Navy Awards NASSCO Contract for Materials for Expeditionary Base Ship

ARLINGTON, Va. — The Navy has awarded a contract to NASSCO for long-lead materials and other support to build the fourth Lewis B. Puller-class expeditionary mobile base ship (T-ESB 6).

Naval Sea Systems Command awarded to NASSCO — a General Dynamics company — a \$136.8 million contract "for the procurement of long lead time material, pre-production and engineering support for the Expeditionary Sea Base 6. This action allows the procurement of ship sets of the purchase specifications supporting integrated propulsion, main diesel generator engines, propeller and shafting, integrated bridge electronics, centrifugal pumps, fuel and lube oil purifiers and steering gear components," the Oct. 16 Defense Department contract announcement said.

The work is expected to be completed by May.

The Lewis B. Puller class T-ESB is a modification of the Montford Point class of expeditionary transfer dock ships, of which two were built. The T-ESBs are configured with a 52,000-square-foot flight deck, fuel and equipment storage, repair spaces, magazines, mission planning spaces and accommodations for up to 250 personnel. The ships are capable of supporting multiple missions including airborne mine countermeasures, counterpiracy operations, maritime security operations, humanitarian-aid and disaster-relief missions and U.S. Marine Corps crisis response. They also support MH-53 and MH-60 helicopters.

Two T-ESBs are in service: USS Lewis B. Puller and USNS Hershel "Woody" Williams. Under construction is T-ESB 5, USNS

PEO USC Program Office Wins Two Navy Acquisition Awards

WASHINGTON — The Unmanned Maritime Systems Program Office within Program Executive Office for Unmanned and Small Combatants (PEO USC) received two 2018 Department of the Navy Acquisition Excellence Awards during a ceremony Oct. 16 at the Pentagon, Naval Sea Systems Command said in a release.

The Acquisition Excellence Awards recognize individuals and organizations that have demonstrated excellence in the acquisition of products and services for the Navy and Marine Corps. This year, 14 awards were given. Award winners represent the very best of professionalism, ingenuity and accomplishment among their peers — the more than 63,000 members of the acquisition workforce.

"These awards reflect a great team effort across the PEO, system command and industry to accelerate, innovate, and deliver new capabilities to the fleet," said Rear Adm. John Neagley, PEO USC commander.

The Dr. Al Somoroff Acquisition Award was given to the program office for outstanding acquisition achievement in the accomplishment of its mission to include creative/effective acquisition management practices, outstanding resource management and personnel growth and retention.

The Competition Excellence Acquisition Team of the Year award recognizes the Orca Extra-Large Unmanned Underwater Vehicle acquisition and contracting team. The team included not only

program office members, but also Naval Sea Systems Command's leadership, cost engineering and industrial analysis division, contracts directorate, legal, and submarine/submersible design and systems engineering; Naval Surface Warfare Center's Carderock Division; and Space and Naval Warfare Systems Command's Systems Center Pacific. The award recognizes an acquisition team whose outstanding achievement brings increased competition in contracting resulting in cost savings or avoidance, a better product and a lasting positive impact on the organization and Department of Navy mission.

"These awards reflect the dedicated efforts of a great team of professionals focused on delivering unmanned capability and discovering acquisition best practices," said Capt. Peter Small, Unmanned Maritime Systems Program Office program manager. "Continuous dialogue among stakeholders, early and frequent coordination with industry, and effective and ongoing planning were essential to our success."

PEO USC, part of Naval Sea Systems Command, provides the fleet with a package of warfighting capabilities within two variants of the littoral combat ship (LCS). With LCSs based on the East and West coasts, each ship is dedicated to one of three missions — antisubmarine warfare, surface warfare and mine countermeasures.

Navy Birthday Ball Marks 243 Years of Service Above Self

WASHINGTON — Hundreds of Washington-area Navy personnel and their guests celebrated 243 years of "honor, courage and commitment" at the U.S. Navy Birthday Ball Oct. 13 at the

Ronald Reagan Building, hosted by Navy League national headquarters.

The event featured a performance by the U.S. Navy band and remarks from Chief of Naval Operations (CNO) Adm. John M. Richardson and Tammie Jo Shults, a former naval aviator and now a commercial pilot, who gave a riveting account of the teamwork, training and "steel-caliber nerves" that helped bring Southwest Airlines Flight 1380 in for a safe landing April 17 after the plane suffered a catastrophic engine failure at 32,000 feet.

The CNO and his wife, Dana, and Shults and her husband Dean, joined Navy League National President Alan Kaplan and his wife, Marnie, in the official party for the evening, along with Master Chief Petty Officer of the Navy Russell Smith and his wife, Amy, and Undersecretary of the Navy Thomas Modly and his wife, Robyn.

The remarks and dinner in the Reagan Building's cavernous atrium were followed by the ceremonial cake-cutting with Richardson and Smith being joined the youngest and oldest Sailors in attendance, toasts to each of the sea services and "those in harm's way," and dancing in the adjacent ballroom with music from DJ Chad.

Rear Adm. Brent Scott, chief of chaplains of the Navy, offered the invocation.

"From the core of our soul, help us find faith in something bigger than ourselves, where toughness of spirit and strength of character emerge to carry us, alongside our families, through the storms that head our way," he said.

During his introductory remarks, Kaplan noted, "Our organization is honored to host the 243rd Navy Birthday Ball. … It takes a special person to become a Sailor. Sailors are not born, they are forged. Tonight, it is our honor to thank you, your spouses and your families for the sacrifice,

dedication and for all your service. ... You will always be our organization's North Star, lighting our way and inspiring us with your lifelong journey, forged by the sea," echoing the event's theme.

Richardson opened his remarks with a few words of thanks to the Navy League, noting, "The Navy League really has taken this to whole other level. What a great night to come together and remember what the Navy means to our nation."

He also asked that those in attendance remember those who would be marking the Navy birthday from the far corners of the globe, where they were conducting the business of protecting the nation's interests.

"It is a maritime era, this is a maritime century, a maritime economy, ... and the stakes for us have never been higher," he said. "While we are here enjoying this wonderful meal in tremendous comfort, even luxury, it always is helpful to think about those 65,000 Sailors who are deployed on about 95 ships, protecting our security."

That is at the very heart of the notion of "forged by the sea," Richardson said.

"They are out there deterring bad behavior, deterring those who would want to take us on, building alliances and partnerships, responding to crises," he said, be it by providing hurricane relief in the Carolinas, assisting with drug interdiction efforts in the Caribbean and Eastern Pacific, participating in the Trident Juncture exercise with NATO allies in Northern Europe or Valiant Shield in the Pacific, or operating in the Mediterranean: "an increasingly hot part of the world. ... We do our job by being forward, by being at sea and we are at sea tonight."

The experiences at sea, being far forward on deployment, "are the experiences that forge us together to be much tougher, more capable versions of ourselves, inspiring us to levels of performance that even we didn't think that we could do on our own," Richardson said.

And he introduced Shults as "someone who embodies all of that. She is one of us, she is a naval aviator," he said. "Drawing on her extensive naval and civilian flight training, Captain Shults and her team remained calm under extraordinary pressure and circumstances. She piloted her damaged aircraft and nearly 150 passengers onboard to safety in performing an emergency landing in Philadelphia.

"Being a captain means something, and you set the tone. And amid the toughest circumstances, she kept her cool. ... We celebrate the Navy spirit embodied in Tammie Jo Shults. She did not give up her aircraft, and we do not give up the ship."

Had either the Air Force and Army obliged, Shults might not have become "one of us," as the CNO noted. Growing up in New Mexico, "you don't see many ships there," she joked, but the jets from nearby Holloman Air Force Base "drew my attention."

Her desire to become an aviator, however, was rebuffed by the Air Force and the Army. So while the Navy was not her first choice, it did give her what the services would not: an opportunity.

"In March of 1985, I checked into AOCS (Aviation Officers Candidate School Class 16-85) in Pensacola, Florida. I got my head shaved, and I stared doing push-ups like everyone else. I loved it. I had found my people," she said.

Shults entered the Navy at a fortuitous time, as more doors were being opened to women for roles that traditionally had been male-only, something that would come later — many years, in some cases — for other service branches. She went on to become one of the Navy's first female F/A-18 Hornet fighter pilots.

"The Navy itself is too noble, with a mission too big, to cater to personal prejudice," she said. "The Navy was moving

on, from the best armada of men to the best armada.

"The experiences that we have in the Navy we could have nowhere else," she continued. "For me, carrier landings and A-7 night bombing stand out as the challenges that groomed more than my skills. They forged a new set of steel-caliber nerves for me. As an instructor pilot, I wasn't allowed to teach guns like my peers. ... I was sent to teach OCF [out of control flight] instead. This constant rehearsal of departing controlled flight and even a spiral served me well on April 17, when my Boeing wanted to depart flight."

Shults paused at the midpoint of her remarks as the harrowing audio of the air traffic control recordings that chronicled the battle to bring Flight 1380 in for a landing was played back for the audience, who then gave her a standing ovation when the tape concluded.

Twenty minutes into the flight from New York to Dallas, the 737's left engine failed over Pennsylvania, damaging the wing and the hydraulic and fuel lines, and sending debris into the fuselage that caused a rapid depressurization of the cabin. One passenger was partially sucked out of the plane.

"Everything was fine, until it wasn't," Shults said.

She was quick to credit her fellow crew for their teamwork in helping bring the flight back from the brink of disaster to a safe conclusion.

"A wise man once said, 'It is amazing what you can accomplish when you don't care who gets the credit.' I was blessed to be part of an incredible team that day," she said.

While the flight crew battled to keep the plane in the air, the cabin crew assisted the passengers with their oxygen masks and assured them that "we were not going down. We were going into Philly," Shults said. "A destination gave hope. It changed the atmosphere immediately."

One passenger, Jennifer Riordan, died as a result of the

accident, despite the heroic efforts of several passengers to first pull her back into the plane and then give her cardiopulmonary resuscitation. And though the plane landed safely, "and we returned 148 people to their loved ones that day," the fact that one passenger was not still weighs heavy on herself and the crew, Shults said.

"There is a time to weep and a time to laugh," she said. "A time to mourn and a time to dance. That day I understood those words."

Going forward, Shults urged those in attendance to, come what may, keep blazing a trail.

"It is my hope that when you get your head down deep into the details, or grow tired of your grueling schedule, or become weary of trying to balance saving the free world and still making it home in time for a family dinner, please do not let this one fact elude you: The ripples of your obedience in serving your country, a cause greater than yourself, it changes the very posture of the world we live in," she said.

"You certainly changed my world, by opening your ranks, allowing women to fly in the military. The Navy blazed this trail. ... Your birthday quest? ... I implore you to lead on. You know who you are, and where you are going. You set a good course. Please continue. Lead on."

Navy Innovators Reveal Revolutionary Research to Counter Emerging Threats

DAHLGREN, Va. — Navy inventors are confident that their latest research in quantum physics, artificial intelligence, and

cyber security — to name a few — will ultimately impact U.S. military and homeland security efforts. The innovations and their potential military applications were introduced and explained by the researchers at a recent event, Naval Surface Warfare Center Dahlgren Division (NSWCDD) announced Oct. 12.

In all, principal investigators presented 20 research projects with the titles of their discoveries ranging from "Cyber Security for the Internet of Things" and "Electrochemical Destruction of Bulk Chemical Warfare Agents" to the "Dynamical Non-Locality Induced Effect in Quantum Interference."

Navy technical managers, engineers and scientists networked with representatives from academia, industry, transition partners, and other key stakeholders to see and hear more about these new innovations at the In-house Laboratory Independent Research (ILIR) and Independent Applied Research (IAR) End of Year Review at the University of Mary Washington Dahlgren Campus, Sept. 25.

Funded by the Office of Naval Research (ONR), the ILIR and IAR program fosters fundamental and applied research at the Navy Warfare Centers to counter emerging threats by connecting technological needs with current and emerging capabilities.

The NSWCDD principal investigators identified challenges, objectives, accomplishments and future benefits while answering questions and briefing the ILIR and IAR projects they've been working on over the past year.

"The program helps to ensure a next generation of technically competent scientists by supporting masters and doctoral dissertation research, and research in the areas that are essential to our future mission," said Dr. Jeff Solka, NSWCDD ILIR/IAR program director. "Our ILIR and IAR process is a means to develop the next generation of Navy scientists and engineers capable of addressing key warfighter challenges to ensure the Navy maintains a leading edge in science for

national defense."

Many of the projects presented at the ILIR and IAR event have the potential to result in Cooperative Research and Development Agreements. This legal agreement provides a means for NSWCDD and a private sector partner to cooperatively conduct research and development in a given technical area and share in the technical results.

"We have three strategic thrusts for ILIR and IAR programs," Solka said, in reference to the programs at NSWCDD. "We provide funding for science, engineering, mathematics and statistics students to complete their graduate studies. New researchers can develop their own science and technology projects and portfolios. In addition, world-class researchers have the ability to develop revolutionary ideas."

For example, world-class principal investigators Scott Spence and associate investigator Dr. Dan Parks developed a revolutionary idea for their quantum physics project, titled, "Dynamical Non-Locality Induced Effect in Quantum Interference." The potential military applications of their research include anti-tamper cybersecurity, invisible security fences and highly sensitive vibrometer technologies.

"Dynamic non-locality is more robust than kinematic non-locality," said Spence, pointing out that dynamical non-locality will provide an enabling technology for future quantum devices.

Principal investigator Dr. Joseph Hunt's work — "Synthesis and Characterization of Carbon Nanotube-Metal Organic Framework Composites" — could be used to develop new electromagnetic materials with enhanced, tunable properties with applications in electromagnetic offense and defense, and electric weapons in addition to chemical, biological and radiological protection.

"The Metal Organic Framework nanotube composites could be

transitioned to a variety of operational areas in which thin layers of material with high electromagnetic lossiness is desired," said Hunt. "The other permittivity and potential electronic properties could be used in electric weapons or directed energy projects."

Hunt's project — performed to produce composites with enhanced properties by combining carbon nanotube and reticular chemistry — advance the state of the art by exploring how the material properties of Metal Organic Framework are affected by the incorporation of increasing amounts of carbon nanotubes.

"This work enables future weapon systems by providing control over the electromagnetic properties of the material as well as providing the improved conductivity necessary for sensors and other electronic systems utilized by the Navy and Department of Defense."

Principal investigator Kimberly Zeitz — an NSWCDD scientist and Ph.D. student at Virginia Tech — presented a new security technique in her project, "Cyber Security for the Internet of Things," that has the potential to protect data from sensor devices utilized for wartime communications.

Zeitz focused on limiting the time attackers may conduct reconnaissance on low-powered embedded system devices while considering the challenges such as resource and performance constraints. Low-powered, low-resource devices cannot use traditional security methods.

"This Micro Moving Target IPv6 Defense obscures communications of these devices through address rotation," said Zeitz, regarding her research at NSWCDD, which is closely linked to ongoing research conducted within the Virginia Tech Information Technology Security Lab.

"Past and ongoing research includes a Moving Target IPv6 Defense and its applications in enhancing network security," said Zeitz. "This security technique can be catered for use with different applications on different embedded devices. The ability to select the hashing algorithm used allows it to be adapted for a best fit and also to stay current as new has algorithms are developed."

Dr. Elizabeth Haro's research on data visualization support resulted in a tool that will be transitioned to the Aegis Readiness and Training Center for use in in training Sailors. Her research project — "Data Visualization Support for Creation of a Numerical Table: Effects on Training and Performance" — can result in novel visualization techniques, including 3D visualizations to optimize delivery and utilization for the human users.

An incorrectly developed ship doctrine can lead to catastrophic events. Currently, the system includes a tabular display of completed doctrine statements on the Aegis Display System and the doctrine comparison capability in 2D. There is no graphical representation to aid the warfighter in the development of doctrine.

"This technology is a visual-based doctrine system that could enable the ability for centralized Fleet level doctrine creation and tactics in real time," said Haro, the team lead for the NSWCDD Human Systems Integration Science and Technology Team. "It can reduce Sailor workload by minimizing the required sectors that a warfighter must monitor for each ship based on the global coverage area of the fleet doctrine."

Navy Strategic Systems

Official: Hypersonics 'Coming to a Theater Near You'

WASHINGTON — The Navy's Strategic Systems Program (SSP) office is planning two more test flights to demonstrate conventional prompt strike (CPS) capability, a program official said, to capitalize on the first test conducted a year ago.

"Hypersonics is coming to a theater near you," Capt. Doug Williams, the SSP's technical director, said at the third annual Triad conference.

"As part of a program of record within the Office of the Secretary of Defense, we [SSP] have been working a hypersonic glide technology demonstration," Williams said. "We called it Flight Experiment No. 1. FE-1 flew about a year ago, Oct. 31. We took an old A3 [Polaris] rocket motor built in the late '80s, made it a stack, and launched it off of Hawaii, flew it a couple thousand miles. It landed at Kwaj [Kwajalein Atoll].

"It was brilliant. The whole time we had telemetry pumping down. We saw everything in a virtual model, real time, and it was one of those things that makes your hair on the back of your neck stand up. And you stand up as you see the body do what the body did and the body land exactly where it was supposed to land. It was awesome," he said.

Williams said that hypersonics is the No. 1 priority of Michael D. Griffin, undersecretary of defense for research and engineering.

"We're leaning forward," Williams said. "We have two more experiments to fly. We are working with the Office of the Secretary of Defense and with ASNRD&A [assistant secretary of the Navy for research, development and acquisition] staff to understand conventional prompt strike. For the Navy it is going to be indeed a program."

Williams noted that even with the potential of conventional prompt strike, the primary mission of SSP is to provide a nuclear deterrence capability with the Strategic Weapon System. He cautioned that "if we don't do that right, no one is going to care about CPS. We are on a path to ensure that we firewall this conventional capability. That, no doubt, will be a heavy lift. We cannot have CPS drain Trident [the Navy's submarine-launched ballistic missile program]."

Navy Elevates TACAMO Weapons Tactics Detachment to Full Command

ARLINGTON, Va.— The Navy has upgraded the TACAMO strategic communications community's weapons tactics detachment to a full command.

According to an internal Navy directive, the Detachment Weapons Tactics Unit of commander, Strategic Communications Wing One, at Tinker Air Force Base, Oklahoma, was disestablished on Oct. 1. In its place, on the same day, TACAMO Weapons School was established with a commanding officer instead of an officer in charge.

TACAMO, an acronym for "Take Charge and Move Out," is a system of survivable communications designed to maintain communications between the national command authority with the elements of the U.S. strategic deterrent triad: Air Force bombers and intercontinental ballistic missile bases and Navy ballistic-missile submarines.

The Navy's two operational TACAMO squadrons, Fleet Air

Reconnaissance Squadrons Three and Four, also based at Tinker, fly 15 Boeing E-6B Mercury aircraft in support of U.S. Strategic Command.

Navy Secretary Names Two Littoral Combat Ships

WASHINGTON — Navy Secretary Richard V. Spencer has announced the names of two future littoral combat ships (LCSs), the secretary's public affairs office announced in two Oct. 9 releases. The Freedom-variant LCS 29 will be named USS Beloit and the Independence variant LCS 32 will be named USS Santa Barbara.

The future USS Beloit (LCS 29) is named in honor of Beloit, Wisconsin, and is the first ship to bear the name.

"The city and citizens of Beloit have been a steadfast supporter of the Navy and Marine Corps," Spencer said. "From building engines for Freedom-variant LCSs to manufacturing components for the Ford-class aircraft carriers, the contributions of Beloit citizens make our Navy stronger, more capable and more lethal. I am proud to name the next ship in honor of the city and citizens of Beloit."

USS Beloit will be constructed by Lockheed Martin with Marinette Marine in Marinette, Wisconsin. This ship will be 387 feet long, have a beam length of 57.4 feet and travel at speeds in excess of 40 knots.

The future USS Santa Barbara (LCS 32) is named in honor of Santa Barbara, California, and is the third ship to bear the name.

"I am pleased to name the next Independence variant LCS after the city of Santa Barbara," Spencer said. "This city's innovative workforce and longstanding support of our Navy and Marine Corps team, whether active duty, reserve force, civilian or Veterans, the support from this community strengthens our Navy and nation."

The future USS Santa Barbara will be built by Austal USA in Mobile, Alabama. This ship will be 421 feet long with a beam length of 103.7 feet and be capable of operating at speeds in excess of 40 knots.

The Navy has accepted delivery of 16 LCSs. Including the recent contract modifications, a total of 32 LCSs have been procured with 10 ships under construction (LCS 15, 17, 19-26).

Navy Awards General Dynamics Contract Increase to Modernize Personnel and Pay System

FAIRFAX, Va. — The U.S. Navy has awarded General Dynamics Information Technology (GDIT) a contract ceiling increase from \$177 million to \$270.2 million for the Personnel Modernization (PERSMOD) contract, which supports the Navy Standard Integrated Personnel System (NSIPS), the company said in an Oct. 8 release.

NSIPS is the primary human resource system for the Navy, performing personnel management, pay and entitlement transactions and leave for over \$34 billion worth of the

Navy's annual personnel budget. The Navy will leverage GDIT's solutions and alliance partnerships to help drive down sustainment costs through the accelerated consolidation, migration and de-customization of legacy systems.

"GDIT's ongoing support of NSIPS allows us to rapidly advance new solutions and help the Navy maintain momentum on this important initiative," said Senior Vice President Leigh Palmer, head of GDIT's Defense Division. "Through the PERSMOD contract, we have already completed modernization updates and collapsed one legacy HR system, with a second system's retirement in progress. We are excited to leverage these milestones for the Navy and continue to upgrade this program."

Through this increase, GDIT will accelerate the support and transformation of the Navy's integration of Oracle's PeopleSoft Global Payroll product as well as the implementation of the Treasury Direct Disbursing (TDD) process. These updates will improve financial reporting and eliminate errors at the source for the Navy.

This contract increase includes an immediate award of \$93.2 million with the potential to award two preapproved six-month increments. If awarded, these increments will extend the ordering period by an additional year and increase the contract ceiling by an additional \$95.7 million to approximately \$366 million. The indefinite-delivery, indefinite-quantity contract was originally awarded to SRA International Inc., a managed affiliate of GDIT, in June 2014. It included a five-year ordering period through June 2019. Up to one year of additional ordering may be permitted through June 2020.

Over the past four years, GDIT has successfully collapsed one legacy human resources system, Reserve Headquarters System, with the retirement of a second system, known as the Inactive Manpower and Personnel Management Information System, currently in progress. At the same time, GDIT supported the

successful rollout of the Blended Retirement System, eliminated significant manual processes with addition of Retirements and Separations functionality, and additional automation to Reservists' drill processing with a major update to the Enhanced Drill Management (EDM) system in NSIPS. The EDM also provided self-service functionality allowing the individual sailor to schedule/reschedule drills, which eliminated the need for paper from the process and significantly reduced human error. The system can now handle the entire gamut of drill scheduling and processing.

Saalex Solutions Awarded U.S. Navy OLSS Contract

CAMARILLO, Calif. — Saalex Solutions Inc. has been awarded the SeaPort Ordnance Logistics Support Services (OLSS) contract by the U.S. Navy, valued at \$5.7 million over five years, the company said in an Oct. 4 release.

The work will support the Navy Munitions Command Pacific CONUS West Division (NMCPAC CWD). Saalex will provide technical and support services at Naval Weapons Station (NWS) Seal Beach and NWS Fallbrook for the NMCPAC CWD mission of Fleet Ordnance Support.

Saalex's contract services include administrative and inventory support, truck driving and heavy equipment operations, key custodianship and magazine access for NMCPAC CWD, USB and DET FB. Support specific to the Surface Launched Missiles Division at USB includes support of the Standard Missile, Evolved SeaSparrow Missile, Tomahawk Missile and Vertical Launch systems material coordination, movement, and

tracking. Support specific to the Air Launched Missiles Division includes support of the Navy Sidewinder, Maverick, Hellfire and Air Force Maverick material coordination, movement and tracking.

"Saalex is proud to be awarded this contract and once again support the Navy," said Travis Mack, president and CEO of Saalex. "We have a longstanding commitment to serving the Navy in its efforts to maintain the security of the United States and are honored to expand that relationship even further with this contract."

L3 OceanServer Successfully Participates in Advanced Naval Technology Exercise

FALL RIVER, Mass. — L3 OceanServer successfully participated in the Advanced Naval Technology Exercise (ANTX), an annual event held at the Naval Undersea Warfare Center in Newport, Rhode Island, where the future of naval technologies is demonstrated, the company announced in an Oct. 4 release. L3 OceanServer's presence included 12 Iver unmanned underwater vehicles (UUVs), the largest UUV showing at ANTX.

Iver vehicles successfully completed seven missions at the event, including three customer-operated missions, showcasing new technology payloads and advanced command and control capabilities. One successful exercise integrated the Marine Magnetics internal magnetometer into an Iver UUV for the collection of magnetometer data over a simulated minefield.

Notably, an Iver4 concept vehicle demonstrated battery power

endurance and system efficiency by completing a long ingress/egress mission. The vehicle started its mission with a 15-nautical-mile ingress, was retasked on arrival to survey a simulated minefield and finished with a 3-nautical-mile egress. On mission completion, 57 percent of battery power remained.

"As undersea missions evolve, our dialogue with naval customers has consistently reiterated the need for a portable vehicle that can complete long-duration missions," said Daryl Slocum, L3 OceanServer's general manager. "The Iver4 offers a broad range of innovative technologies, including various power options, to execute these demanding missions."

L3 OceanServer is part of the Maritime Sensor Systems sector within L3's Communications & Networked Systems business segment. Since its inception in 2003, L3 OceanServer has sold more than 300 autonomous underwater vehicles worldwide, providing highly capable solutions to a broad array of military, commercial and international customers.