

Department of the Navy Releases Business Operations Plan to Further Reforms

WASHINGTON – The Department of the Navy released its business operations plan Oct. 24, establishing the framework for the department's continuing business reform agenda, the Office of the Navy Chief of Information said in a release.

"The Department of the Navy Business Operations Plan for Fiscal Years 2019–2021" represents a strategic shift for the department, from oversight to leadership in ensuring that the department's business operations effectively and efficiently achieve its mission to man, train, and equip Navy and Marine Corps forces for global operations.

Through greater accountability, more agile processes and improved management of business operations, the plan will enable greater efficiencies that allow the department to reallocate resources from business operations to readiness and recapitalize our naval forces for the future.

"As we look forward to the future, we must continue this momentum by leveraging every resource, expert, leading practice, and efficiency we can find – from all sources, private and public – to think anew about our business operating model," Navy Secretary Richard V. Spencer said in the plan's opening message. "The National Defense Strategy and National Defense Business Operations Plan drive our agenda, and this Business Operations Plan will guide our department by providing a vision for the future, and charting a clear course for how to get there."

The plan aligns to the three lines of effort expressed in the National Defense Strategy – rebuild military readiness while building a more lethal joint force, "strengthen alliances and

attract new partners, and reform the department's business practices for greater performance and affordability" – as well as to the nine objectives defined in the National Defense Business Operations Plan:

- Restore military readiness to build a more lethal force.
- Lay the foundation for future readiness through recapitalization, innovation, and modernization.
- Enhance information technology and cybersecurity capabilities.
- Ensure the best intelligence, counterintelligence, and security support to Department of Defense (DoD) operations.
- Implement initiatives to recruit and retain the best total force to bolster capabilities and readiness.
- Reform the security cooperation enterprise.
- Improve and strengthen business operations through a move to DoD-enterprise or shared services; reduce administrative and regulatory burden.
- Optimize organizational structures.
- Undergo an audit, and improve the quality of budgetary and financial information that is most valuable in managing the DoD.

Undersecretary of the Navy Thomas B. Modly will lead the implementation of the business operations plan in his role as the chief management officer for the Department of the Navy.

"America's security relies on the success of our U.S. Navy and Marine Corps team. Our Sailors and Marines represent the greatest expeditionary force the world has ever seen, operating forward every day to shape and defend our national interests," Modly said in a message in the business operations plan. "Yet, as the National Defense Strategy reminds us, the U.S. military has no preordained right to success or victory. We must now move with a sense of urgency to improve how we manage the department in order to continually reinvest into the improved readiness and modernization of our force. While doing so, we will create a more agile and accountable

organization that not only responds rapidly and with precision, but also anticipates future threats and opportunities.”

Saab, Damen Submarine Targets Dutch Requirement

PARIS – Saab and Dutch shipbuilder Damen Shipyards Group have joined forces to develop an expeditionary submarine for the Netherlands' Walrus Replacement Program.

The partnership was highlighted Oct. 23 during a joint press conference at the Euronaval international naval exhibition on the proposed Expeditionary Submarine.

“Replacing the Walrus-class submarines requires a unique approach. Swedish modular submarine design and production techniques coupled with the Dutch shipbuilding tradition bring together the capabilities needed to deliver an assured operational capability,” said Gunnar Wieslander, senior vice president, head of business area Saab Kockums.

“The result of the collaboration will be a customer-adapted submarine for expeditionary missions. This will ensure that the Royal Netherlands Navy continues to play an important role in European waters as well as globally,” said Hein van Ameijden, managing director of Damen Schelde Naval Shipbuilding.

The Expeditionary Submarine builds on the capabilities of the Swedish A26 and puts into practice the experience of the Swedish designed Collins-class submarine in service with the Australian Navy.

In addition, the Walrus replacement will also benefit from the operational lessons reflected in the Swedish Navy's Gotland midlife upgrade. As a result, the Expeditionary Submarine will be equipped with state-of-the-art technology while benefiting from de-risking on three submarine classes. Saab and Damen are thereby creating one of the most modern Air Independent Propulsion submarines in the world, which if selected, will be done in consultation with the customer using a "design to cost" approach.

The production process will see sections made in Sweden and then assembled at Vlissingen in the Netherlands. Having secured the cooperation of many Dutch companies, Saab and Damen are set to enhance the domestic submarine competence.

This cooperation will also extend beyond the Dutch submarine project, as the two companies see a growing market for this type of advanced conventional submarines.

Raytheon Delivers RAM Launcher to Mexico, Completes SM-2 Tests with South Korea

TUCSON, Ariz. – Raytheon Co. has delivered a Rolling Airframe Missile (RAM) launcher to the Mexican government as part of the long-range offshore patrol vessel (Patrulla Oceánica de Largo Alcance, or POLA) program, marking the first delivery of a RAM product to a Latin American country, the company announced Oct. 23.

The Mexican Navy will use the RAM Block 2 supersonic, quick reaction, fire-and-forget missile to counter enemy anti-ship

missiles. This latest version features a larger rocket motor, advanced control section and an enhanced radio frequency receiver.

“RAM Block 2 protects ships against a long list of constantly evolving threats,” said Mitch Stevison, Raytheon Air and Missile Defense Systems vice president. “With RAM protecting its frigate, Mexico not only enhances its maritime posture, but they also expand their naval support of national security and defense of critical sea lanes.”

The RAM system is the world’s most modern ship self-defense weapon and protects ships of all sizes. It’s deployed on more than 165 ships in eight countries, ranging from 500-ton fast attack craft to 95,000-ton aircraft carriers.

In a separate release, the company announced that five Standard Missile-2 (SM-2) surface-to-air missiles successfully completed five test flights in back-to-back summer exercises conducted at sea by the Republic of Korea Navy, or ROKN.

ROKN fired two Block IIIA missiles in an initial exercise to test the missiles’ advanced semi-active radar seeker technology. During a second exercise, the navy destroyed three aerial threats using the Block IIIB variant.

The SM-2 missile gives navies the capability to defend against anti-ship missiles and aircraft out to 90 nautical miles.

“These successful flight tests add to SM-2’s impressive legacy of more than 2,700 successful firings,” Stevison said. “As we begin to produce a new generation of SM-2s, the missile will be in the inventories of navies worldwide for decades to come.”

Raytheon restarted the SM-2 missile line in 2017 to meet global demands from international customers, which include eight international countries.

New deliveries are scheduled to begin in 2020 and will include more than 280 SM-2 Block IIIA and IIIB missiles.

Ceremony Culminates 12 Months of Centennial Activities

DAHLGREN, Va. – Navy and congressional leaders joined Naval Surface Warfare Center Dahlgren Division (NSWCDD) personnel to celebrate a centennial of technological innovation that revolutionized surface warfare at a grand finale ceremony here, Oct. 19.

Over the past year of centennial activities – from a concert and picnics to podcasts and a rocket contest – government civilians, defense contractors, and military personnel working at NSWCDD travelled down memory lane leading up to the 100-year mark this month.

“The first shot of the new base was fired from a 7-inch, 45-caliber, tractor-mounted gun, just like the one over there,” said Capt. Godfrey “Gus” Weekes, NSWCDD commanding officer, while pointing to the century-old gun on display.

Since that shot was fired on Oct. 16, 1918, Dahlgren scientists and engineers rose to the occasion time and again to provide the Navy with innovative solutions based on their technical capability to integrate sensors, weapons, and associated weapon and combat systems into surface ships and vehicles.

“The men and women of Dahlgren are dedicated to the mission and have always answered the bell,” Weekes told the audience which included 65 distinguished visitors. “We answered the

bell in 1918 and we're answering the bell today. Just like during the Cold War or the Korean War, we're up against near peer or peer threats. The need for Dahlgren is never more apparent."

Today, NSWCDD leads in the research and delivery of technological solutions that enable warfighters to counter emerging threats. The command leverages core naval warfare systems development and integration capabilities in electric weapons such as the electromagnetic railgun and high-energy lasers, mission engineering and analysis, and cyber warfare engineering.

"I've been blessed with the opportunity to recognize our workers who have given so much to this institution," said Weekes, recounting that he has presented scores of certificates recognizing Navy civilians for 30 and 35 plus years of federal service. "I've been privileged to recognize employees who were pioneers in GPS, to those who pioneered Aegis Ballistic Missile Defense and the Standard Missile as well as any advanced weaponry which the U.S. Navy is now in the process of realizing or advancing."

As participants celebrated the division's impact upon the Navy and nation, a time capsule – 10 105 mm shells surrounding a 16-inch shell – was unveiled and all in attendance had the opportunity to write notes and share their thoughts with future generations.

The writers conveyed how they personally met the challenges of our time and solved them through innovative collaboration, placing their letters inside the capsule that will be displayed on base. Dahlgren personnel can write notes to be placed inside the capsule until the end of 2018 when it will be sealed and opened on Oct. 16, 2068, at the command's 150th anniversary.

"Think about the contributions Dahlgren has made over the past

100 years,” said John Fiore, NSWCDD technical director. “We have over 500 patents to our name thanks to the men and women here who have done that work. When the Navy struggles with challenges, it is often that they come to Dahlgren to ask what they should be doing, what they should be thinking about, what we should be working on. Our innovations that have become programs of record are changing the face of warfare systems today.”

Since June 1918, when U.S. President Woodrow Wilson signed a proclamation to acquire nearly one thousand acres to create the original ordnance proving ground during World War I, through today, Dahlgren has served as the center for the scientific research and development that led to hundreds of patents, innovations, and scientific breakthroughs for the U.S. Navy. Dahlgren, today, hosts nine different commands with an expansive array of scientific research and development, and is one of the hubs of naval weapons and weapon system development nationwide.

“There is no technical director who does not appreciate what has happened in the past but let’s think about where we are headed in the future – the kinds of systems and solutions the Navy needs in the future,” said Fiore, speaking to a crowd of more than 700 people – government employees, military personnel, defense contractors and visitors, including former NSWCDD technical directors and commanding officers.

“As I thought about that, I thought about our values. Values that we hold dear at Dahlgren – integrity, courage, imagination, esprit de corps, and urgency. We here overcome change, and we overcome the things we need to do to in order to make a difference in warfare systems throughout the Navy, and that takes courage. The value that I’m the proudest about is urgency, and I think Dahlgren exemplifies that. We’ve been talking urgency and that’s been a core value of Dahlgren for years.

“Recently, I’ve had the privilege of hearing the secretary of the Navy talk. He signs his name, ‘urgently, Richard Spencer’ – understanding that we live in a time when what we do is urgent. If we do not do what we do in developing warfare systems, we’re not enabling our Sailors and Marines to go out and do their mission effectively and come home safe to their families and loved ones – that’s critical.”

Dahlgren’s enduring success in research, development, test, and evaluation stems from its ability to handle complex mathematics and engineering associated with ballistic weapons and projectiles. Moreover, the command’s civilian scientists and engineers always had the capability to test their ideas in collaboration with military personnel on base to produce proven technological solutions.

“This is an installation where a great deal of innovation and collaboration take place,” said Sen. Mark Warner, D-Va., describing Dahlgren’s development of technologies revolutionizing military capabilities over the past 100 years. “We’re going to need that same level of collaboration, cutting edge experimentation as we move forward for the next 100 years, not only to protect our country but to make sure that we’re able to match the innovation and have the kind of protections that will keep this nation strong, safe and free. So, for all you’ve done for the last 100 years, I say thank you.”

Warner cited Dahlgren’s role in the development of long guns for World War II followed by the development of Naval warfare systems, the super computer (Naval Ordnance Research Calculator) during the 1950s, the Naval Space Surveillance Center in the wake of Sputnik, GPS technology, and technological advancements impacting ballistic missile systems.

“How are we going to do more with the resources that we have than our adversaries do with the resources that they have?”

U.S. Rep. Rob Wittman, R-Va., asked the audience. "How are we going to do more with our unit of currency than they do with their unit of currency?"

The congressman – focusing on technological solutions required to meet complex threats to U.S. national security – answered his questions.

"We're not going to have the ability to out-resource people anymore," said Wittman. "Today, it's about the creation and innovation that goes into doing more with what we have than anybody around the world. We have done that, we can do that, and we will continue to do that to make sure that our nation's Navy, Marine Corps, Air Force, Army and indeed our Coast Guard, continue to be the greatest the world has ever known because we have the best and brightest men and women serving our nation both in uniform and here at the base in making sure that we have what we need to defend our nation's interest. And you will do it better than anybody else in more creative and innovative ways than anybody else, that's what has made Dahlgren great in the first 100 years and that's what will make it great in the next century."

At one point in the ceremony, Virginia State Sen. Richard Stuart and Virginia Delegate Margaret Ransone read and presented the Virginia General Assembly Resolution proclaiming Oct. 16 as Dahlgren Day.

"NSWC Dahlgren Division is the largest employer in central Virginia and the Northern Neck with over 8,000 civilian and military and contract personnel," said Stuart. "The workforce – composed of 14 counties in Virginia and five counties in Maryland – contributes more than \$6.5 billion to the local economy. That is incredible to a boy who grew up in the small town of Montross and understands how important Dahlgren is to this entire region. For your economic activity, for your amazing technological advancements, and for your invaluable contributions to modern warfare systems, we thank you."

As the U.S. Navy band played “Stars and Stripes Forever” to conclude the ceremony, people from the audience began making their way up for a closer look at the time capsule. They took pictures and in response to the invitation to share their thoughts with future generations – wrote letters to be placed in the capsule.

JFD Completes Sea Trials for First Deep Search and Rescue Vehicle for the Indian Navy

OLDMELDRUM, Scotland – JFD, part of James Fisher and Sons plc, has successfully completed the sea trials of the deep search and rescue vehicle (DSRV) for the first of two third-generation submarine rescue systems being delivered to the Indian Navy, the company announced in an Oct. 22 release.

The Deep Search and Rescue Vehicle (DSRV) carried out underwater mating with a bottomed submarine at a depth of over 300 feet, followed by a target mating and hatch opening at 45 degrees. On successful mating with the bottomed submarine, JFD and the Indian Navy then carried out a safe transfer of personnel from the submarine to the DSRV.

The sea trials have proven the newly inducted DSRV’s ability to undertake rescue operations from a disabled submarine at sea, providing the Indian Navy with a critical submarine rescue capability. In addition to the mating and transfer of personnel exercises, the DSRV conducted a record dive which represents the deepest submergence by a “manned vessel” in Indian waters, as well as remotely operated vehicle operations at a depth of over 750 meters and side-scan sonar operations

at a depth of over 650 meters, all of which represent significant 'firsts' for the Indian Navy.

In a statement on social media, the Indian Navy said it now "joins a select league of nations with the capability to search, locate and provide rescue to distressed submarines by induction of our first DSRV and associated kit, which in a fly away configuration can be rapidly mobilized. The DSRV can be mobilized from the naval base at Mumbai to the nearest mounting port by air, land or sea, ready to provide rapid rescue to the submarine in distress."

Having already successfully completed harbor trials earlier this year, the DSRV has now completed a full launch deployment, dive and recovery in open sea as well as an underwater mating exercise, replicating the operating conditions of a real submarine rescue operation. The completion of open sea trials represents a significant milestone in the ongoing delivery and acceptance of the 3rd Generation Submarine Rescue System, which is grounded in a rigorous trials and testing process that ensures the highest safety standards are upheld.

"JFD is pleased to have successfully completed a period of rigorous sea trials, working in close partnership with the Indian Navy who provided the commercial mothership and associated trials consort vessels," said Ben Sharples, India DSRV project director. "The Indian Navy west coast-based rescue team, who will operate the system when in service, were active participants throughout this phase of the trials, ensuring they are equipped with the skills and expertise to conduct safe and efficient submarine rescue operations, should the need ever arise.

"The sea trials of the DSRV has ushered in a niche capability into the Indian Navy," he said. "The DSRV, which is operated by a crew of three, can rescue 14 personnel from a disabled submarine at one time. These sea trials have proven the newly

inducted DSRV's ability to undertake rescue operations from disabled submarines at sea and has provided the Indian Navy with a critical capability."

JFD is delivering two complete third-generation submarine rescue systems, including launch and recovery systems equipment, Transfer Under Pressure systems, logistics and support equipment, and a 25-year all-inclusive annual maintenance contract.

MBDA Introduces Naval Versions of MMP Ground Combat Missile System

PARIS – MBDA has unveiled its new naval offering based on the fifth-generation MMP ground combat missile at Euronaval, the company announced in an Oct. 23 release. This decision follows the operational evaluation campaign carried out at the end of the summer by the French armed forces in Djibouti to confirm the reliability and operational performance of the MMP system in a hot environment, both from the ground and from a rigid-hull inflatable boat (RHIB) moving at high speed.

A total of nine MMP missiles were fired with all reaching their target. Two of these shots were fired by the maritime force of marines and commandos from an ECUME RHIB. A first firing from the sea-to-land and the second from sea-to-sea have demonstrated the ease of use of the MMP.

The success of this evaluation allows MBDA to extend the integration perspectives of the MMP system and to propose it on fast attack craft or semi-rigid boats for missions against

hostile ships, coastal defenses or armored vehicles, especially in support of a landing of small units or special forces.

On fast patrol boats, the MMP will be fired from a stabilized turret carrying four ready-to-fire ammunitions installed in launchers protecting the missiles from the maritime environment. The turret can be controlled from a dedicated console or from a multifunction console in the ship's operations center.

"Today's launch of a family of naval systems based on the MMP missile is aligned with the trajectory we initiated with the French armies at the launch of the MMP program in 2011," said Antoine Bouvier, chief executive of MBDA. "By deciding at that time to introduce the most modern technologies of guidance and propulsion together with a multi-effect warhead, we laid the foundations of a family of weapons capable of meeting the most demanding constraints the armed forces may encounter in the field, in terms of tactical effects, in terms of mobility, as well as in environmental terms. The MMP family sees today the advent of naval versions. I have no doubt that the MMP will give birth to other more powerful versions in the near future."

L3 ASV to Conduct Autonomous Navigation Study for U.K. Government

PORTCHESTER, England – L3 ASV has received U.K. government funding for a pioneering project on autonomous navigation of maritime vessels, the company announced in an Oct. 23 release.

The company will conduct a study with its partners in the Maritime & Coastguard Agency (MCA) and U.K. Hydrographic Office (UKHO), focusing on the future of marine navigational data and charts.

The project is funded by the Department for Transport's Transport Technology Research Innovation Grant (T-TRIG) and aims to promote early-stage science, engineering or technology innovations with the potential to advance the U.K.'s transport system.

L3 ASV's T-TRIG project will begin by exploring the characteristics of navigational data and charts in terms of what they comprise, their structure and how they are updated.

"Current navigational data and charts have been developed over centuries to be read and interpreted by humans," said Dan Hook, senior director of business development at L3 ASV. "Today, and over the coming decade, more and more marine vessels will be operating unmanned, and the charts will be read by computers."

The project will identify the technical data requirements to enable the development of a Smart Chart system, which will then provide information to autonomous vessels to enable safer navigation.

"Understanding the data requirements of autonomous vessels is going to be hugely important for the MCA if we are to continue to ensure the safety of navigation in U.K. waters to save lives and combat pollution," said Tim Wilkes, product manager for the MCA. "This project will help us identify some of the regulatory issues that accompany a shift to smart and autonomous shipping and will highlight how the MCA can use its wealth of bathymetric and ship movement data to support this growing industry."

"As we move through the 21st century, technology will continue to transform the U.K.'s world-leading maritime sector," said

Shipping Minister Nusrat Ghani. “Innovations such as Smart Charts pave the way for automation and Smart Shipping, and we are keen to support British companies making the most of new technologies, giving our vibrant sector a competitive edge. Technology and innovation are a key part of our Maritime 2050 initiative, which will set a vision for the growth and success of our maritime sector over the next 30 years.”

“A wealth of marine geospatial data, from bathymetry depicting the seafloor to the speed and direction of the tides, supports navigation across our oceans,” said Mark Casey from the UKHO. “For over 200 years, the UKHO has supplied this information to shipping and defense to help keep mariners safe at sea. And we have developed our expertise in sourcing and processing this location-based information to help others better understand the marine environment. With this expertise and knowledge, we are well placed to help our partners identify the data requirements and standards needed to support autonomous vessels of the future.”

Vigilant Shield Homeland Defense Exercise Set to Begin

PETERSON AIR FORCE BASE, Colo. – The North American Aerospace Defense Command (NORAD) and U.S. Northern Command (USNORTHCOM), in conjunction with the Canadian Joint Operations Command, will conduct its 13th annual homeland defense exercise, Vigilant Shield 19, Oct. 24-28.

This is a binational exercise between the United States and Canada designed to assess and enhance the readiness of NORAD and USNORTHCOM, its components and mission partners to defend

the homelands from attack. More than 5,500 personnel from across the United States and Canada will participate, including the three commands' headquarters, the Alaskan and Canadian NORAD Regions, USNORTHCOM components (U.S. Army North, U.S. Navy North, U.S. Marine Forces North and Special Operations Command North), and other subordinate units and mission partners.

"The homeland is no longer a sanctuary and conducting exercises like Vigilant Shield is just one example of the many active measures taken every day by NORAD and USNORTHCOM as we continue enhancing our ability to defend our nations," said Air Force Gen. Terrence O'Shaughnessy, NORAD and USNORTHCOM Commander.

The Continental NORAD Region and U.S. Air Force North continue conducting their homeland defense missions from Langley Air Force Base (AFB), Virginia. However, they will have minimal participation in Exercise Vigilant Shield 19 in order to allow service members and families to focus on recovering from Hurricane Michael damage at Tyndall AFB, Florida, which is the home station of both organizations. While most facilities at the base were damaged, NORAD and USNORTHCOM have well established contingency plans that account for such events to allow the Department of Defense to execute its mission without interruption. Vigilant Shield 19 will go forward with some changes to the exercise.

Vigilant Shield 19 provides NORAD and USNORTHCOM opportunities to examine and refine strategies, evaluate processes and procedures, and demonstrate the ability to address threats in various environments and domains. It is primarily a Command Post Exercise using simulated forces and involves the commander, the staff, and communications within and between headquarters. While the overall exercise scenario is classified, it is designed to assess and enhance NORAD and USNORTHCOM's ability to defend the homeland across all domains, which include air, land, maritime, space and cyber.

NORAD provides aerospace warning, aerospace control and maritime warning for North America. USNORTHCOM conducts homeland defense, civil support and security cooperation to defend and secure the U.S. and its interests. The two commands have complementary missions and are co-located together on Peterson AFB.

Canadian Joint Operations Command leads most Canadian Armed Forces operations in Canada, North America and around the world. It directs Canadian Armed Forces missions from planning to closing, to meet national and international strategic goals.

Airbus Helicopters to Showcase H135 as Future Navy Helicopter Trainer

GRAND PRAIRIE, Texas – Airbus Helicopters is showcasing its H135 aircraft as the future training helicopter for the U.S. Navy at the Naval Helicopter Association's Fleet Fly-in at Naval Air Station Whiting Field in Pensacola, Florida, from Oct. 22-26, the company said in a release.

"Airbus Helicopters is convinced the H135 is the best solution to prepare the next generation of U.S. Navy pilots for decades to come, both technically and economically," said Chris Emerson, president of Airbus Helicopters Inc. and head of the North America region. "We look forward to demonstrating why this aircraft is the best solution for the Navy's helicopter training needs."

Airbus pilots will conduct orientation flights with U.S. Navy

pilots and other stakeholders to demonstrate the H135's capabilities at the October fleet fly-in.

Equipped with the most advanced technologies available like 4-axis autopilot and One Engine Inoperable (OEI) training mode, the FAA Instrument Flight Rules (IFR) Certified H135 provides future aviators with an ideal platform for training missions, a critical requirement for the Navy as it trains its pilots over water and in reduced visibility.

"As a twin-engine helicopter, the H135 provides a training environment most similar to the Navy's warfighting rotorcraft fleet, creating opportunities for cost and operational efficiencies compared to a single-engine aircraft," said Scott Tumpak, vice president of military programs at Airbus Helicopters Inc.

With its maneuverability, cockpit visibility, advanced safety features, endurance and best-value performance attributes, the H135 is the preeminent military training helicopter in the world. More than 130 units are providing training for military pilots in 13 countries, including Germany, Switzerland, the United Kingdom, Australia and Japan.

The H135 has executed over 300,000 military training flight hours. Globally, the H135 operates in more than 60 countries and has flown more than 4.8 million hours.

The H135 boasts the Airbus-developed, state-of-the-art Helionix avionics package designed by pilots specifically for helicopters. The H135's advanced cockpit design improves pilots' situational awareness while reducing workload, which enhances safety. The high-set main rotor and Fenestron shrouded tail rotor contribute to improved operational safety.

Airbus produces the U.S. Army's primary training helicopters, the twin-engine UH-72A Lakota. Since contract award in 2006, Airbus has delivered 431 Lakotas on time, on cost and on quality. Also, the Lakota is the primary trainer aircraft for

the Navy's Advanced Test Pilot School in Patuxent River, Md.

The H135 trainers for the Navy would be produced at the company's facility in Columbus, Miss., where the Lakota is manufactured. The Columbus workforce is comprised of more than 40 percent U.S. military veterans.

"A multimission and economical workhorse, the H135 is the right tool to support U.S. Navy initial pilot training," Tumpak said. "Airbus' global success in delivering rotary wing training platforms is recognized worldwide."

General Dynamics Mission Systems Launches Latest UUV at Oceans 2018

QUINCY, Mass. – General Dynamics Mission Systems has released the new Bluefin-9 autonomous unmanned underwater vehicle (UUV) at Oceans 2018 in Charleston, South Carolina, the company said in an Oct. 23 release.

The completely re-engineered vehicle combines high navigational accuracy, outstanding sonar resolution and precision manufacturing to deliver defense, commercial and academic customers highly-detailed subsurface data in minutes rather than hours.

The two-man portable UUV provides the same data collection capabilities of larger UUVs, and can be deployed and recovered from piers, a rigid-hulled inflatable boat (RHIB) or other vessels of opportunity.

The Bluefin-9 includes a removable data storage module (RDSM)

which stores high-definition images, video and sonar data that can be accessed within minutes of the vehicle's recovery. It delivers mission endurance of up to eight hours at a speed of three-knots and can reach speeds of six-knots and dive to 200 meters.

Because of its modularity, customers can exchange both the RDSM and battery to redeploy the Bluefin-9 in 30 minutes or less. These capabilities align with environmental surveying, water quality measurement, search and recovery, security, intelligence, surveillance and reconnaissance, and other tactical missions.

"General Dynamics has invested in the redesigned Bluefin-9 and a broad team of engineering experts has made significant improvements to the design, production quality, modularity and reliability of the entire Bluefin Robotics product family to deliver cost-effective UUVs with more mission capability and range," said Carlo Zaffanella, a vice president and general manager of General Dynamics Mission Systems. "We are proud to introduce this first product of a new generation of UUVs, designed to meet the dynamic operational challenges of our defense and commercial customers."