

AeroVironment Introduces Puma VNS, a Visual-Based Navigation System for Small UAS



An illustration of a Puma small UAS equipped with the new Puma VNS, which determines the precise location of an aircraft during flight without relying on GPS. *AEROVIRONMENT*

ARLINGTON, Va. – AeroVironment Inc. on Sept. 15 introduced Puma VNS, a visual-based navigation system for Puma 2 AE and Puma 3 AE small unmanned aircraft systems that will enable GPS-denied navigation across increasingly GPS-contested environments.

The system will provide operators with continually advanced navigation capabilities, features and functionality through anticipated software and hardware updates, the company said in a release. The system will also enable the integration of future autonomy capabilities.

“Puma VNS gives operators an unprecedented advantage in the battlefield,” said Trace Stevenson, AeroVironment vice president and product line general manager for SUAS. “Operators now can execute missions with more confidence in GPS-contested environment with the system’s new navigational capabilities.”

The next-generation navigation system features a suite of down-looking sensors that gather imagery data and track features on the ground, as well as an embedded compute module to process and determine the precise location of an aircraft while it is in flight. Designed with the operator in mind, the system automatically transitions to and from GPS-denied navigation mode without any input from the operator.

Puma VNS is available as an add-on option for new Puma 3 AE system orders and as a retrofit kit for fielded Puma 2 AE and Puma 3 AE systems.