Navy Down-Select for Compact Rapid Attack Weapon Expected in February

The U.S. Navy is expected to soon down-select for the Compact Rapid Attack Weapon, an offensive version of the Very Light-Weight Torpedo, shown here. *NORTHROP GRUMMAN*

ARLINGTON, Va. — The Navy's down-select of a company to manufacture the Compact Rapid Attack Weapon is expected in February 2022, a defense industry official said.

David Portner, Northrop Grumman's senior program manager for undersea weapons, said during a Dec. 15 interview with *Seapower* he expects the contract for building the CRAW will be awarded in March 2022 after the down-select decision. Northrop Grumman in competing for the production contract.

The CRAW is an offensive version of the Very Lightweight Torpedo developed by Penn State Applied Physics Lab. The defensive version is known as the Counter Anti-torpedo Torpedo, which differs from the CRAW only in its software.

Northrop Grumman submitted its response to the October request for proposals at the end of November. At issue is the selection of the company with the best readiness and capability to build the CRAW in production quantities, taking the non-production-designed VLWT prototype — designed by Penn State Applied Physics Lab — into a production design and developing it as an All-Up Round CRAW suitable for manufacturing. Other Transactional Authority will be used to deploy the torpedo to the fleet.

The nine-foot-long VLWT is one third of the size of the Mk54 — the Navy's most advanced light-weight torpedo — and weighs just over 200 pounds, compared with the 608-pound Mk54. With

this weight advantage, a platform can carry more torpedoes or carry the same number at longer ranges and give the platform more endurance. The VLWT could be carried by surface, airborne, and undersea platforms, manned and unmanned.

Portner said in an earlier interview the VLWT could be carried by such anti-submarine aircraft as P-8A maritime patrol aircraft, MH-60R helicopters and MQ-8 Fire Scout unmanned aerial vehicles. During an Advanced Naval Technology Exercise in 2018, Northrop Grumman demonstrated the deployment of a VLWT from a surrogate helicopter simulating a Fire Scout.

The torpedo is fitted with a parachute to reduce the shock of impact with the water. The VLWT also could be fitted with a glide wing kit similar to the one on Boeing's HAAWC (High-Altitude Anti-submarine Weapon Concept), which is in development to extend the launch range and altitude as well as precision guidance for the Mk54 torpedo.

Portner said the VLWT also could be deployed from a vessel such as a littoral combat ship by way of an unmanned surface vehicle or unmanned underwater vehicle. He said the light weight of the CRAW, compared with the MK54, would enable a platform to carry more weapons the same distance or the same number of weapons to a greater range or endurance.

If selected, Northrop Grumman would build the CRAW components in Salt Lake City, Utah, with a key supplier in Colorado. Final integration would be accomplished in Annapolis. Maryland, Portner said.