

Sea-Air-Space: Textron Offers the Tsunami USV Family for Multi-Purpose Navy Use



Tsunami, a small USV, is a joint effort by Textron Systems and Brunswick Corp. *Photo credit: Textron Systems*

Textron Systems (Booth 1827, D1), originator of the Common Unmanned Surface Vehicle (CUSV) in U.S. Navy service, has developed a less expensive USV that could be used for a variety of missions and could even be considered attritable.

Textron is teamed with Brunswick Corp., a small craft manufacturer, to offer Tsunami, family of deployable, small, scalable, gasoline-powered outboard-engine craft, with hull lengths ranging from 14 to 42 feet long. Certain of the models have a payload capacity of 1,000 pounds, ranges between 600 and 1,000 nautical miles, and operable in Sea State 4.

“We are the originator of the common uncrewed surface vehicle,

the CUSV, for the Navy which was successfully adapted to become the Navy's first unmanned surface vehicle program of record and which is being fielded to the littoral combat ship fleet now [for mine countermeasures]," said David A. Phillips, senior vice president, Air, Land & Sea Systems, Textron Systems, in a briefing to reporters. "Surface warfare that doesn't necessarily require the power and the weight necessary in a mine countermeasure system."

Phillips noted several mission sets that an inexpensive unmanned craft could take on, including port security, port surveillance, escort and training.

"We have been in constant collaboration with Navy and commercial customers as to what a system like this might bring them in terms of operational flexibility [and] emerging mission sets," he said. We continue discussion with the Navy – all elements of the Navy to include fleet as well as our particular programs in which we work. And we've been hearing an increased expression of interest in a small, rapidly deployable, unmanned surface vehicle that can support a variety of missions beyond mine countermeasures."

Brunswick, builder of recreational watercraft of such product lines as Boston Whaler, Bayliner and Mercury Marine, has craft adaptable to Textron's vision and has established supply lines.

"Brunswick's portfolio of reliable high-performance vessels – their watercraft, propulsion systems, control systems – and manufacturing capacity and their global footprint along with our mature autonomy technology and systems integration capability was really the perfect combination to allow us to develop an accessible, rapidly deployable, and what I call a modular open systems architecture oriented family of vehicles or systems," Phillips said.

"Brunswick's technologies are already in mass commercial

production and globally available. That allows us to reduce costs, risk, and production time when integrating and ultimately delivering these vessels. Their global footprint and mature resilience supply chain provides our customers with an unmatched support and aftermarket service.”

Brunswick “has invested in and developed a built-in drive-by-wire system for us to ramp our higher levels of operationally relevant autonomy that we’ve developed and delivered to the U.S. Navy and that we’ve proven through mine countermeasure unmanned surface vehicles and that we fielded operationally with the Navy and demonstrated through exercises like RIMPAC and FLEX,” he said.

Phillips said the Tsunami could be fielded rapidly.

“We recognize the need for a ready-now solution that harnesses the capability and capacity of the U.S. industrial base,” he said. “That’s important at being able to scale and being able to rapidly deploy systems when our customer wants them. ... Speed. Speed to market. Speed to contract. Speed to delivery. Leveraging this mature production capability enables rapid production without the costs and risks of developing boutique manufacturing capability and scaling mass production. These watercraft are already in production.”

The Tsunami craft is adaptable to swarming tactics, according to Textron.

“We’ve also done some testing in that realm,” Phillips said. “Although I’m not going to go into certain mission scenarios, the swarm is important and controlling multiple systems is important. We’ve done that for many years with our aircraft systems. We understand swarming of systems. We also understand the complexity associated with that. We have designed this system and we have demonstrated this system to operate multiple watercraft. I won’t get into how many.”

The low cost of the Tsunami is key to the craft being

attributable, Phillips said.

Asked by *Seapower* if the USVs used by Ukraine against the Russian navy were part of the inspiration for the Tsunami, Phillips replied that "it certainly informed us of that emergent need. ... I am not presupposing what one of our customers might use our system for."