

Navy Seeking Innovation in New Places Despite Challenges, ONR Director Says



Anne Sandel, executive director, Office of Naval Research.
U.S. Navy / John F. Williams

While there is a new administration and leadership, the Office of Naval Research's executive director said she does not expect any major changes in the Department of the Navy's priorities, and the acquisition team will continue to be

focused on delivering and sustaining lethal capability, increasing agility, driving affordability and developing a work force to compete and win.

Anne Sandel, also the acting principal civilian deputy to the assistant secretary of the Navy for research, development and acquisition, spoke at the National Defense Industrial Association's Expeditionary Warfare Conference, which took place virtually Feb. 2 and 3.

Sandel said the Navy acquisition and research and development enterprise, like everyone else, was challenged by the global pandemic during 2020. COVID 19 had a big impact on the work environment. But, she said, through adaptation and process, the Navy has continued to execute.

"We've leapfrogged ahead to embrace that virtual and electronic environment," Sandel said. "Our outreach, communication and our collaboration has actually increased. Although people like to be in room with one another, I have seen much more collaboration across the board, whether it's Navy, Marine Corps, or any of our industry partners or allies. We are able to reach out on a moment's notice and do what we're doing today with one another. Many times, it's a force multiplier, because we can include people who personally would not have been available because of travel, cost or schedule demands. Today, they can log on, be part of a phone call, and be there instantaneously. It's multiplied our ability to communicate and move forward in a format that is unusual for those of us who grew up in an industrial infrastructure. We've had to transcend that with the acquisition, design, engineering and construction efforts. It's improved our processes."

Sandel has a long career in shipbuilding, maintenance and repair, but in her current role, she has a view of the many evolving technologies and concepts to address current and future warfighting requirements across all of the warfare

domains.

In her job at ONR, Sandel said she came to better appreciate just how much of ONR's portfolio is focused on the expeditionary mission and in support of Marines. In fact, the vice chief of naval research is a Marine who also commands the Marine Corps Warfighting Laboratory.

"We are very closely aligned with the Marine Corp and the expeditionary portfolio," she said.

Leveraging innovation

Sandel talked about finding and leveraging innovation. The NavalX organization, established by then-Assistant Secretary of the Navy for Research, Development and Acquisition James Guerts, focuses on embracing non-traditional agility methods across the DON workforce, and linking up isolated or disparate pockets of excellence and subject matter experts. As a part of NavalX, the Navy established storefront "TechBridge" offices – "agility cells" to broaden the network to help the Navy and Marine Corps learn and act faster in key locations.

The TechBridge storefront concept applies both internally within the Department of the Navy, but also externally, with other federal, state, regional and local government organizations, academia, nonprofits, trade and professional organizations and industry.

"Think of NavalX as the 'network,' and the TechBridges as the nodes on the network," Sandel said.

While she said the Navy is committed to developing and supporting America's industrial base, she also is looking at capabilities that are available on the global market, including government-to-government and international commercial collaboration.

Sandel said Rear Adm. Lorin Selby, the Chief of Naval

Research, has an international component to his job, and ONR Global has offices around the world to connect with academia, industry and governments to share developing technologies. The first TechBridge outside the U.S. has been established in the U.K., collocated with ONR Global at Northwood, to help make connections and find innovative technologies.

Another way to accelerate getting technology into the hands of warfighters is through experimentation. The Navy and Marine Corps are planning an ambitious array of exercises in the months and years ahead, including Trident Warrior, RIMPAC, Sea Dragon, Bold Alligator, Valiant Shield, Valiant Blitz, Large Scale Exercise 2020, to name a few, along with Advanced Naval Technology Exercises (ANTX) and Joint Interagency Field Exercises.

Originally planned for 2020, the Navy is looking to leverage Large Scale Exercise 2021 to operationalize concepts like Distributed Maritime Operations (DMO), Expeditionary Advanced Base Operations (EABO), and Littoral Operations in a Contested Environment (LOCE), naval operational architecture, and command and control in a contested environment to develop and test alternative warfare concepts.

"We're putting tools and kit in the hands of the actual operators, experiment with it, and give us feedback directly," she said.

Sandel discussed some of the ways the Navy in general, and ONR specifically, can move quickly to find, develop and field new technology. She pointed to ONR's TechSolutions program as an example of how ONR can act promptly on ideas from deckplate Sailors or Marines to improve mission effectiveness. TechSolutions has resources to rapidly address suggestions and ideas from the fleet, investigate available technologies, and deliver prototype solutions.

She also recognized the importance of small business, such as

those participating in the Small Business Innovation Research (SBIR) program. "During my tenure at ONR, and now at the enterprise level, I have seen how we have been able to leap forward greater agility using the SBIR funding than I was aware of in all my years in the engineering and acquisition organizations. I knew they were there, and how to get innovation from small companies that couldn't compete as primes, but I've learned that they're more agile than I recognized, The SBIR program, the way its architected and funded, has the agility to take innovative technologies and leapfrog forward," she said.