SAIC Advances Scalable Open-Architecture Counter-UAS Systems

From left to right: the vehicles are the Polaris MRZR, Polaris DAGOR, and the EOS Defense HMMWV, all of which are enabled by SAIC's CUAS. (SAIC photo)

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — SAIC's counter-unmanned aerial system (CUAS) concepts will be further tested in a June 2024 demonstration, a company official said. The company has two types of CUAS systems deployed and is in competition for two Department of the Navy programs.

"We're really excited about the [June] counter-swarm demo that we've been selected to participate in," said Greg Fortier, SAIC's senior vice president for Army aviation, fires, and C2 in the Army business group, in an interview with Seapower.

SAIC, which has been developing CUAS systems for more than a decade, already has two CUAS systems fielded with U.S. agencies.

The company's Valkyrie CUAS System is "operational in a few parts of our country," Fortier said, with "[O]perational forces in the U.S. Army right now on a pilot type of effort. The predecessor of our system [the Medusa] is also active across the CENTCOM AOR [U.S. Central Command area of responsibility] in certain capacities, and that's mostly with the Department of the Air Force."

Fortier said that SAIC has "continued to evolve our solutions, continued to understand the different requirements from all of the services — frankly all of the agencies in our nation — and

then really have driven for the past couple of years into a modular, 100% open system that is a scalable approach to meeting all the different threats within counter-UAS. That's not just in the all-domain warfighting imperative but it's also things like the border of the future as well as the general overall citizen experience for our country.

"SAIC is pivoting on five national imperatives: all-domain warfighting, undersea dominance, citizen experience, border of the future, and next-gen space. CUAS applies to four of the five across multiple agencies," he said. "The company has multiple lines of effort with these imperatives. We go at it in terms of four phases: detect, track, identify, and mitigate. There are multiple technologies that apply across the board—kinetic and non-kinetic solutions. Every customer, every requirement is a little bit different."

"It's all about our open architecture that allows us to integrate very quickly to any of the different modalities that support detect, identify, track, and mitigate," said Jeremy Davidson, SAIC's counter-UAS lead, also speaking during the interview. "Multi-functional capability within each of those mission domains from detect to mitigate – including all of your different non-kinetic and kinetic modalities as well, including lasers, but also traditional small arms, rockets, ATM [air traffic management], drone interceptors, things like that.

"We bring all of the sensors that feed into that, from radars, to RF [radio frequency], to EW [electronic warfare], and of course the last one is the eye, which is identify where you get into your EO/IR [electro-optical/infrared] sensors," Davidson said.

"We are a tech-agnostic integrator," Fortier said. "We feel like we are a world-wide leader in technology agnostic integration. That makes our systems more powerful in that we can take multiple technologies as we've already done in the

past couple of years, integrate and learn, understand, and then pass that along [and] make that connection among the multiple agencies within the United States."

He stresses that the company's integration of technology is not just with hardware but also with software, and that cost reduction and operational effectiveness are achieved through open architecture.

"When you have an open system, and you have an obsolete part, you can pull that part off, and if the technology or the threat changes, you can plug and play new technology at pennies on the dollar because you're not re-integrating or re-configurating an entire system," Fortier said.

SAIC continues to participate in multiple demonstrations for the Joint Capabilities Office and for the Department of Homeland Security on the border, he said.

"There are two offices right now in the Department of the Navy, both of which we are pursuing," Fortier. "We were down-selected in one of those opportunities to continue in the competition, but that competition is still active."

The two Department of the Navy competitions are the MADIS-CES (Marine Air Defense Integrated System-CUAS Engagement System) Lethality Upgrade and Marine Corps Installation CUAS.

SAIC has 25 partners and integrates more than 45 technologies. Most of its current integration work is performed in Huntsville, Alabama. The company has had discussions with foreign countries in Europe and elsewhere about its integration technology.