which supplies most of the Pentagon's small UAS. "They see the squad as a strategic force and want overwhelming power at the squad level. So we continue to see them filling out their requirements and incorporating the latest capabilities."

At the same time, the Army has almost completed its planned procurement of SUAS and is shifting its focus to sustainment and upgrades. After buying 6,000 RQ-11 Ravens and larger RQ-20 Pumas from AeroVironment, "we are close to fielding our objective procurement—about the 95% mark," says Maj. Jeff Poquette, SUAS program manager.

At this late stage, the Army plans to open its SUAS procurement to competition, awarding indefinite-delivery/ indefinite-quantity (ID/IQ) contracts to multiple vendors, then competing individual task orders for top-up buys, services, logistics and upgrades. The ID/IQ contracts will cover the medium-endurance Raven-class and long-endurance Puma-class SUAS, but be open to other manufacturers of airframes and payloads. There will also be some flexibility to purchase other systems, such as a vertical-takeoff-and landing (VTOL) SUAS, says Poquette.

The Army's plans helped fuel an explosion of small-UAS activity at the AUVSI show, which Minson eyes with skepticism. "Who is buying these things? We are supplying the majority of everything."

Although AeroVironment will face competition going forward, he is confident of continued domestic and international demand for Raven and Puma, and the company is introducing new SUAS, including the all-environment Wasp AE, lethal Switchblade and VTOL quadrotor Shrike.

"When we first started doing SUAS, not much thought was given to how many should be in the force," says Minson. "We see the need for another class of aircraft, the Shrike VTOL. And more products are in development. "We will move to smaller UAS, and also go up to longer endurance," he says. But AeroVironment will stick to the lower end of the market, for now. "We see hand-launch as key," he says.

One reason for the growing popularity of SUAS is the ongoing dramatic reductions in payload size, which are significantly increasing the capabilities of small platforms. "Five years ago everyone was building an aircraft in their garage and bringing it to the show. But the platforms are settling down," says Steve Morrow, president and CEO of small-UAS manufacturer Insitu.

"Now everyone is building a payload... And Moore's Law applies to payloads. It's fast-moving and exciting—it's eye-watering," he says. "Insitu is looking at 75-100 potential payloads, some proposed by customers, suppliers and technologists, and some we ourselves have conceived. Future capabilities will be less about the truck and more about the payload."

Poquette says future roles the Army is eyeing for SUAS include chemical/biological and radiation detection, signals intelligence, communications relay and base defense. Longer term, in 5 to 10 years, he sees the need emerging for smaller, stealthier SUAS with longer endurance and faster launch. "We want something you can launch out of a pocket and control with a screen on your arm."