Commander Nominated for Resurrected U.S. Second Fleet

ARLINGTON, Va. — President Donald J Trump has nominated Vice Adm.
Andrew L. Lewis to command the new U.S. Second Fleet, to be headquartered in Norfolk, Virginia.

Lewis, a naval aviator, has served as deputy chief of naval operations for Operations, Plans and Strategy since August. He began
his career as an A-7 attack pilot and later made the transition to the
F/A-18. He has flown 100 combat missions during numerous operations in
Southwest Asia since 1991. He was the recipient of the Naval Air Forces
Pacific Pilot of the Year award in 1996.

His command tours include Carrier Strike Group 12, deploying with
USS Theodore Roosevelt; Naval Strike and Air Warfare Center; Carrier
Air Wing 3, deploying with USS Harry S. Truman; Strike Fighter Squadron
(VFA) 106; and VFA-15, deploying on USS Enterprise and USS Theodore
Roosevelt.

The chief of naval operations, Adm. John Richardson, announced the
establishment of the fleet during a change of command ceremony for U.S.
Fleet Forces Command (USFF) in Norfolk, May 4, the Navy said in a
release. The new fleet will report to USFF.

“Second Fleet will exercise operational and administrative authorities over assigned ships, aircraft and landing forces on the East Coast and northern Atlantic Ocean,” the release said. “Additionally, it will plan and conduct maritime, joint and combined operations and will train, certify and provide maritime forces to respond to global contingencies.

In its former iteration, Second Fleet generated forces to support operations in the North Atlantic, as well as U.S. Sixth Fleet in the Mediterranean Sea, the Middle East Force (later U.S. Fifth Fleet) in the Persian Gulf and, occasionally, U.S. Seventh Fleet during the Vietnam War. The fleet figured prominently in the Navy’s Maritime Strategy of the Cold War Era, when the Second Fleet staff would embark in a flagship for exercises in the North Atlantic and Norwegian Sea as a bulwark against the Soviet Union. The former Second Fleet was disestablished in 2011.

As noted by U.S. European Command, the Russian Navy has become more active in recent years in the Northern Atlantic and the Mediterranean Sea. U.S. Sixth Fleet in recent years has operated more frequently in the Baltic and Black Seas.

Marines Stage on Expeditionary Mobile Base Ship USS Puller for Real-World Operation

ARLINGTON, Va. — A Marine Air-Ground Task Force-Crisis Response (MAGTF-CR) has used a Navy expeditionary mobile base ship (ESB) for a quick-reaction movement in the Persian Gulf, the task force commander said.

Speaking June 8 to the Potomac Institute, Col. Christopher Gideons, commander of SPMAGTF-CR-Central Command from August 2017 to April, said that elements of the task force were called upon to stage to the United Arab Emirates in preparation for a maritime intercept operation (MIO) in the region.

After arrival, the task elements staged to the USS Lewis B. Puller, a newly commissioned ESB assigned to the U.S. Fifth Fleet that supports a variety of forces including mine countermeasures forces, special operations forces, patrol boats and other units.

Gideons said MV-22B Osprey tiltrotor transport aircraft were staged to the flight deck of Puller along with an infantry contingent of about 200 Marines. The MIO of an unspecified nature was planned and rehearsed, he said, but ultimately the force was told to stand down when the MIO was canceled by higher authority.

“The team did a great job,” Gideons said.

He praised the capabilities of the ESB, with its large flight deck, spacious hangar deck and rotorcraft refueling capability.

One challenge of the operation was getting needed gear on the ship and sustaining the force, he noted.

The use of an alternate platform – the ESB – in this case was necessitated by the lack of an amphibious ready group (ARG) with an embarked Marine Expeditionary Unit (MEU), as pointed out during the presentation by retired Marine Corps Commandant Gen. Alfred M. Gray Jr., who also highlighted the shortage of amphibious warfare ships that necessitates the existence of SPMAGTFs.

There was a 100-day gap in the presence of an ARG/MEU when Gideons' SPMAGTF was in theater, Gideons said.

The SPMAGTF also operated from the French Navy helicopter carrier FS Tonnere during the deployment.

The SPMAGTFs were created in 2014 in response to the 2012 attack on the U.S. government facilities in Benghazi, Libya, in which four Americans were killed in a siege with no ARG/MEU available in the Mediterranean Sea to rescue them.

Wave Gliders Selected to Study Arctic and Southern Oceans

SUNNYVALE, Calif. – Oceanographers from Scripps Institution of Oceanography (Scripps) and the Applied Physics Laboratory of the University of Washington (APL-UW) have selected Wave

Glider long-duration ocean robots as their sensor platform to conduct advanced scientific research in the most inhospitable and remote regions of the Arctic and Southern oceans, according to a June 5 release from Liquid Robotics, a Boeing company.

Using Liquid Robotics Wave Gliders, proven in extreme ocean conditions (sea state 6-plus), scientists will obtain real time data and rare insights into the dynamic conditions that drive the world's weather and climate. This data is critical for scientists to understand and improve global ocean weather modeling and climate prediction.

The oceanographers leading these important missions are:
■ Dr. Eric Terrill and Dr. Sophia Merrifield, Coastal Observing Research and Development Center, Scripps.
■ Dr. Ken Melville and his team at the Air-Sea Interaction Laboratory, Scripps.
■ Dr. Jim Thomson and his team in the Stratified Ocean Dynamics of the Arctic program at the APL-UW.

Each team will integrate sophisticated oceanographic and atmospheric sensors onto the Wave Gliders to measure extreme wave states, winds, temperature and salinity in the upper layers of the ocean. Historically, these regions have been undersampled due to the dangers and risks of operating in these turbulent oceans. With the help of unmanned systems, the oceanographers will be able to observe the real time weather and climate conditions safely from shore.

"The reliability of the platform, modular payloads, and proven navigation capabilities led to our decision to select the Wave Glider for our upcoming science program," said Terrill, director of the Coastal Observing R&D Center at Scripps. "Tackling at-sea science questions has plenty of challenges and we needed a platform we could trust and adapt. The modularity allows us to deploy our own sensors and adapt autonomy algorithms so that the vehicle will optimally sample

the ocean.”

Working together with Liquid Robotics, these oceanographers have successfully conducted long-duration scientific missions in the Arctic, Pacific, Southern and the North Atlantic oceans. Exploring the vast, remote regions of our ocean, especially in the Arctic and Antarctica, is incredibly challenging. Deploying Wave Gliders in the most energetic sea conditions on Earth will help scientists gain a better understanding and modeling of our changing planet.

“In 2016, we successfully completed a three-month, 2,000-kilometer mission in the Southern Ocean where the Wave Glider performed through 6-meter-high waves, extreme winds and swam through the world’s largest ocean current, the Antarctic Circumpolar Current,” said Thomson, senior principal oceanographer at the APL-UW. “The data collected provided unprecedented temporal and spatial coverage and I have great confidence our upcoming Arctic mission in the Beaufort Sea, part of the Stratified Ocean Dynamics of the Arctic, will again provide valuable insights.”

Marine Corps to Award Orders for Cold Weather Boots and Socks

MARINE CORPS BASE QUANTICO, Va. – Marines will stay warm during ambient cold weather operations with new boots and socks. Marine Corps Systems Command (MCSC) intends to award sole source purchase orders for two types of Intense Cold Weather Boots (ICWBs) and Intense Cold Weather Socks (ICWSs) to improve Marines’ performance in cold weather environments.

A total of 2,000 boots and 50,000 pairs of socks will be delivered from four vendors by Sept. 28.

“Based on market research, industry days and events such as Modern Day Marine, we narrowed our decision for the orders down to two companies for cold weather boots and two for socks,” said Todd Towles, program analyst for the Clothing and Equipment Team at MCSC.

There are currently no Marine Corps issue boots designed for use in the -20 to 20 degrees Fahrenheit range. The Temperate Weather Marine Corps Combat Boot was designed for a temperature range between 20 to 60 degrees Fahrenheit, and the Extreme Cold Weather Vapor Barrier Boot was designed for a range between -65 to -20 degrees Fahrenheit.

This effort to acquire the cold weather boots and socks will help MCSC evaluate commercial, off-the-shelf solutions and offer the potential to reduce or eliminate the current environmental protection gap, said Towles. The socks will have much higher wool content than the polypropylene wool socks Marines currently use. Additionally, the Clothing and Equipment Team is hopeful the new gear will offer increased water repellency, comfort and insulation in extreme cold weather environments.

MCSC’s Program Manager Infantry Combat Equipment will conduct a field user evaluation December through March. The team will gather input from Marines as they wear the ICWB and ICWS prototypes at the Mountain Warfare Training Center, Fort McCoy and Norway.

Feedback regarding fit, form and function will be collected along with how well both prototypes of the ICWB and ICWS perform in sub-zero temperatures.

“The Army is conducting evaluations with similar boots and socks, so there is potential to have some consistency with our results and products,” said Lt. Col. Chris Madeline, program

manager for ICE. “Marines will keep the prototype boots through the duration of testing. Once data is collected, it will inform future acquisition decisions and allow the Corps to purchase boots and socks that bridge the gap between the existing cold weather boots.”

The Clothing and Equipment Team falls under Program Manager Infantry Combat Equipment at MCSC.

Schultz Takes the Helm as Coast Guard Commandant

WASHINGTON – Adm. Karl L. Schultz took command of the U.S. Coast Guard during a June 1 ceremony at Coast Guard headquarters presided over by President Donald J. Trump and attended by most of the Joint Chiefs of Staff, homeland security officials, a large international contingent, current and former Coast Guard members, and family and friends.

“Today is a day of hails, a day of farewells and a day of thank yous,” Homeland Security Secretary Kirstjen Nielsen said in her introductory remarks at the change of command, which marked the end of the four-year tenure as commandant of Adm. Paul F. Zukunft, who officially retired from the Coast Guard in a ceremony immediately following the event.

“‘Service above self,’ an Adm. Zukunft quote, is a reflection of his 40 years of service in the Coast Guard, words to live by that I share,” she said.

Zukunft became the 25th commandant on May 30, 2014. His leadership and vision were instrumental in increasing the pace of the Coast Guard’s recapitalization efforts, according to a

release from the service. He worked with Congress and the White House to achieve funding for completion of the national security cutter program of record, the acquisition of new fast response cutters, and funding for the waterways commerce cutter and the offshore patrol cutter. He also ensured the Coast Guard began receiving necessary funding for the acquisition of the nation's first new polar icebreaker in more than 40 years.

Zukunft led the service's efforts to respond to the unprecedented 2017 hurricane season, where Coast Guard personnel saved or assisted nearly 12,000 victims from flooded communities in Texas, Florida and Puerto Rico.

Schultz reports to Coast Guard headquarters as the 26thh commandant from Portsmouth, Virginia, where he served as the Atlantic Area commander since August 2016, directing all Coast Guard missions from the Rocky Mountains to the Arabian Gulf, spanning across five districts and 40 states.

Noting Schultz's oversight of last summer's hurricane response as Atlantic Area commander, Nielsen said "confidence, leadership and dedication to country was evident in the mission. As he assumes command today as the commandant of the Coast Guard, President Trump and I have full confidence in Adm. Schultz's ability to lead this proud organization with honor and integrity."

"We're gathered together today for a truly special occasion," Trump said during his remarks. "We are here to mark a change in command of the United States Coast Guard and celebrate the incredible career of its 25th commandant, Adm. Paul Zukunft. On behalf of the American people, I thank you for a lifetime of noble service. Congratulations on everything you have achieved for nearly half a century. For 45 years, Paul has proudly worn the Coast Guard uniform. That's a long time, you don't look that old," he joked.

“In that time, he has led every kind of mission never backed down … he’s never lost a challenge,” Trump said. “For the last four years, Adm. Zukunft … has led with extraordinary skill, devotion and pride. … Throughout the admiral’s tenure, he poured his heart and soul into the service of our nation and he brought remarkable vision to the task of ensuring the Coast Guard’s rightful place at the forefront of American security and prosperity. America is safe because our Coast Guard is strong.”

Trump also thanked Zukunft’s wife, Fran DeNinno-Zukunft for her own service as a devoted mentor and representative for military families.

“We are grateful for everything you’ve done to advance the Coast Guard mission, it’s been a lot,” he said.

After highlighting some of the Coast Guard’s accomplishment’s during Zukunft’s tenure, Trump praised last year’s “unbelievable” hurricane response and noted that, “with this ceremony we proudly pass the helm of the United States Coast Guard to the man who oversaw those emergency operations.”

Echoing Nielsen’s comments about Schultz, Trump said, “I have complete confidence that Karl will carry out his new mission with the same talent, strength and devotion that have characterized his entire career. He has had an incredible and very brave career. Karl, we congratulate you and we thank you for answering this call to service. …

The change of command, Trump said, comes “at a great moment, not just for the Coast Guard, but for our entire nation. Your service makes all of America proud. American knows that we can always count on the Coast Guard because the Coast Guard is always ready.”

“Today is the first day of hurricane season, this is a good day to cut and run,” Zukunft quipped, after receiving the orders relieving him of command. He used a series of baseball

analogies to describe his tenure as commandant.

“When I came into this position, I told my senior leadership team that it is high time that we swung for the fences. For too many years we went up to the plate and squared around to bunt. You’re never going to hit a ball out of the park when you bunt every time you step up to the plate. Well swing we did. … 2018 was the largest appropriation for the United States Coast Guard,” he said.

“When I look what we are investing in, our fleet of national security cutters, originally this was going to be a fleet of eight, we now have 11 on budget and under construction. The offshore patrol cutter, it was a hope in 2014 … well it’s a reality, the first one will hit the water in 2021, with many more to follow. … And we’re building polar icebreakers, the first one arrives in 2023. … We’re building out a fleet of what we call waterway commerce cutters. In 2019, we will open up a cyber curriculum at the U.S. Coast Guard Academy. We have to grow the talent. We’re also investing in unmanned aerial systems. … We’re investing our people as well, we’re growing the force.

“Yes, we swung for the fences, we hit a home run, but this is an infinite game and the game goes on and, yes, it must go on,” he said.

After reading his orders to report for duty as commandant, Schultz pledged to carry on the work that had begun under Zukunft’s watch.

“Our Coast Guard is in fact strong. We have been a well-run and led organization. The privilege of assuming command today is amplified by the fact that this will be a seamless transition. Much more about a continuity of command than a changing of command. … As I survey the waters and the opportunities that lie ahead for this service, I envision our heading remaining generally steady, but we’ll look to pick up

spend when possible and where appropriate," Schultz said.

"As I assume my new duties, I am confident that we have built a strong leadership team. We are eager to get about the work of leading this Coast Guard."

New 'Rebreather' Helps Navy Divers Beneath the Waves

ARLINGTON, Va. – The U.S. Navy diver hoisted a 60-pound life-support regulator onto his back, then donned a 30-pound metal helmet. Fellow divers connected his diving suit to an "umbilical" hose pumping in breathing gas and establishing communications with the surface. After receiving approval to hit the water, the diver descended into a large test pool at Naval Surface Warfare Center Panama City (NSWC), Florida – home to the Navy Experimental Diving Unit.

The diver's mission: demonstrate the effectiveness of the MK29 Mixed Gas Rebreather – a new prototype system that's the first of its kind within the Navy diving community, developed by NSWC Panama City.

The technology is sponsored by the Office of Naval Research Global (ONR Global) TechSolutions program. TechSolutions is ONR Global's rapid-response science and technology program that develops prototype technologies to address problems voiced by Sailors and Marines, usually within 12 months.

"This rebreather system is an awesome opportunity to enhance the capabilities of Navy divers and accelerate their deployments," said ONR Command Master Chief Matt Matteson, who heads up TechSolutions.

Navy diving missions include underwater rescues, explosive ordnance disposal, ship hull maintenance, recovery of sunken equipment, and salvage of vessels and aircraft.

Beneath the waves, Navy divers breathe a careful mixture of oxygen and nitrogen. Below 150 feet, however, nitrogen becomes toxic – leading to nitrogen narcosis, a drowsy state that can dull mental sharpness severely and jeopardize safe return to the surface.

The solution is to replace nitrogen with helium. However, helium is expensive and hard to obtain because of recent worldwide shortages. And the Navy needs a lot of it for missions and training exercises, requiring canisters of the gas to be transported on accompanying ships or planes.

The MK29 rebreather solves these problems. Used oxygen-helium is filtered through a carbon dioxide scrubber – which removes carbon dioxide and recycles the breathable gasses back to the diver.

The result? Very little venting (giveaway bubbles) – or wasted helium.

“The MK29 decreases helium requirements by approximately 80 percent,” said Dr. John Camperman, a senior scientist overseeing the development of the MK29 at NSWC Panama City. “Divers can perform more dives with the same amount of gas or bring less helium.”

Test results suggest this system will be a major asset to Navy divers-who cannot only perform more dives, but also stay underwater longer if surface supply gas is interrupted.

The MK29 even reduces breathing noise and fogging of helmet viewports. It’s also the first piece of Navy diving equipment to feature 3D-printed titanium tubing that connects hoses from the helmet’s breathing manifold to the regulator backpack. That titanium reduces the risk of breathing hoses being sliced

by sharp or jagged underwater objects.

The idea for the MK29 came from a NSWC Panama City master diver, who contacted TechSolutions seeking a way to reduce helium consumption while using newly available rebreather technology. Recognizing the expertise of Camperman and his team, TechSolutions asked them to develop the MK29.

Camperman's research team will conduct further MK29 tests this year-and hope to see the rebreather issued throughout the fleet by next year.

HII Completes Initial Sea Trials of Virginia-Class Submarine Indiana

NEWPORT NEWS, Va. – Huntington Ingalls Industries' Newport News Shipbuilding division has successfully completed the initial sea trials on the newest Virginia-class submarine, Indiana (SSN 789), the company announced in a May 25 release.

The initial round of sea trials, known as alpha trials, provides an opportunity to test all systems and components. It includes submerging for the first time and high-speed maneuvers while on the surface and submerged.

"Sea trials is a significant milestone and the first major test of [a] submarine's capabilities at sea," said Dave Bolcar, Newport News' vice president of submarine construction. "We are pleased with how Indiana performed and look forward to continuing our testing program before we deliver the boat to the U.S. Navy later this year."

Construction of Indiana began in 2012. The boat – the 16th Virginia-class submarine built as part of the teaming partnership with General Dynamics Electric Boat – was christened in April 2017. Indiana Video

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Lockheed Martin Tests Long-Range Anti-Ship Missiles for Super Hornet Requirement

ORLANDO, Fla. – Lockheed Martin announced on Wednesday it has successfully fired two production representative Long-Range Anti-Ship Missiles (LRASMs) from a U.S. Air Force B-1B.

In the event over the Sea Range at Point Mugu, California, a U.S. Air Force B-1B from Dyess Air Force Base, Texas, released the pair of LRASMs. The missiles navigated through all planned waypoints, transitioned to mid-course guidance and flew toward the moving maritime target using inputs from the onboard sensors. The missiles then positively identified the intended target and impacted succesfully.

“The success of this second dual-LRASM test event speaks volumes,” said David Helsel, LRASM director at Lockheed Martin Missiles and Fire Control. “As LRASM moves toward early operational fielding for the U.S. Air Force and U.S. Navy, the weapon system continues to demonstrate critical capabilities that our warfighter needs.”

LRASM is designed to detect and destroy specific targets within groups of ships by employing advanced technologies that reduce dependence on intelligence, surveillance and reconnaissance platforms; network links; and GPS navigation in

contested environments. Lockheed Martin says the LRASM will play “a significant role” in ensuring military access to operate in open ocean, due to its enhanced ability to discriminate and conduct tactical engagements from extended ranges.

LRASM is a precision-guided, anti-ship standoff missile based on the Joint Air-to-Surface Standoff Missile – Extended Range. The air-launched variant provides an early operational capability for the U.S. Navy’s offensive anti-surface warfare Increment I requirement to be integrated onboard the U.S. Air Force’s B-1B in 2018 and on the U.S. Navy’s F/A-18E/F Super Hornet in 2019.

HMS Queen Elizabeth’s U.K. Crew Finally Meets the F-35B

PATUXENT RIVER, Md. – Members of the flying control and flight deck control teams aboard HMS Queen Elizabeth (R08), flagship of the Royal Navy’s new class of aircraft carriers, visited Naval Air Station Patuxent River, Maryland, this week for their first live peek at the F-35B Lightning II, ahead of the jet’s first trials aboard the ship this fall, the F-35 Program Executive Office said in a May 22 release.

On May 22, about 20 members of the HMS Queen Elizabeth team witnessed F-35B test aircraft BF-02 and BF-04 taxi, perform two vertical landings apiece, and conduct a couple short takeoffs. The ground reverberated as each aircraft approached the tarmac for its vertical landings led by the F-35 Pax River Integrated Test Force team, hovering for several seconds prior to descending.

The next day, the ship's team took over and, acting as landing signal officers, taxied an F-35B for the first time. Persistent rain limited the team's activities on Thursday prior to their Friday departure back to the United Kingdom.

In terms of getting his personnel familiar with the F-35B, prior to this fall's ship trials off the U.S. eastern seaboard, the trip was a success, said Royal Navy Cmdr. James Blackmore, Commander Air aboard HMS Queen Elizabeth.

"It's the first time they've ever seen the jet or been up and close to it as it's performing its flight maneuvers, so they got to feel the environment of what it's like, the sort of noise, the heat, the sound and the pressure of the aircraft, so that when it comes to deck for the first time, it's not a surprise," Blackmore said.

As HMS Queen Elizabeth's "air boss," Blackmore is in charge of all aviation activity onboard a ship "that's been designed specifically for the F-35," he said.

At roughly 65,000 tons, HMS Queen Elizabeth is much smaller than U.S. Navy carriers, but its flight deck and hangar are about the same size, Blackmore said. He noted the "key difference" between the two nation's aircraft carriers is the Queen Elizabeth class' flight deck, which is designed exclusively to handle helicopters and the F-35B, the short takeoff and vertical landing (STOVL) variant of the fifth-generation fighter.

"From the keel up, it's all been about F-35 from day one," he added.

For the U.K., the F-35B represents a much-anticipated return to carrier aviation, one that holds particular significance for Blackmore, who piloted the last Harrier flight off the HMS Ark Royal, the U.K.'s last aircraft carrier, in November 2010. Equally fitting, the Ark Royal's captain at that time, Commodore Jerry Kyd, is now the captain of HMS Queen

Elizabeth.

“I was fortunate enough to fly the last ever Harrier launched from a U.K. aircraft carrier in 2010, so if you like, I almost closed down what we used to do,” Blackmore said. “The fact that eight years later, I’m now here opening that back up with the team is really good.”

Blackmore called the F-35B “a step change for the U.K. in how we’re going to conduct business.”

“The fact that it’s F-35 is pivotal, because you’re in the fifth-generation game now with aircraft, which brings stealth, sensor fusion, advanced weapons, and the ability to project aviation and power ashore at your choosing,” he said.

NAVSEA Leadership: High-Velocity Learning Key to Expanding the Advantage

WASHINGTON – The two top leaders of Naval Sea Systems Command (NAVSEA) bookended the first high-velocity learning (HVL) summit to show their commitment to HVL, one of the pillars of the NAVSEA Campaign Plan to Expand the Advantage, the Naval Surface Warfare Center’s Carderock Division said in a May 17 release.

Jim Smerchansky, executive director for NAVSEA, opened the HVL summit held at Naval Surface Warfare Center (NSWC), Carderock Division in West Bethesda, Maryland, May 15-16. NAVSEA Commander Vice Adm. Thomas Moore closed the event, which brought representatives of NAVSEA commands together to discuss

HVL tools, successes and opportunities.

With similar messages about the importance of high-velocity learning, both men described the need to increase the United States' capabilities over its adversaries. The country is in an era of great power competition, namely with Russia and China, and according to both Smerchansky and Moore, NAVSEA's vision to "expand the advantage" means contributing to the overall effort of the secretary of defense's National Defense Strategy to broaden that capability gap.

"High-velocity learning is about mission accomplishment," Smerchansky said. "Our obligation, our mission to the Navy and the nation is to deliver and provide warfighting systems and ships to the men and women of the country to never allow them to be in a fair fight. Our obligation to our workforce is to provide meaningful work and the right tools they need to be successful."

Each of the speakers took questions from the audience, many of which were concerning the loss of knowledge that is expected as the more experienced employees retire.

In response to one such question, Smerchansky said instead of thinking of it as a transfer of knowledge to the next generation, people should consider a transfer of experience, meaning the more senior employees need to start turning their work over to the junior employees, allowing them to gain the experience necessary to work through problems.

"High-velocity learning can go right to the heart of that," Smerchansky said. "This is the generation coming up that has to be able to look right; they have to count on the 75,000 people (within NAVSEA) to be part of their network to help them be successful."

The idea of high-velocity learning originated from the book, "The High-Velocity Edge," by Steven Spear. Chief of Naval Operations Adm. John Richardson adopted HVL as something every

level of the organization should be achieving, as laid out in his plan “A Design for Maintaining Maritime Superiority.”

High-velocity learning can be explained with the four “S’s:” see, swarm/solve, share and sustain. Within this framework, decision making can be pushed to the lowest levels of the organizations, thereby empowering employees to gain the experience Smerchansky said they need.

During the summit, which included remarks by Rear Adm. Doug Small, Program Executive Office, Integrated Warfare Systems, the attendees were able to experience their own “swarm.” NAVSEA’s PMS 391 (Team Subs) identified three challenges they have, specifically in modernization, acquisition and maintenance.

“We use these philosophies in hopes of becoming a true learning organization,” said Jana Patterson, a senior acquisition product engineer for Team Subs. “We are trying to figure out how to not only increase the throughput of modernization, but to improve upon our maintenance situation, the processes already in place.”

Patterson said the knowledge is at the waterfront with the people actually turning wrenches or ordering parts, and the people in service support, like her, need to hear from them.

“We are looking for ideas on how to empower that level of personnel out at the shipyards, whether they be private or government, to identify issues,” Patterson said.

The attendees split into three groups and spent about 45 minutes brainstorming the issues presented by Team Subs, working towards possible solutions, which is precisely what “swarming” is. They then came back together to share their results. Even though most of the people in the groups did not work in the submarine world, it was their own experiences that led to the possible solutions.

Patterson came away with several ideas, which she said she will take back to her work environment and see if there are opportunities to incorporate some of the possible solutions.

The idea of HVL is not only improving processes by seeing the problems and swarming them for solutions, but it's also about sharing across the enterprise so the workforce is working smarter and continuing to expand the advantage.

"If you can't spend a little bit of time doing strategic planning, high-velocity planning on what the future workforce needs to look like, then we are kind of doomed to do what we've been doing over and over again," said Don McCormack, executive director for NSWC and Naval Undersea Warfare Center.

One of the common themes at the summit was communication as a barrier to high-velocity learning.

"The biggest challenge I have every day is effectively communicating to a workforce of 75,000 people," Moore said, acknowledging that sharing is going to naturally be the hardest part about HVL. "But if we really want to be a high-velocity learning organization, we have to be able to communicate and get it down to where it's culturally important for us to be working on this; it has to become second nature."

Moore said he expects the attendees of the HVL summit to become the change agents, relying on them to force the culture to change.

"The two things on the Campaign Plan that require the most work and that we've made the least amount of progress on, they are both ideas that are culture issues, a culture of high-velocity learning and a culture of affordability," Moore said. "Why are those things the hardest? Because culture in an organization is the absolute hardest thing to change, without a doubt."

Moore challenged the summit attendees to take the principles

of high-velocity learning to the next level and find a way to get them ingrained into the culture, so that everybody is thinking about HVL.

“The high-velocity learning piece is probably the most key element to eventually getting to the vision to expanding the advantage,” Moore said.