Sea-Air-Space 2021 Prequel: Next-Gen Attack Sub Will Be Ultimate Apex Predator, Admiral Says



USS Seawolf, shown here in Japan in 2009. The Navy aims to combine the Seawolf-class's speed and payload, Virginia-class acoustics and sensors and Columbia-class longevity into the next-generation nuclear-powered attack submarine, the SSNX. *U.S. NAVY / Lt. Cmdr. Greg Kuntz*

ARLINGTON, Va. — The U.S. Navy's next-generation nuclear-powered attack submarine, SSNX, will combine the best technologies and capabilities from earlier submarines to produce the finest hunter the world's oceans have ever seen, according to the service.

"We're looking at the ultimate apex predator for the maritime domain," said Rear Adm. Bill Houston, director, Undersea

Warfare, Division, Office of the Chief of Naval Operations, who has been selected to be the Navy's next commander, Submarine Forces, speaking in a pre-recorded webinar of the Navy League's Sea-Air-Space Prequel.

Houston said the SSNX has "got to be faster, carry a significant punch, a bigger payload, a larger salvo rate. It's got to have acoustic superiority and simultaneously we're going to work on operational availability with respect to maintenance and life of the ship.

"We're taking what we already know how to do and combining it together," he said.

The Seawolf-class SSN, which entered service in the late 1990s, "has incredible speed and payload," he said. "We're going to take that Seawolf trait of payload and speed; we're going to take Virginia class acoustics and sensors; and then we're going to take Columbia's [nuclear-powered ballistic-missile submarine, or SSBN] operational availability and life of ship.

"We're going to put that all together [for SSNX] – the apex predator – because it really needs to be ready for major combat operations," he said. "It's going to need to be able to go behind enemy lines and deliver that punch that is going to really establish our primacy. It needs to be able to deny an adversary's ability to operate in their bastion regions."

Houston said that the Navy is "confident we're going to be able to do that because we've already built that on those platforms. We know how to do that. We just have to mesh it together with one platform. The systems we have, with electronic design, the tools, the stuff that we've already developed, we're going to capitalize on that."

The admiral explained that the SSNX is timed to capitalize on the 'very robust" design team for the Columbia-class SSBN when that program is ramping down amid production of the SSBNs.

“We’ll be ramping up in SSNX because we’ll have the design and the RDT&E [research, development, test and evaluation] done,” Houston said. “It takes a significant amount of time and effort for that RDT&E to develop this apex predator. That’s what we’re going to do over the next decade working on the systems for SSNX. We’re very confident we can get there. It’s a daunting task, but the team is more than capable of doing it.”