## CMS Breakfast: Pursuing Ways to Strengthen the Workforce, Boost Readiness



Government and industry need to work together to solve the problems of shipbuilding schedules, workforce retention and getting deployable technology into the hands of warfighters at scale, speakers said at the Center for Maritime Strategy breakfast on April 9.

"Is it time to call for the Defense Production Act?" asked Admiral James Foggo, the dean of CMS and panel moderator, noting the number of shipyards have declined over the decades from 55 to just six today.

"It's about setting conditions," said Nickolas Guertin, the Navy's relatively new assistant secretary for research, development and acquisition, noting the industry saw the need to ramp up shipbuilding in the 1930s, providing critical capability when World War II began. "Setting conditions is part of what I can do."

Guertin said defense officials and industry need to stop thinking of themselves as carrier people or submarine people, "but as delivering game-changing capability across the tyranny of distance."

He said government and industry need to look at the workforce as national strategic assets and create environments where they want to stay in an industry adversely affected by COVID.

"Their happiness at work is a primary task for industry ... we are bleeding people on the waterfront and we need to turn that around," he said.

Admiral Daryl Caudle, commander of Fleet Forces Command, said it has become obvious to Chief of Naval Operations Admiral Lisa Franchetti that the Navy she has inherited "will not fundamentally change in size. It just will not. We have a responsibility to wring out every ounce of readiness we can."

The Navy needs to innovate on force generation, defining what combat surge readiness looks like, and coupling revolutionary technology like artificial intelligence and machine learning with actual problems they can help solve, "so we can actually apply [them] where those technologies need to land," he said.

It would also be helpful to give industry clear demand signals through clear requirements and multi-year procurements, Caudle said, and the service must turn concepts of operations into concepts of deployment. "How do I get this into the theater?"

## **DIU Evolution**

That is one of the jobs of DIU, the Defense Innovation Unit directed by Doug Beck, recruited by the late secretary of

defense Ash Carter, who Beck said was prescient about the direction industry was going and realized "we must leverage the incredible technology in our commercial tech sector," Beck said.

"What he saw was that in so many areas of technology – artificial intelligence, autonomy, biotech, space, cyber – those areas of technology are going faster in order to meet the relentless demands of billions of consumers around the world," much faster than "they possibly could in our bespoke only" defense market.

The nation is now at a tipping point, he said, where the president, secretary of defense, commercial tech sector and Congress all "get it" and need to move that technology to the field. DIU's first iteration was building a bridge to the tech sector, version 2.0 was proving that commercial technology could help solve military problems and the latest version, call it DIU 3.0, is aimed applying technology "with strategic effect," and doing so at scale.

One such effort is Replicator, a Department of Defense effort to field thousands of attritable, autonomous, uncrewed systems to counter China's growing naval capability. The initial effort is about creating the capability and then doing that "over and over again," Beck said. "We are on track for both of those objectives."

He said he couldn't talk about actual systems that are part of the effort, but said tranche 1 is "off to the races" and they are working on tranche 2, with a deadline of August 2025.

## Columbia Status

Matthew Sermon, the executive director, PEO Strategic Submarines, addressed the Columbia-class submarine program, identified as being well behind schedule, according to a Navy shipbuilding review. "Columbia is becoming a ship," with the lead ship is under construction, stable requirements and a mature design, he said. However, it has experienced "lead ship challenges," which he said could be expected in the first ship designed entirely in a 3D model.

"We're not going to surrender that lead ship schedule," he said, and the program is moving to match the production cadence required by the Navy.

Speaking of innovative technology, he said additive manufacturing is entering the workforce, although it may not be as widely distributed as previously thought.

"We have narrowed that down to six critical materials" and the related parts, he said. "We're going to prove it out, we're going to destructively test it ... we're going to get it right."