

AUSTAL USA RECEIVES ORDER FOR THREE VIRGINIA-CLASS SUBMARINE MODULES



[Release from Austal USA](#)

MOBILE, Ala. – Austal USA received an order for the manufacture and outfitting of three electronic deck modules for the Virginia-class submarine program. The order, valued at \$10.6 million, was issued by prime contractor General Dynamics Electric Boat. Construction will begin in fall 2023 and the modules are scheduled to be delivered to Electric Boat by the middle of 2025.

The construction of these modules is the result of the strategic partnership formed in 2022 between Austal USA and Electric Boat, supported by the U.S. Navy, to take a strategic sourcing approach to expanding the production capacity of the submarine industrial base. As part of the partnership, Austal USA is constructing and outfitting Command and Control Systems Modules (CCSM) and Electronic Deck Modules (EDM) for the Virginia- and Columbia-class programs.

“This order signifies the confidence Electric Boat and the Navy have in Austal’s talented workforce to maintain a steady production line building quality modules on time and on budget,” said Austal USA Vice President of New Construction Programs Dave Growden. “We are excited to play an important role in the submarine industrial base and about being part of a program critical to our Nation’s security.”

Austal USA has continued to expand its facilities and workforce to support the growing demand of the submarine industrial base. The order for the three modules follows an initial order for a CCSM in February 2023.

First missionized Coast Guard HC-27J completes inaugural flight



[U.S. Coast Guard Release](#)

Sept. 6, 2023 – The Coast Guard successfully performed the first flight of the newly missionized HC-27J prototype

aircraft, CGNR 2712, today at Naval Air Station (NAS) Patuxent River, Maryland. The milestone flight is part of the Coast Guard's effort to enhance its fixed-wing surveillance aircraft fleet with improved capabilities to gather, process and transmit information during maritime patrol aircraft joint operations.

The flight was a culmination of efforts by the Coast Guard's Aviation Projects Acquisition Center and Medium Range Surveillance Aircraft program office along with Naval Air Systems Command's Naval Air Warfare Center Aircraft Division AIRWorks Team and the original equipment manufacturer, Leonardo Aircraft Division (LAD). The first flight of the HC-27J was a modified functional check flight and was tailored to exercise the program's Safety of Flight and Safety of Test systems prior to fully proceeding into the flight test phase. The initial flight tests will be performed by the Naval Air Warfare Center Aircraft Division's Air Test and Evaluation Squadron (VX) 20 HC-27J test team with support from the Coast Guard and LAD at NAS Patuxent River.

The Coast Guard is in the process of missionizing 14 C-27J aircraft that were transferred from the U.S. Air Force under the National Defense Authorization Act of 2014. As originally delivered, the C-27Js were outfitted with weather radar and communications equipment. Missionization refers to the process of integrating specialized equipment, such as radar, sensors and processors, that enhance the aircraft's effectiveness in carrying out Coast Guard missions. The Coast Guard is using Minotaur mission system architecture developed by the Navy across its fixed wing fleet to integrate the specialized components such as surface search radar and electro-optical/infrared sensors because it offers significant increases in speed and memory capability.

Bell Begins HSVTOL Risk Reduction Testing at Holloman Air Force Base



Release from Bell Textron

HOLLOMAN AIR FORCE BASE, N.M. (13 September, 2023) Bell Textron Inc., a Textron Inc. (NYSE: TXT) company, today announced the delivery of a High-Speed Vertical Takeoff and Landing (HSV) test article to Holloman Air Force Base for demonstration and technology evaluation. The team will leverage the Arnold Engineering Development Complex Holloman High Speed Test Track to test the folding rotor, integrated

propulsion and flight control technologies at representative flight speeds.

“The HSVTOL test article delivery and start of sled testing operations serves as a major milestone in our mission to develop the next generation of high-speed vertical lift aircraft,” said Jason Hurst, executive vice president, Engineering, Bell. “Bell plans to showcase HSVTOL technology informed by more than 85 years of high-speed rotorcraft development and leverage lessons learned to produce a flying prototype with game-changing capabilities.”

The objective of Bell’s sled test operations is to validate key technologies through a full-scale, integrated demonstration in a representative operating environment. Bell plans for the test article to execute a series of HSVTOL high-speed transition maneuvers, a first of its kind capability for vertical lift aircraft. Prior to delivery at Holloman Air Force Base, Bell successfully completed functional demonstrations at Bell’s Flight Research Center.

Bell’s High-Speed Vertical Takeoff and Landing (HSVTOL) technology blends the hover capability of a helicopter with the speed (400+ kts), range, and survivability of jet aircraft. Bell has developed high-speed vertical lift technology for more than 85 years, pioneering innovative VTOL configurations like the X-14, X-22, XV-3 and XV-15 for NASA, the U.S Army and U.S. Air Force, and continues to build on its proven history of fast flight from the Bell X-1.

Austal USA Awarded US\$91.5 m

LCU Contract by US Navy



[Release from Austal USA](#)

Sep 12, 2023

Austal USA Awarded US\$91.5 m LCU Contract by US Navy

Austal Limited (Austal) (ASX: ASB) is pleased to announce Austal USA has been awarded a US\$91,535,551 (AU\$143.4 million) fixed-price incentive and firm-fixed-price type contract for the construction of three Landing Craft Utility (LCU) 1700 class craft.

The contract follows a previous contract for the detail design of the vessels and includes options for manufacture of an additional nine vessels and associated support arrangements.

The steel hull LCU 1700-class possess heavy-lift capability with 170 ton payload capacity, and will be deployed with the Navy's amphibious assault ships to support a range of military operations including the delivery of tracked and/or wheeled vehicles, troops and cargo from ship to shore, shore to shore and back to ship.

Austal Limited Chief Executive Officer Paddy Gregg said the new contract reinforces Austal USA's position as a critical capability partner to the United States Navy and further diversified the company's steel shipbuilding portfolio.

"The LCU are an essential capability of the US Navy, and we're proud to be contributing to this important shipbuilding program with up to 12 vessels to be constructed," he said.

"Austal USA continues to diversify its product portfolio, with production continuing on two Towing, Salvage and Rescue Ships (T-ATS) and the 8,500sq metre Auxiliary Floating Dry Dock Medium (AFDM) on the company's state-of-the-art steel line. Austal USA also holds multiple ship contracts for the Navy's TAGOS-25 ocean surveillance ship, and the U.S. Coast Guard's Heritage-class Offshore Patrol Cutter (OPC) programs."

The LCU 1700-class has a roll-on / roll-off monohull configuration, with hydraulically controlled bow and stern ramps that allow multiple vessels to connect and form a causeway for fast and secure unloading and loading. The craft are designed to be transported within, and load/unload from the well decks of amphibious assault ships, carrying loads up to 3.5 metres high, above the vessel's vehicle deck. With a crew of 13, each vessel can conduct independent open ocean Page 2 of 3 transits or operations at sea with a range of 1,200 nautical miles (at 8kn) and a top speed of 11 knots.

This ASX announcement has been approved and authorised for release by Paddy Gregg, Austal Limited's Chief Executive Officer.

DOD Exercises Option on Second Micro Nuclear Reactor Design

[Release from the U.S. Department of Defense](#)

SEPT. 13, 2023

As part of the Strategic Capabilities Office (SCO) initiative Project Pele, the Department of Defense (DOD) has awarded a contract option to X-energy, LLC of Rockville, Maryland in order to develop an enhanced engineering design for a transportable micro nuclear reactor.

In 2022, SCO selected BWX Technologies, Inc. of Lynchburg, Virginia to build a prototype micro reactor. This work is underway and long lead hardware fabrication has begun. By executing this contract option with X-energy, SCO seeks to develop a complementary micro reactor design that builds upon X-energy's developments completed under Project Pele in 2022. This option continues funding for X-energy to develop its design to meet the technical requirements of Project Pele, targeting a reactor design which is ready for licensing by the Nuclear Regulatory Commission (NRC) for both commercial ventures and military resiliency.

"Due to their extraordinary energy density, nuclear reactors

have the potential to serve multiple critical functions for meeting resiliency needs in contested logistical environments,” said Dr. Jeff Waksman, Project Pele program manager. “By developing two unique designs, we will provide the Services with a broad range of options as they consider potential uses of nuclear power for both Installation and Operational energy applications in the near future.”

The DOD uses approximately 30 Terawatt-hours of electricity per year and more than 10 million gallons of fuel per day—levels that are only expected to increase due to anticipated electrification of the vehicle fleet and maturation of future energy-intensive capabilities. A safe, small, transportable nuclear reactor would address this growing demand with a resilient, carbon-free energy source that does not add to the DOD’s fuel needs, while supporting mission-critical operations in remote and austere environments.

This contract option for one year of work by X-energy will not result in a completed engineering design, but will allow a thorough analysis of design options, leading to a Preliminary Engineering Design and initiation of a regulatory preapplication process.

“The Strategic Capabilities Office specializes in adapting commercial technology for military purposes,” said Jay Dryer, SCO director. “By nurturing and developing multiple micro reactor designs, SCO will not just provide options for the military Services, but will also help jumpstart a truly competitive commercial marketplace for micro reactors.”

Teledyne FLIR Defense Demonstrates Groundbreaking UAV Vehicle Reconnaissance Technology at DSEI in London

Release from Teledyne FLIR

'Black Recon' tech concept will enable crews in fighting vehicles to autonomously launch and recover small drones for immediate, covert situational awareness without leaving the vehicle

LONDON, September 12, 2023 – Teledyne FLIR Defense, part of Teledyne Technologies Incorporated (NYSE:TDY), is showcasing a new technology concept at this week's DSEI conference in London that will allow crews to autonomously launch small drones operated from inside a military vehicle; perform reconnaissance, surveillance, and target acquisition (RSTA); and then recover the aircraft without ever having to leave the safety of the vehicle.

The Black Recon™ Vehicle Reconnaissance System (VRS) is a development program that features an entirely new micro-unmanned aerial vehicle (UAV) designed to withstand the rigors of traveling on infantry and other fighting vehicles. The system is built to provide continuous untethered reconnaissance at flight speeds that allow the UAV to work ahead of advancing vehicles, supplying valuable situational awareness even beyond line of sight.

Fitted inside a hardened launch box mounted to a vehicle, Black Recon's deployment system can launch up to three UAVs during a mission. When one returns, a unique cradle-arm autonomously recovers the drone using patented technology to

precisely track, capture, and dock the UAV – day or night, even in poor weather. Drones are then automatically recharged for the next mission

With its thermal and visual payload, Black Recon delivers live imagery and targeting information to vehicle crews. Operators can use the system for a wide range of missions, such as assessing if terrain is passable, sweeping for mines and improvised explosive devices, or performing close-up inspection under bridges using onboard illumination. The system provides high precision RSTA and can perform GPS-denied operations.

“Black Recon represents a groundbreaking new capability and a force multiplier for warfighters to take on near-peer adversaries,” said Dr. JihFen Lei, executive vice president and general manager of Teledyne FLIR Defense. “The ability to launch and recover UAVs in seconds from a vehicle, without exposing the crew, will enable fighting units to maintain operational tempo and leverage the system when it’s needed most – in dynamic, uncertain, and complex environments.

“We continue to refine Black Recon’s technology and are excited about future applications, not only for the military but also other areas like law enforcement, border security, and critical infrastructure protection. We look forward to sharing the concept with industry partners during DSEI,” Lei added.

Navy Deploys Automated Energy

Assessment Tools to the Fleet



[Release from Naval Sea Systems Command](#)

Sept. 8, 2023

Naval Sea Systems Command Public Affairs

WASHINGTON, D.C. – Engineers at the Naval Sea Systems Command have achieved an important milestone with the installation of the Global Energy Information System (GENISYS) suite onboard DDG 51 Arleigh Burke-class guided missile destroyers.

The GENISYS suite includes a Shipboard Energy Assessment System (SEAS) and digital log books (eLogBook) to link fuel consumption, mission, and environmental data to provide

operators afloat and ashore an integrated platform from which they can monitor and manage energy consumption across the Fleet.

“One of our main priorities at NAVSEA is digital transformation so that we can provide the best level of support to the Fleet,” said Peter McCauley, NAVSEA technical warrant holder for machinery integration and program manager for fleet energy management. “This initiative is a great example of how we are harnessing feedback from our Fleet commanders, leveraging innovation from the Navy’s Small Business Innovation Research Program, and linking it to other applications such as condition-based maintenance to drive a greater understanding of our onboard equipment to optimize operational excellence.”

The Shipboard Energy Assessment System integrates sensors and other sources of energy-related data from human and equipment performance trends to produce a real-time operational data model. The model then serves a command and control function as it delivers recommendations to inform operator actions pertaining to energy usage and availability.

The eLogBook provides Sailors with a smart logging capability for the bridge deck log, engineering log, daily fuel and water log to automate data collection directly into the Navy Energy Usage Reporting System. Combined with SEAS, data aggregation and reporting is significantly enhanced providing greater mission presence and awareness, operational decision-making, and more effective prioritization of energy investments.

“We now have the capability to align shipboard energy consumption against mission data at multiple levels, including individual ship, operational commander, homeport, ship class, or by the assigned Fleet,” said Capt. Megan Thomas, Naval Surface Force Atlantic’s force materiel officer.

Following rigorous field-testing earlier this year, both

systems are now being installed on DDG 51 class destroyers where they will undergo testing and crew training before becoming operational later this year. Installation of the system onboard San Antonio-class amphibious transport dock ships is planned to commence in 2024.

NAVSEA is the largest of the Navy's six system commands, responsible for the building, buying, maintaining, and inactivation of ships, submarines and systems for the U.S. Navy. The Naval Systems Engineering and Logistics Directorate (SEA 05) manages the engineering and scientific expertise, knowledge and technical authority necessary to design, build, maintain, repair, modernize, certify and dispose of the Navy's ships, aircraft carriers, submarines and associated combat and weapons systems.

Vigor Begins Work on USCGC John McCormick at Ketchikan Shipyard



[Release from Vigor](#)

Ketchikan-based cutter to undergo repairs and maintenance at local facility

KETCHIKAN, Alaska (September 12, 2023) – The U.S Coast Guard has awarded Vigor Alaska, a Titan company, a contract to perform maintenance and repairs on U.S. Coast Guard Cutter John McCormick at the Ketchikan Shipyard. USCGC John McCormick will be the first U.S. Coast Guard maintenance solicitation awarded at the Ketchikan Shipyard since 2011. The Fast Response Cutter is stationed at Coast Guard Base Ketchikan, just 3.5 miles from Ketchikan Shipyard, ensuring work on this locally-based vessel supports jobs in Ketchikan's local economy. Work on the vessel begins this week.

“Vigor and our skilled employees are looking forward to beginning work on CGC John McCormick at our local Ketchikan Shipyard,” said Adam Beck, Vigor EVP of Ship Repair. “Having a

strong partnership with the Coast Guard supports family wage jobs in Ketchikan and helps get vessels back into service patrolling our coastlines faster. We are grateful for the opportunity to serve the Coast Guard and ready to get to work.”

The \$3.65 million contract represents a significant milestone in Vigor’s tenure as operator of Ketchikan Shipyard, which is owned by the Alaska Industrial Development and Export Authority (AIDEA). The critical partnership between owner and operator supports a strong local economy in Ketchikan.

“AIDEA is proud to partner with Vigor in providing jobs in Ketchikan and boosting the local economy,” said Randy Ruaro, Executive Director of AIDEA. “We applaud USCG in trusting the Ketchikan Shipyard for this important maintenance work and look forward to similar projects in the future. The U.S. Coast Guard’s District 17 fleet has an Alaska maintenance facility to rely on.”

Work on USCGC McCormick will cover comprehensive maintenance and repair of the vessel. After USCGC McCormick is dry docked, the skilled team at Ketchikan Shipyard will inspect the hull plating, conduct maintenance on the ship’s propulsion system and renew hull coatings, as well as several other key maintenance and repair operations. Work is anticipated to last through the fall, with approximately 40 employees supporting the project.

In addition to USCGC McCormick, Vigor continues to conduct critical work for the Alaska Marine Highway System at Ketchikan Shipyard. Maintenance work on MV Kennicott began last month and will continue into November. Work on MV Stikine was completed earlier this year.

Leonardo DRS Unveils New 5-inch Electro-Optical/Infrared Stabilized Gimbal for Group 1 UAS Platforms

[Release from Leonardo DRS](#)

Available with Company's Market-Leading TENUM 1280 High-Performance Infrared Imager

ARLINGTON, Va.— Sep. 11, 2023— Leonardo DRS, Inc. (NASDAQ: DRS) announced today that it is releasing its next-generation 5-inch stabilized, multi-sensor EO/IR payload gimbal, with market leading high-definition nighttime imaging capability.

The Small Unmanned Aircraft System Tactical Agile Gimbal (STAG)-5 LLD gimbal is designed for small, unmanned aircraft systems, including common launch tube UASs, small tactical multirotor UAVs, and light fixed-wing aircraft and helicopters.

The STAG-5 LLD is the latest advancement in the DRS STAG-5 family of gimbals designed for Class 1 UAS platforms used across the U.S. military for a range of missions. The gimbal provides a combination of the newest small high-performance sensors including high-definition electro-optical, high-definition long-wave infrared, short-wave infrared, laser range finder and a laser target designator. The gimbal systems are highly stabilized, Modular Open Systems Architecture (MOSA) compatible, less than 6" diameter and weigh under five pounds. STAG-5 LLD delivers higher performance through significant savings in weight and volume over current competitor products.

The high-definition long-wave package includes the industry leading DRS TENUM 1280 10-micron uncooled camera core. TENUM is a commercial off-the-shelf sensor providing ultra-high resolution and long-range imaging performance in a small package.

“Adding this high-performance gimbal for day and night use to our STAG-5 family of systems provides the warfighter a market leading capability to improve airborne operations, including JTAC missions, from small, highly portable UAV platforms,” said Jerry Hathaway, senior vice president & general manager of the Electro-Optical & Infrared Systems business. “We are proud of our innovative team that developed this breakthrough capability, it offers UAS primes, operators, and end-users a new choice to improve their intelligence surveillance reconnaissance-targeting mission execution and effectiveness.”

Kongsberg Maritime's Promas propulsion system now available for navy vessels

[Release from Kongsberg](#)

The Promas propeller and rudder system delivers increased fuel efficiency, better manoeuvrability and extended range for naval platforms

DSEI 2023, 12th September 2023 – Kongsberg Maritime has concluded a research programme that shows its Promas propeller and rudder system can deliver a host of benefits for naval

platforms including significant fuel savings, greater range and improved manoeuvrability.

Originally designed for commercial ships, Promas combines rudder and propeller into one propulsion system. Most naval twin-screw vessels use conventional rudders placed off-centre from the shaft centreline. Promas can deliver fuel savings of more than 5% which can translate into increased range, boosting the capability of naval platforms.

The research, carried out by Kongsberg's Hydrodynamic Research Centre (HRC), has shown that naval vessels relying on traditional rudder and propeller systems can increase their efficiency and manoeuvrability with the adoption of the Promas propeller and rudder system.

The HRC tested and compared the Promas bulb-rudder system, and the conventional off-centre rudder system used by navies on a typical naval aft ship dummy design. The dummy design consisted of an open shaft configuration with V-bracket and high shaft inclination angle to produce a typical wake field for a naval twin screw vessel.

The tests compared propulsive efficiency, rudder forces, cavitation inception speed, cavitation, pressure pulses, and noise levels between Promas and conventional navy propulsion for ship speeds up to 25 knots. At 25 knots, the Promas system reduced power consumption by 6%. The rudder forces with Promas are also much higher. The system demonstrated less drag at small rudder angles and a higher lift at larger angles than a conventional navy system. This improves slow speed and harbour manoeuvring.

Patrik Kron, Kongsberg Maritime's Chief of Naval Systems, said: "We've known for many years how Promas brings a quick improvement in efficiency for commercial operators, and this latest research demonstrates how these benefits can be offered to our governmental customers.

“By being able to demonstrate an improved efficiency of around 6%, for navies, this means their vessels are able to extend their range, something which can be crucial on longer missions.

“We know there is a large market for grey and light grey ships operating up to 25 knots, so our initial research has focussed on that speed range, but we’re continuing our research to consider how Promas could enhance the operational capability of combatants which operate at up to 30 knots”.