Artificial Intelligence, Machine Learning Top Naval Intelligence Technology Needs, Director Says

Sailors stand watch in the sonar room of the Los Angeles-class fast-attack submarine USS Chicago (SSN 721) in support of Valiant Shield 2020. Valiant Shield is a U.S. only, biennial field training exercise (FTX) with a focus on integration of joint training in a blue-water environment among U.S. forces. This training enables real-world proficiency in sustaining joint forces through detecting, locating, tracking, and engaging units at sea, in the air, on land and in cyberspace in response to a range of mission areas. U.S. Navy / Mass Communication Specialist 1st Class Derek Harkins

ARLINGTON, Va. — The U.S. Navy will need more help from artificial intelligence systems to answer the technology challenge posed by vast amounts of data and information

available from every domain, the deputy chief of naval operations for information warfare says.

The challenge is with "the amount of data and information that is out there," according to Vice Adm. Jeffrey Trussler, who is also director of Naval Intelligence. "We're well beyond the point where rooms full of analysts" can handle digital information coming from open source, signals and acoustical intelligence, Trussler told a Jan. 27 webinar hosted by the Intelligence and National Security Alliance. "We're going to have to put machines on that, with the algorithms in place to manage it.

"Every advancement that exists for AI [artificial intelligence] and ML [machine learning], we need to suck in and learn from," Trussler said when asked about the top Naval Intelligence technology needs. "I think across the board, AI/ML is what is top."

Trussler said there were already "some tremendous AI projects underway" at the acoustics intelligence agency. Of all the domains from seabed to space, only the U.S. Navy deals with intelligence gathering underseas, said Trussler, a submariner for most of his career. "And that is the domain where we still have a dominant margin. But we need to keep pressing and keep learning in that arena."

He also urged industry to keep pressing the Navy. "The innovations and ideas from industry are huge. Keep pressing us. Keep knocking on the door. Keep showing us what's available and what you can do," he said. However, the Navy isn't looking for proprietary technology that can't mesh with existing or future platforms. "We're going to be more interested in 'How is this going to link into the systems we have? How is this going to help us advance a collaborative web to close our kill chains?'"

In the future, Trussler said, the Navy Department won't invest

in "proprietary things that we can't crack open. That aren't open architecture, that we can link in with the rest of our systems."