

Navy Requests Concepts for Attritable Mother Ship for Unmanned Systems



The large unmanned surface vessel Nomad transits the Pacific Ocean to participate in Exercise Rim of the Pacific (RIMPAC) 2022. The Navy's concept for a an attritable unmanned mother ship (AUMS) for delivering large numbers of unmanned systems could resemble a smaller version of a Project Overlord ship. *U.S. NAVY / Mass Communication Specialist 1st Class Tyler R. Fraser*

ARLINGTON, Va. – The U.S. Navy has issued a Request for Information for concepts for an attritable unmanned mother ship to “cost-effectively deliver large numbers of UxVs (unmanned systems) to forward locations in a contested environment,” the published notice of the request said.

The Attritable UxV Mother Ship (AUMS) Program stressed in the Oct. 31 announcement that the ship should cost as minimal as possible so that loss of such a ship would be acceptable.

The program office also said the AUMS concept “should explore modular open system approaches to have the ability to quickly insert the latest technology into a midlife upgrade.”

The RFI listed the following operational parameters for the AUMS:

- Open-ocean transit distance of 1,500 nautical miles (may vary from 1,000 to 2,000 depending on cost)
- Top speed from 12 to 20 knots
- Survivability in Sea State 5; full mission capability in Sea State 4
- Five days of operation without onboard human intervention

- Support of a 20-foot container (either towed or onboard, with capability to push it over the side); upon drop off, the container will be self-sustaining
- Be unmanned, capable of navigating via waypoints with GPS
- Have Over-the-Horizon and Line of Site Communications.
- Feature capability for resistance to boarding and tampering
- Self-scuttling capability upon remote order
- System will only traverse in the open ocean, will never operate less than three nautical miles from any shoreline untended.
- Minimum service of the vessel would be five years, with longer service life desired if obtainable for a small cost increase

Government furnished equipment initially would include the command, control, communications, computers and intelligence (C4I) suite and a modularized 20-foot ISO container with UxVs.

The Navy is aiming to award a design and construction by mid-2026, with delivery of the first AUMS within 24 months of contract award.

The RFI was issued by the Unmanned Maritime Systems Program Office of the Program Executive Office (PEO) Unmanned and Small Combatants (USC). Responses must be received by Dec. 15.