Textron Submits Concept for Marine Corps Advanced Recon Vehicle



Textron Systems' Cottonmouth concept for the Marine Corps' Advanced Reconnaissance Vehicle. *TEXTRON SYSTEMS*

ARLINGTON, Va. – Textron Systems has submitted to the Marine Corps its proposal for the competition to build the Advanced Reconnaissance Vehicle (ARV), a Corps requirement for an amphibious scout vehicle that will serve as a sensor node in the Corp's planned modernization to meet the challenges of great power competition with expeditionary advanced base operations in the Indo-Pacific region.

The ARV proposal, called Cottonmouth by Textron, is designed to be a "next -generation Naval Sensor Node," fitted with "cutting edge sensor technology," the company said in a May 4 release. "Cottonmouth delivers advanced maneuverability and a synergized sensor system to enhance reconnaissance operations."

The Cottonmouth has a 6×6 compact build that will allow four ARVs to fit on an LVAC 100-class ship-to-shore connector, also built by Textron. The Cottonmouth would be "equipped with multi-spectrum sensors, providing seamless communication between the Navy and Marine Corps to employ unmanned systems and joint-warfighting weapons systems. This provides the next-generation decision dominance needed to defeat threats beyond line of sight."

The Cottonmouth's sensors would include Elbit Systems of America's IronVision, "which uses "see-through" technology to provide the vehicle with advanced visibility and 360-degree situational awareness," the release said.

The Cottonmouth is a six-wheeled vehicle designed to operated by two personnel and to carry five additional mission personnel. It is designed for rugged land operations and water operations – using waterjets – in waves of 2 to 3 feet.

Dave Philips, Textron System's vice president for Land Systems, said the ARV would serve as a "quarterback" of a new platoon concept, which may include five other variants of the ARV. He said company is focused on Cottonmouth as a naval sensor node, but the company expects to build an infantry fighting vehicle version of the vehicle equipped for direct and indirect fire in the future.

Marketing imagery of the vehicle shows a notional weapon system mounted atop the vehicle, in this case a remote-operated Kongsberg CROWS-J with a .50-caliber machine gun and an anti-tank missile system, said Luke Wright, Textron's ARV program manager.

For the prototype, the government is providing the competing contractors Lockheed Martin Stalker unmanned aerial vehicles to be integrated within their vehicles.

The Marine Corps plans to replace its fleet of approximately 600 LAV-25 Light Armored Vehicles with 500 ARVs.

The Cottonmouth Alpha purpose-built, open-architecture prototype was developed using more than $6 million so far, Philips said, and is a vehicle not required by the initial phase of the program, which is being put through requirements validation testing at the National Automotive Test Center in February 2021. Amphibious capabilities are being evaluated during the current quarter. As of May 3, the vehicle had logged 748 hours of operation in testing.

Philips said the Marine Corps will select up to three competitors for the prototype phase of the ARV program. Up to two contractors will be chosen for the engineering and

manufacturing development (EMD) phase. He estimates the EMD phase will be conducted in 2024.