DARPA Christens Unmanned Ship Aimed at Revolutionizing Naval Capability

Ship sponsor Mattie Hanley follows naval tradition by breaking a bottle of spirits on the side of the USX-1 Defiant during the official christening ceremony in Everett, Wash., on Aug. 11, 2025. (DARPA photo by Spencer Bruttig)

Defiant demonstrates path to accelerate US shipbuilding and strengthen naval fleet

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DARPA has marked a traditional naval milestone with the christening of USX-1 *Defiant*, a first-of-its-kind autonomous, unmanned surface vessel designed from the ground up to never accommodate a human aboard. The ceremony took place Monday, Aug. 11, at Everett Ship Repair in Everett, Washington.

The demonstrator for the No Manning Required Ship (NOMARS) program, the *Defiant*, has a simplified hull design to allow

rapid production and maintenance in nearly any port facility or Tier III shipyard that traditionally supports yacht, tug, and workboat customers.

The 180 foot-long, 240-metric-ton lightship is completing final systems testing in preparation for an extended at-sea demonstration of reliability and endurance.

"*Defiant* is a tough little ship and defies the idea that we cannot make a ship that can operate in the challenging environment of the open ocean without people to operate her," said NOMARS Program Manager Greg Avicola, during the ceremony. "While relatively small, *Defiant* is designed for extended voyages in the open ocean, can handle operations in sea state 5 with no degradation and survive much higher seas, continuing operations once the storm passes. She's no wider than she must be to fit the largest piece of hardware and we have no human passageways to worry about."

The NOMARS program leapfrogs conventional thinking about unmanned ships, with a goal to minimize the need for "optionally manned" vessels and safely demonstrate the reliability and capability of fully unmanned systems to strengthen the nation's defense industrial base.

"*Defiant* class vessels provide cost-effective, survivable, manufacturable, maintainable, long-range, autonomous, and distributed platforms, which will create future naval lethality, sensing, and logistics," said DARPA Director Stephen Winchell. "*Defiant* will protect and expand the capabilities of manned ships, multiply combat power at low cost, and unlock new American maritime industrial capacity."

After completing the at-sea demonstration, *Defiant* will be turned over to the U.S. Navy's Unmanned Maritime Systems Program Office (PMS 406). DARPA is working closely with the Navy to identify a pathway to ensure capabilities and technologies demonstrated throughout the NOMARS program are

accessible for rapid transition and integration, are scalable, and support international defense partnerships.

In the reconciliation bill, which passed in July of this year, Congress appropriated $2.1 billion “for development, procurement, and integration of purpose-built medium unmanned surface vessels.” Upon transition to PMS 406, *Defiant* will be the Navy’s first solely autonomous (vs. hybrid manned-unmanned) MUSV.