home to Naval Station Mayport March 16 after completing a 26-day patrol conducting law enforcement operations in the Caribbean Sea, the Coast Guard 7th District said in a release.

Coast Guard Cutter Valiant patrolled over 4,600 nautical miles in the Caribbean Sea, conducting counter-narcotics operations in support of Joint Interagency Task Force South (JIATF-S), Coast Guard District 7 and Coast Guard Sector San Juan, Puerto Rico.

While preparing for flight operations training with Coast Guard Air Station Borinquen, Puerto Rico, Valiant received information about a potential target of interest in the Mona Pass from a maritime patrol aircraft. Valiant shifted gears from training to law enforcement and interdicted a 16-foot go-fast style vessel, seizing over 520 pounds of cocaine, valued at over \$8.8 million, and apprehending three suspected narcotics traffickers.

Valiant also partnered with the USS Wichita (LCS 13), to safely transfer nine suspected narcotics traffickers and 132 additional pounds of cocaine for prosecution in the United States. The joint team ensured the safe transfer of all suspected traffickers, evidence, and narcotics to the United States for future prosecution.

Valiant's patrol started with a training availability cycle. However, the COVID-19 pandemic continued to present challenges including limited port calls and the need to completely isolate for 14 days to ensure the crew's health and safety before getting underway after several COVID-19 positive cases. Additionally, Valiant had to overcome a variety of mechanical issues. However, by partnering with Coast Guard maintenance support teams stationed in San Juan, Puerto Rico and deployable technical experts, Valiant's team of technical experts was able to execute repairs and continue on the mission.

"This was an extremely challenging patrol for team Valiant and I could not be more proud of the entire crew to overcome every obstacle and ultimately have several operational successes," said Cmdr. Jeff Payne, Valiant's commanding officer. "Our friends and families back home also deserve much of the credit for our success. While only underway for 26 days, Valiant's patrol truly started on 25 January when we began the training cycle. That was followed by a variety of mechanical and pandemic issues requiring both the crew and our families to constantly adjust and find solutions. However, we overcame

each challenge, teamed with our Department of Defense counterparts, and ultimately executed textbook missions protecting our shores and nation.”

The Valiant is a multi-mission 210-foot medium-endurance cutter. Missions include search and rescue, maritime law enforcement, marine environmental protection, homeland security and national defense operations.

Navy, Marine Corps Release Unmanned Campaign Plan



An autonomous vehicle dubbed Blue Water Maritime Logistics UAS flies over Unmanned Air Test and Evaluation (UX) 24 during a demonstration flight at Naval Air Station Patuxent River November 4, 2020. *U.S. Navy*

WASHINGTON, D.C. – The U.S. Navy and Marine Corps released on March 16 the Unmanned Campaign framework, which presents their strategy for making unmanned systems a trusted and integral part of warfighting.

Through a capabilities-based approach, the services seek to build a future where unmanned systems are at the front lines of U.S. competitive advantage.

The framework has five goals: Advance manned-unmanned teaming effects within the full range of naval and joint operations; build a digital infrastructure that integrates and adopts unmanned capabilities at speed and scale; incentivize rapid incremental development and testing cycles for unmanned systems; disaggregate common problems, solve once, and scale solutions across platforms and domains; create a capability-centric approach for unmanned contributions (platforms, systems, subsystems) to the force.

The framework provides a strategy for integrating these systems to provide lethal, survivable, and scalable effects supporting the future maritime mission. The Navy and Marine Corps are developing detailed technology maturation and acquisition roadmaps within a separate classified plan of action and milestones. The objective is to innovate quickly to provide solutions for complex problems of current and future conflicts.

The path forward requires a holistic approach to developing and deploying unmanned systems, ensuring individual technologies can operate within a broader architecture of networked warfighting systems, supported by the right people, policies, operational concepts, and other enablers.

The campaign framework focuses on how the Navy and Marine Corps will reduce risk and identify performance requirements. Using dedicated prototypes for each unmanned system and developing capability in this manner standardizes autonomy,

command and control, payload interfaces, and networks.

“The Navy and Marine Corps unmanned campaign plan serves as a roadmap for how we will realize a future where unmanned systems serve as an integral part of the Navy’s warfighting team in support of distributed maritime operations,” said Vice Adm. Jim Kilby, deputy chief of naval operations for warfighting requirements and capabilities. “The plan lays out how we will scale tested and proven systems as well as develop the core technologies required to successfully integrate unmanned systems into the fleet.”

The framework provides guidance for the services to pursue an agile and aggressive approach to develop the core technologies required to successfully integrate unmanned systems into the Navy’s future force structure. The services must invest in the networks, control systems, infrastructure, interfaces, artificial intelligence, and data required to support unmanned systems to succeed.

“The Navy and Marine Corps unmanned campaign plan will guide our naval research and development investments, and through the acquisition process, we will collaborate with our industry partners to design, build, field and sustain manned and unmanned teaming throughout the fleet,” said Frederick J. Stefany, acting assistant secretary of the Navy for research, development and acquisition. “It also sets the framework to enable the Department of the Navy to accelerate, deliver and scale valuable manned and unmanned capabilities.”

Today’s global security environment has seen a return to great power competition. This shift has placed the Navy at an inflection point where a traditional force structure will not be enough in the face of new warfighting demands. Autonomous systems are not a replacement, but provide additional capacity and capability to the combatant force and allow commanders to accept risk where they couldn’t before.

“A family of unmanned systems is critical to the employment of our force during distributed maritime operations. The goal is for us to be able to persist inside the weapons engagement zone of any adversary, to create problems and challenges, to make that adversary change their behavior or course of action they intend to pursue. These systems will be prevalent in all mediums: surface, subsurface, ground and air. Manned/unmanned teaming increases our lethality while allowing us to accept less risk in certain situations. Coordinating our efforts as a naval force will expedite the concept development and material solutions for our Marines and Sailors,” said Lt. Gen. Eric Smith, commanding general of Marine Corps Combat Development Command and deputy commandant for combat development and integration.

The Unmanned Campaign Plan is comprised of the Unmanned Campaign Framework and a classified Unmanned Plan of Actions and Milestones.

The Unmanned Campaign framework can be found at: [Department of the Navy Unmanned Campaign Framework.](#)

State Dept. Approves \$1.8B Sale of P-8A Patrol Aircraft to Germany



A P-8A Poseidon maritime patrol aircraft assigned to the “Grey Knights” of Patrol Squadron (VP) 46, sits on the flight line, Jan. 7, 2021. Germany is seeking a foreign military sale of five such aircraft worth nearly \$1.8 billion. *U.S. Navy / Mass Communication Specialist 2nd Class Austin Ingram*

WASHINGTON – The State Department has approved a possible foreign military sale to Germany of P-8A aircraft and associated support and related equipment, for an estimated cost of \$1.77 billion, the Defense Security Cooperation Agency said in a March 12 release.

Germany has requested five P-8As aircraft and their associated mission systems and avionics. The sale also would include “aircraft spares; spare engine; support equipment; operational support systems; training; training devices; maintenance trainer/classrooms; publications; software; engineering technical assistance; logistics technical assistance; country liaison officer support; contractor engineering technical services; repair and return; transportation; aircraft ferry;

and other associated training and support; and other related elements of logistics and program support,” the release said.

The proposed sale will improve Germany’s capability to meet current and future threats by providing critical capabilities to coalition maritime operations. Germany currently operates the Lockheed P-3C Orion, but that aircraft is reaching end-of-life and will retire in 2024. Germany plans to replace it with the P-8A Poseidon. The proposed sale will allow Germany to modernize and sustain its maritime surveillance aircraft capability for the next 30 years.

The prime contractor will be the Boeing Co., Seattle, Washington.

Coast Guard Commissions 42nd Sentinel-Class Cutter



Vice Adm. Scott Buschman, the deputy commandant for operations, addresses the USCGC Robert Goldman (WPC 1142) crew on March 12, 2021, in Key West, Florida. The Robert Goldman was officially commissioned into service and will now transit to Bahrain for service as part of Patrol Forces Southwest Asia. *U.S. Coast Guard / Senior Chief Petty Officer Sara Muir*
KEY WEST, Fla. – The USCGC Robert Goldman (WPC 1142), Patrol Forces Southwest Asia's (PATFORSWA's) second Sentinel-class cutter, was commissioned into service at Coast Guard Sector Key West, March 12, the Coast Guard Atlantic Area said in March 12 release.

Vice Adm. Scott Buschman, the deputy commandant for operations, presided over the 42nd Sentinel-class cutter ceremony.

The Robert Goldman is the second of six FRCs to be homeported in Manama, Bahrain, which will replace the aging 110-foot Island Class Patrol Boats built 30 years ago. Stationing FRCs

in Bahrain supports PATFORSWA, the Coast Guard's largest unit outside of the U.S., and its mission to train, organize, equip, support and deploy combat-ready Coast Guard forces in support of Central Command and national security objectives.

PATFORSWA works with Naval Forces Central Command to conduct maritime operations forwarding U.S. interests. These efforts are to deter and counter disruptive countries, defeat violent extremism, and strengthen partner nations' maritime capabilities to secure the maritime environment in the Central Command area of responsibility.

Each FRC bears the name of an enlisted Coast Guard hero who distinguished himself or herself in the line of duty. Robert Goldman enlisted in the Coast Guard in October 1942 as a pharmacist's mate. In 1944 he reported for duty aboard the Coast Guard-manned, 328-foot Landing Ship, Tank-66, taking part in a campaign to retake the Philippines from the Japanese.

On Nov. 12, 1944, a Japanese plane flew straight for the men gathered on the starboard side of the LST's stern. Goldman witnessed the enemy fighter crash into the deck and exploded. Goldman's back was on fire from the aviation fuel, his right leg received shrapnel from the crashing fighter, and he suffered severe shock from the sudden crash and the resulting carnage. Disregarding his injuries, Goldman courageously treated the wounded and dying. For his heroic deeds, Goldman received the Purple Heart and Bronze Star medals.

Several Goldman family members were in attendance, including his three sons and his daughter-in-law, Elly Goldman, the ship's sponsor, and daughter-in-law, Ms. Gail Fresia. Fresia, in nautical tradition, presented the long glass to the crew to set the first official watch aboard the ship.

The Coast Guard took delivery of Robert Goldman on Dec. 21, 2020, in Key West. They will transit to Bahrain later this

year with their sister ship, the Charles Moulthrope (WPC 1141), delivered on Oct. 22, 2020, and commissioned on Jan. 21, in Portsmouth, Virginia.

The Coast Guard has ordered 64 FRCs to date. Over 40 are now in service: Charles Moulthrope and Robert Goldman, 12 in Florida, seven in Puerto Rico, four in California, three each in Hawaii, Texas, and New Jersey, and two each in Alaska, Mississippi, and North Carolina. Two FRCs arrived in their homeport of Apra Harbor, Guam, in 2020, with one more to come.

The fast response cutters are designed to patrol coastal regions and are operating in an increasingly expeditionary manner. They feature advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance equipment and launch and recover standardized small boats from the stern.

Cutter Bertholf Returns to Alameda following Three-Month Patrol



A boarding team member from the U.S. Coast Guard Cutter Bertholf stands on top of a semi-submersible boat Feb. 1, 2021, in the Eastern Pacific Ocean. The Bertholf crew completed a 3-month, 15,000 mile, multi-mission patrol. *U.S. Coast Guard*

ALAMEDA, Calif. – The crew of the Coast Guard Cutter Bertholf (WMSL 750) returned home to Alameda March 15 following a three-month, 15,000-mile, multi-mission patrol, the Coast Guard Pacific Area said in a release.

In January, the Bertholf's crew boarded three vessels in the Eastern Pacific Ocean.

“Early in the patrol, we interdicted three go-fast vessels over a span of six hours,” said Capt. Brian Anderson, Bertholf commanding officer. “We used every available resource including all three pursuit boats, our helicopter and Scan Eagle drone to successfully stop them in their tracks, resulting in the apprehension of four suspected drug smugglers and seizure of over 1,700 pounds of cocaine. It was quite an exciting evening and demonstrated our full capabilities and our commitment to keeping America safe and secure.”

The Bertholf mobilized its advanced capabilities that included a small unmanned aircraft system, an attached Helicopter Interdiction Tactical Squadron MH-65 helicopter and aircrew, and an embarked Law Enforcement Detachment from the Pacific Tactical Law Enforcement Team. The crew spent more than 50 days patrolling the Eastern Pacific Ocean on a counter-narcotics mission that resulted in the apprehension of approximately 6,200 pounds of cocaine with an estimated value of more than \$107 million.

“This is my last deployment aboard the Bertholf,” Anderson said. “It’s been a privilege to serve, especially with this crew, who have gone above and beyond in every respect to accomplishing the mission safely and effectively amidst a pandemic. I couldn’t be more proud of them.”

The Bertholf is a 418-foot national security cutter, commissioned in 2008 and homeported in Alameda.

Coast Guard Commandant Outlines Future of Service in San Diego



Adm. Karl Schultz, the commandant of the Coast Guard, speaks during the 2021 State of the Coast Guard Address in San Diego March 11, 2021. During the annual address, Schultz reflected on the organization's successes over the past year and outlined the shared vision for the future of the Coast Guard.
U.S. Coast Guard / Petty Officer 2nd Class Travis Magee

SAN DIEGO – The Commandant of the United States Coast Guard delivered his third state of the Coast Guard address March 11 at Coast Guard Sector San Diego, Coast Guard Headquarters said in a release.

Adm. Karl Schultz outlined his vision for the service to protect the homeland, enhance economic prosperity, and advance America's national security interests. Schultz accentuated the dedication and sacrifice of Coast Guard members stationed across the country and deployed during this past year of unprecedented challenges.

“Across the Service, I see individual Coast Guard members contributing to their communities, and standing the watch to secure the Homeland, enhance our economic prosperity, and

advance our national interests across the globe,” Schultz said.

During the annual address, Schultz reflected on the organization’s success over the past year and featured members of the Coast Guard who excelled in crisis, rescued mariners in distress, interdicted illicit narcotics, and responded to a record-setting Atlantic basin hurricane season, all complicated by the challenges presented by the COVID-19 global pandemic.

“Coast Guard members stood the watch amidst adversity, showcasing what makes our Service special – our people,” Schultz told the mostly virtual attendees this year due to COVID-19 restrictions.

He also underscored new Coast Guard capabilities in Southern California. “In April, we will break ground on our first new aviation unit in more than two decades – located right here in Southern California. Air Station Ventura County will significantly enhance our aviation multi-mission capability in the region,” Schultz said.

The service chief discussed a variety of ongoing and emerging fleet recapitalization programs, providing updates on the Polar Security and Offshore Patrol Cutter acquisitions; efforts to replace the aging fleet of inland buoy and construction tenders with Waterways Commerce Cutters; and initial steps to transition to an all MH-60 Jayhawk helicopter fleet.

Schultz further highlighted the Coast Guard’s operations in the nation’s system of ports and waterways, better known as the Marine Transportation System (MTS). The MTS is a key economic engine for the nation, fueling 26% of America’s gross domestic product (GDP) which equates to \$5.4 trillion of annual economic activity and 31 million jobs.

“Our seaports are the gateways for 90% of international trade,

and the Coast Guard helps to oversee this vital economic engine that ensures energy products and other goods arrive at businesses and storefronts in every corner of our country,” Schultz highlighted.

Download his full remarks at www.uscg.mil/AlwaysReady.