

DoD Announces Establishment of Arctic Regional Center



KOTZEBUE, Alaska – The sun sets over a remote part of The Last Frontier in Kotzebue, Alaska. *U.S. COAST GUARD / Joel Casto, D17*

ARLINGTON, Va. – Secretary of Defense Lloyd J. Austin III announced on June 9 the establishment of a new Department of Defense Regional Center, the Ted Stevens Center for Arctic Security Studies. The center will bring increased cooperation on the unique challenges and security concerns related to the Arctic region.

Defense Department Regional Centers are international academic venues for bilateral and multilateral research, communication, and training with the goal of building strong, sustainable international networks of security leaders. The Ted Stevens Center for Arctic Security Studies will develop collaborative insights with allies and partners.

“The center will support the U.S. Interim National Security Strategic Guidance direction to work with like-minded partners and across the interagency to pool our collective strength and advance shared interests,” Secretary Austin said. “It will address the need for U.S. engagement and international cooperation to strengthen the rules-based order in the region and tackle shared challenges such as climate change.”

The Ted Stevens Center will provide a new venue to collaborate with our allies and partners to advance shared interests for a peaceful and prosperous Arctic. The Department is currently determining the appropriate location for the center.

HII Wins Navy Planning Yard Contract Worth a Potential \$724 Million



The amphibious transport dock ship USS San Antonio (LPD 17) transits the Atlantic Ocean during a photo exercise, May 17, 2021. *U.S. NAVY / Mass Communication Specialist Seaman Jacob M. Turrigiano*

PASCAGOULA, Miss. – Huntington Ingalls Industries' Ingalls Shipbuilding division has been awarded a contract with a potential total value of \$724 million for planning yard services in support of in-service amphibious ships, the company announced June 8.

“Ingalls has a 40-year history of providing planning yard services to ships in active service,” Ingalls Shipbuilding President Kari Wilkinson said. “We consider this a core competency and a critical part of our mission to support the Navy in meeting fleet commitments around the world.”

Planning yard services provided will be in support of amphibious transport dock (LPD 17), assault (LHD 1 and LHA 6), command (LCC 19), and dock landing (LSD 41/49) classes of ships. The contract includes options over a seven-year period and covers fleet modernization availability planning; engineering, design and logistics support; material procurement; program and configuration data management; and on-site technical support through established homeport and planning yard offices and resources.

Raytheon Expands Logistics Support Marine Corps Ground Equipment



U.S. Marines with Light Armored Reconnaissance Company, Battalion Landing Team 1/1, 11th Marine Expeditionary Unit (MEU), operate a Light Armored Vehicle after coming ashore during an expeditionary advance base exercise, May 15. *U.S. MARINE CORPS Corps / Sgt. Alexis Flores*

ARLINGTON, Va. – Raytheon Intelligence & Space, a Raytheon Technologies business, will provide logistics and repair services for all U.S. Marine Corps ground equipment under a five-year, \$495 million contract, the company announced in a June 8 release.

The company will deliver more than 10,000 repaired parts per year to sustain the Marines' combat and tactical ground equipment, ranging from armored vehicles to ground radars and communications systems.

“We provide logistics support for deployed systems around the globe,” said Bob Williams, vice president of Global Training & Logistics for Raytheon Intelligence & Space. “Our job is to ensure no mission is ever delayed because of a needed repair or missing part.”

This contract is an expansion of work the company has supported for 17 years, nearly doubling the anticipated amount of equipment being managed and expanding the company's support to every major Marine Corps installation in the world.

NGC to Develop C5ISR and Control Systems for USCG Offshore Patrol Cutters



Adm. Charles W. Ray, vice commandant of the Coast Guard, tours the construction of the first offshore patrol cutter at the Eastern Shipbuilding Group shipyard in Panama City, Florida, Thursday, March 14, 2019. The OPCs will complement the capabilities of the Coast Guard's national security cutters, fast response cutters, and polar security cutters as an essential element of the Department of Homeland Security's layered security strategy. *U.S. COAST GUARD / Petty Officer 2nd Class Loumania Stewart*

CHARLOTTESVILLE, Va. – Northrop Grumman Corp. has been awarded a newly expanded role as systems integrator for C5ISR and control systems on the U.S. Coast Guard Offshore Patrol Cutter (OPC), by Eastern Shipbuilding Group (ESG), the prime contractor for the OPC program, the company said in a June 8 release.

In a newly expanded role as C5ISR systems integrator, Northrop Grumman is responsible for integrating all cyber hardened C5ISR systems, including command and control, communications, navigation and the shipboard computer networking systems.

“With C5ISR and control system test and integration underway, the ESG-Northrop Grumman team hasn't missed a beat,” said Todd Leavitt, vice president, maritime systems and integration, Northrop Grumman. “The effort and resiliency shown by our teammates at Eastern Shipbuilding Group has been outstanding.”

Northrop Grumman's responsibilities for the OPC platform include the integrated bridge, navigation, command and control, computing network, data distribution, machinery control, and propulsion control systems, cyber/information assurance, testing and integration work.

Navy Awards Austal USA \$44M to Develop Autonomous Capability in EPF 13



USNS YUMA (T-EPF 8) moors pierside Durres, Albania to assist JLOTS-21 in intra-theater lift capabilities. Austal USA has been awarded \$44 million to build T-EPF 13, the future USNS Apalachicola. *U.S. MILITARY SEALIFT COMMAND*

HENDERSON, Western Australia – Austal Ltd. announced June 8 that Austal USA has been awarded a \$44 million fixed-price, undefinitized contract modification for the design, procurement, production implementation and demonstration of autonomous capability on Expeditionary Fast Transport (EPF) 13, USNS Apalachicola.

Austal USA is constructing 15 Spearhead-class EPF vessels for the U.S. Navy and has delivered twelve EPFs since December 2012. EPF 13 is currently under construction at Austal USA's Mobile, Alabama shipyard.

Austal Limited Chief Executive Officer Paddy Gregg said the highly anticipated contract was another significant, strategic step towards greater autonomous vessel capability.

“Austal noted in our half year results presentation that the

funding for an autonomous EPF conversion contract had been appropriated in the USA government 2021 budget, so we are pleased that it has now been converted into a formal contract,” Gregg said. “Winning a \$44 million contract is welcome from a revenue perspective, but strategically this contract award is even more significant for Austal.

“Autonomous vessel capability has been identified as an area of strategic importance by the U.S. Navy, so it is promising for Austal that the U.S. Navy has awarded Austal USA a contract for the design, procurement, production implementation and demonstration of autonomous capability of one of our vessels, the Expeditionary Fast Transport (EPF) 13, the future USNS Apalachicola,” he said.

The Spearhead-class EPF is a 103-meter high-speed aluminum catamaran with a large, 1,800 square meter cargo deck, medium-lift helicopter deck and seating for more than 300 embarked troops; providing a fast, high-payload transport capability to combatant commanders around the world.

The Austal-designed and built EPFs support a wide range of missions, from maritime security operations to humanitarian aid and disaster relief.

Two EPF’s are currently under construction at Austal USA’s shipyard, the USNS Apalachicola (EPF 13) and the USNS Cody (EPF 14).

In addition to the EPF program, Austal USA is contracted to deliver 19 Independence-class littoral combat ships (LCS) for the Navy, of which 13 have been delivered since 2010. The 15th Independence-class LCS, the future USS Canberra, was christened at Austal USA on June 5.

General Dynamics Mission Systems to Build Containers for LCS



Independence-variant littoral combat ship USS Omaha (LCS 12) sails in the Pacific Ocean, May 16. *U.S. NAVY / Ensign Alexandra Green*

Marion, Va. – General Dynamics Mission Systems was awarded a multi-million-dollar firm fixed-price contract from Northrop Grumman to provide Reduced Weight Basic Operating Assembly (RWBOA) containers for U.S. Navy littoral combat ships (LCS), the company said in a release. The containers, developed specifically for the Navy, will be produced at General Dynamics' Marion, Virginia facility, with first delivery expected in December.

RWBOA containers are lighter than standard 20-foot shipping containers but offer the same strength and durability. The containers will be used aboard LCS to house modular mission packages that equip the ship with specific mission capabilities needed to perform mine countermeasures, surface warfare or anti-submarine operations.

“The new Reduced Weight Basic Operating Assembly containers are a great example of how we have been able to leverage our expertise designing tactical shelters for the Army and tailor a solution that meets the specific needs of the Navy,” said John Schulz, director of Structures at General Dynamics Mission Systems.

“The new containers are extremely lightweight and will provide the Navy with enhanced corrosion protection in comparison to conventional steel container designs. The use of Reduced Weight Basic Operating Assembly containers provides the Navy with the essential flexibility and mobility they need to

quickly transport and deploy the capabilities to support their missions while at sea.”

Curtiss-Wright to Upgrade Navy Helicopter Mission and Flight Management Computers to Meet New Threats



An MH-60R Seahawk helicopter assigned to the Swamp Foxes of Helicopter Maritime Strike Squadron (HSM) 74 flies in front of the guided-missile cruiser USS San Jacinto (CG 56). Curtiss-Wright's Defense Solutions has been awarded a contract to upgrade MH-60R/S Seahawk mission computers and flight management computers *U.S. NAVY / French navy / Chief Petty Officer Bruno Gaudry*

ASHBURN, Va. – Curtiss-Wright's Defense Solutions division announced June 7 it was awarded a contract by Lockheed Martin to provide its Modular Open-Systems Approach (MOSA) computers and video processing modules to upgrade the Mission Computer and Flight Management Computer (MC/FMC) on the U.S. Navy's fleet of Sikorsky MH-60R/S Seahawk helicopters.

The use of commercial off-the-shelf (COTS)-based MOSA solutions and commercial best practices will deliver cost-effective new capabilities and support more economical and timely upgrades of the helicopter's avionics systems. Curtiss-Wright's selection on this upgrade program is representative of its ability to rapidly and cost-effectively modernize legacy military platforms with open-standards solutions, the

company said.

The initial contract is valued at \$24 million. The estimated lifetime value of the contract is \$70 million. Under the multi-year contract, shipments began in December 2020.

“We are very pleased that Lockheed Martin selected us to provide our defense-focused open standards-based COTS single board computer and video processing solutions to support the upgrade of the mission computer and flight management computer on the U.S. Navy’s MH-60R/S helicopter fleet,” said Chris Wiltsey, senior vice president and general manager, Curtiss-Wright Defense Solutions. “This agreement, which further strengthens the long and successful relationship we have with Lockheed Martin, highlights Curtiss-Wright’s ability to enhance interoperability and improve cost efficiencies with electronics systems that adhere to the DoD’s mandate for a modular open architecture approach.”

The MH-60R/S MC/FMC upgrade will bring advanced display graphics capabilities to this important helicopter platform, providing compatibility with existing imaging and display systems and offering enhanced capabilities for future imaging sensors and high-resolution displays. The COTS modules also enable integration of Curtiss-Wright’s enhanced Trusted and Secure Computing features to ensure system resiliency and secure operation in response to cyber attacks.

Navy Awards Austal Functional Design Contract for T-ATS

Ship



A rendering of the Navajo-class Towing, Salvage and Rescue Ship (T-ATS). *AUSTAL USA*

MOBILE, Ala. – Austal USA was awarded a \$3.6 million contract by the U.S. Navy for the functional design of the Navajo-class Towing, Salvage and Rescue Ship (T-ATS) May 28, the company said in a June 7 release. This marks the first steel new construction contract for the company after breaking ground on a new steel manufacturing line in March. The line will be operational in April 2022.

Austal will define detailed requirements to construct, test, and deliver T-ATS ships in accordance with government ship specifications. T-ATS is a 263-foot (80 meter) steel hulled multi-mission platform scheduled to replace the capabilities of both the retiring Rescue and Salvage Ship (T-ARS 50) class and Fleet Ocean Tug (T-ATF 166) class mission requirements. The ships are able to support towing, salvage, rescue, oil spill response, humanitarian assistance, and wide area search and surveillance.

T-ATS can also embark containerized systems including cyber, electronic warfare, and decoy and surveillance packages. The work will be performed in Mobile, Alabama.

Marine Corps Completes First AH-1Z Flight with Link-16



The U.S. Marine Corps successfully demonstrated in-flight

testing of a two-way connection between an AH-1Z Viper helicopter and a ground station using new Link-16 hardware and software. *BELL TEXTRON*

PATUXENT RIVER, Md. – The U.S. Marine Corps has successfully demonstrated in flight testing a two-way connection between the AH-1Z Viper helicopter and a ground station using new Link-16 hardware and software, Bell Textron Inc. said in a June 7 release.

The company manufactures the AH-1Z Viper and Northrop Grumman Corp. has developed the Link-16 system. Link-16 is part of a defined road map of planned improvements designed to ensure the H-1 platform maintains its technological edge and combat capability throughout its service life.

“Bell is excited to help bring this capability to the USMC H-1 community,” said Mike Deslatte, Bell H-1 vice president and program director. “The ability to participate in the modern and connected battlefield makes the aircraft more lethal and better-equipped to support Marines on the ground.”

Link-16 enables the AH-1Z – unlike any other helicopter in the world with its fully integrated anti-air capability and AIM-9 Sidewinder – to quickly obtain and share information from its sensors with other weapons systems using its onboard digital architecture. This is accomplished through Northrop Grumman’s Link-16 package, which includes a new digital moving map, a new security architecture, and the Link-16 and Advanced Networking Wideband Waveform (ANW2) datalinks.

“Northrop Grumman’s Link-16 system will help U.S. Marines today, and well into the future, with critical technology that facilitates coordination, collaboration, and interoperability. By enabling the display and integration of Link-16 data with the H-1 system, pilots of the AH-1Z have greater situational awareness and enhanced survivability,” said James Conroy, vice president, navigation, targeting and survivability at Northrop Grumman. “This milestone also highlights our focus on “speed

to fleet,” due to the unprecedented time between demonstrating the concept and getting to first flight. Flexibility and adaptability, using next generation agile development practices, are the only ways to innovate and keep pace with changing mission needs.”

In a collaboration between the Marine Corps’ H-1 Light/Attack Helicopter program (PMA-276), Bell, and Northrop Grumman, the team leveraged commercial best practices of Agile Development methodologies. This strategy provided an under-glass solution from concept requirements to vehicle design testing in 12 months.

Northrop Grumman’s Lead Technology Integration group rapidly architected and integrated a mission package for Link-16, including a modern digital mapping solution, for the H-1 platform while Bell’s H-1 program team provided all of the necessary vehicle analysis and modifications to incorporate the mission equipment throughout the existing integrated systems of the AH-1Z. Together, the teams are redefining what it means to rapidly field integrated solutions on existing fielded platforms to increase warfighter capabilities.

“The H-1 has decades of battlefield experience, it has evolved to fight in numerous environments,” said Col. Vasilios Pappas, PMA-276 program manager. “The integration of Link-16 aligns with this platforms’ ability to adapt to the ever-changing threat and meet the needs of current and future warfighters.”

The Marine Corps has flight tests planned for the AH-1Z throughout the summer, which will be followed by flight testing of Link-16 on the UH-1Y Venom. The service anticipates AH-1Z initial fleet integration with Link 16 in 2022.

Ghost Fleet Overlord USV Program Completes Second Autonomous Transit to the Pacific



A Ghost Fleet Overlord vessel takes part in a capstone demonstration during the conclusion of Phase I of the program in September, 2020. Two existing commercial fast supply vessels were converted into unmanned surface vessels for Overlord testing, which will play a vital role in informing the Navy's new classes of USVs. *U.S. NAVY*

ARLINGTON, Va. – The Office of the Secretary of Defense Strategic Capabilities Office (SCO), in partnership with the U.S. Navy, recently conducted a second long-range autonomous transit with a Ghost Fleet Overlord Unmanned Surface Vessel (USV) from the Gulf Coast, passing through the Panama Canal, to the West Coast.

The unmanned vessel, named Nomad, traveled 4,421 nautical miles, 98% of which was in autonomous mode. The first Ghost Fleet Overlord vessel, Ranger, completed a similar transit in October 2020. Both USVs passed through the Panama Canal while in manual mode.

The Nomad transit provided an opportunity for extended testing of vessel endurance, autonomous operations, and interoperability of government command, control, communications, computers and intelligence systems with vendor autonomy, hull mechanical and hull electrical systems. Remote mission command and control for the Nomad transit was conducted from an ashore Unmanned Operations Center operated by U.S. Navy Sailors from Surface Development Squadron One.

“This is another significant milestone for SCO's Ghost Fleet

Overlord program and supports the Navy's Unmanned Campaign Framework by adding a second Overlord vessel to the West Coast. The SC0 Ghost Fleet Overlord program serves to inform Navy prototype efforts by integrating mature technologies to accelerate Service priorities and is a key piece of the build a little, test a little, and learn a lot philosophy articulated in the Navy Unmanned Campaign Framework," said SC0 Director Jay Dryer.

The NomadUSV is joining the Ranger USV to participate in fleet experimentation exercises to further mature the autonomy systems, demonstrate system reliability, and explore employment concepts for coordinated operations with manned combatants while stressing our command-and-control systems. Both vessels will continue to provide key system data, enable fleet operator feedback, and demonstrate capabilities essential to continued maturation and development of USV concepts of operation.

The Ghost Fleet Overlord program is currently in its second phase, which began in September 2019 and focuses on the integration of government-furnished command-and-control systems and payloads and more complex and challenging naval operations experimentation. Phase II is being conducted with the same vessels and industry teams that took part in Phase I and will conclude in early 2022, at which point both Ghost Fleet Overlord vessels will transition to the Navy for further experimentation.

The Ghost Fleet Overlord program, executed by SC0 in partnership with Program Executive Office – Unmanned and Small Combatants, is playing a central role in informing the Navy's new classes of USVs and serving as part of extensive technical risk-reduction efforts.

"Our close partnership with SC0 on the Overlord program is accelerating the technology demonstration, CONOPs [concept of operations] development, and operational command and control

of unmanned surface vessels in direct alignment with the Navy's plans," said Capt. Pete Small, Navy program manager for USVs.

Two additional Ghost Fleet Overlord prototype USVs are currently under construction and will be used to expand and accelerate the Navy's experimentation and testing.