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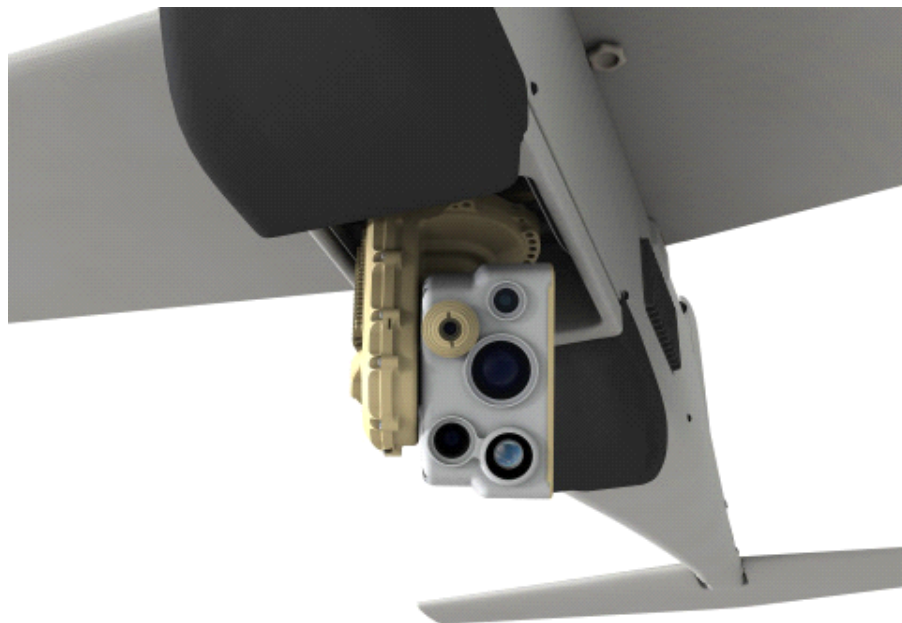
## AeroVironment Unveils Mantis i45 EO/IR Gimbal Payload for Puma AE, Delivering a Dramatic Leap in Small UAS Image Resolution and ISR Capability

- 1 Designed for AeroVironment Puma™ AE small unmanned aircraft systems, Mantis i45 is available for both commercial and military applications
- 1 Mantis i45 features an advanced suite of sensors, including ultra-high-resolution EO and IR imagers, that takes the guesswork out of tactical ISR
- 1 Mantis i45 operators see better and farther than ever before, enabling them to make better decisions and perform missions with certainty

NEW ORLEANS--(BUSINESS WIRE)-- [AeroVironment, Inc.](http://www.aerovironment.com) (NASDAQ: AVAV), a world leader in small unmanned aircraft systems (UAS), today unveiled its new Mantis i45 electro-optical/infrared (EO/IR) gimbal payload designed for AeroVironment Puma™ AE (All Environment) small unmanned aircraft systems - for both commercial and military applications. The company made the announcement at the Association for Unmanned Vehicle Systems International (AUVSI) XPONENTIAL 2016 conference and trade show taking place May 2-5 at the Ernest N. Morial Convention Center in New Orleans (**Note to editors: see a demo of the Mantis i45 at AeroVironment's booth #1525**).

This Smart News Release features multimedia. View the full release here:

<http://www.businesswire.com/news/home/20160502005648/en/>



"The Mantis i45 represents a dramatic leap in small UAS image resolution and approaches capabilities inherent in platforms many times the size and cost of Puma AE," said Kirk Flittie, vice president and general manager of AeroVironment's Unmanned Aircraft Systems business segment. "This enhanced capability enables commercial and military users to see more and farther, with greater detail, than ever before, make better decisions and perform their missions with greater certainty. The AeroVironment Mantis i45 represents a significant increase in performance for Puma AE intelligence, surveillance and reconnaissance (ISR) missions."

In combat, the Mantis i45 empowers operators to identify targets more accurately and with greater detail while operating even farther away from the target. The higher resolution imagery also aids in target analysis, positive identification and better enables operators to identify threats to friendly forces.

AeroVironment's New Mantis i45 Sensor Suite for Puma AE Delivers Dramatic Leap in Capability for Small UAS (Photo: Business Wire)

With an advanced suite of sensors, including ultra-high-resolution EO and IR imagers, key features of the Mantis i45 include: dual-color cameras (wide and narrow views); improved IR imagery; new low-light camera; high-power illuminator; 50-times zoom in EO; optional on-board storage of high definition video and high-resolution stills; and a dedicated on-board image processor. The AeroVironment Mantis i45 also lends itself to a level of customization never before seen in a gimbal

this size while still being compatible with portable Puma AE systems.

Among its many enhancements, the Mantis i45 offers a wide range of night-time solutions, from low-light near-infrared (NIR) to long wave infrared (LWIR) imagers. In addition, it is a backward-compatible, fully waterproof payload capable of operating under the same harsh environmental conditions as the AeroVironment Puma AE system - which is designed for both land-based and maritime operations.

Like previous Puma AE payloads, the Mantis i45 retracts into the fuselage for launch and recovery to protect the gimbal during the highest loading portions of its operation. During flight operations, it provides full lower-hemisphere coverage and continuous zoom.

The AeroVironment Mantis i45 is highly configurable and can cater to a diverse set of missions. The modular hardware is capable of supporting a wide variety of imagers, enabling rapid development of custom configurations to meet future needs.

The AeroVironment Mantis i45 also provides improved image quality performance at increased zoom levels. Improvements in sensors, control algorithms and drive mechanics yield an unprecedented level of mechanical stability in a small, waterproof gimbal system. Augmented with improved on-board digital stabilization, the AeroVironment Mantis i45 delivers excellent video stability.

"With its increased capability, we worked to ensure the high reliability that our customers expect from the i45," Flittie said, "and this design meets more rigorous standards than any previous Puma AE payload." The fully waterproof design protects against sand, dust, rain, salt fog, snow, mud and 100 percent relative humidity conditions, and reliably withstands the shock loads that result from the precision deep-stall landings employed by the Puma AE.

Size, weight and power (SWaP) also were critical design considerations. A payload shell similar to that of the standard Puma AE payload houses the Mantis i45 and installs in an identical manner onto the Puma AE platform. "Even with its valuable new capabilities, the i45 is no larger than its predecessor," Flittie said.

No modifications to the Puma are needed to incorporate the i45. Additionally, power-conscious processors onboard the i45 optimize power consumption, resulting in minimal performance impact to the Puma aircraft while delivering dramatically improved capabilities.

The gimbal open system architecture offers maximum flexibility to facilitate easy future expansion. Its design also supports a wide variety of camera formats, so new camera technology can be integrated into the system with minimal development.

The Mantis i45 payload will be available to order in September 2016.

<http://www.avinc.com/uas/i45>

## **About AeroVironment Small UAS**

RQ-11B Raven®, RQ-12 Wasp®, RQ-20A Puma™ and Shrike VTOL™ comprise AeroVironment's Family of Small Unmanned Aircraft Systems. Operating with a common ground control system (GCS), this Family of Systems provides increased capability to the warfighter that can give ground commanders the option of selecting the appropriate aircraft based on the type of mission to be performed. This increased capability has the potential to provide significant force protection and force multiplication benefits to small tactical units and security personnel. AeroVironment provides logistics services worldwide to ensure a consistently high level of operational readiness and provides mission services for customers requiring only the information its small UAS produce. AeroVironment has delivered thousands of new and replacement small unmanned air vehicles to customers within the United States and to more than 30 international governments.

The Puma AE small UAS comprises one component of AeroVironment's advanced, turnkey data collection, processing and delivery solution employed to provide commercial customers with engineering-quality information, on demand, across multiple industries such as energy, agriculture, transportation and utilities.

## **About AeroVironment**

AeroVironment is a technology solutions provider that designs, develops, produces, supports and operates an advanced portfolio of Unmanned Aircraft Systems (UAS) and electric transportation solutions. The company's electric-powered, hand-launched unmanned aircraft systems generate and process data to deliver powerful insight, on demand, to people and enterprises engaged in military, public safety and commercial activities around the world. Global Observer® is a hybrid-electric, stratospheric UAS designed to provide affordable, persistent reconnaissance and communication over any location on the globe. The Switchblade® tactical missile system enables the infantry squad and other customers with increased lethality, reach and force protection through its rapid deployment, direct fire and collateral damage avoidance capabilities.

AeroVironment's electric transportation solutions include a comprehensive suite of electric vehicle (EV) charging systems, installation and network services for consumers, automakers, utilities and government agencies, power cycling and test systems for EV developers and industrial electric vehicle charging systems for commercial fleets. More information about AeroVironment is available at [www.avinc.com](http://www.avinc.com).

### Safe Harbor Statement

Certain statements in this press release may constitute "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements are made on the basis of current expectations, forecasts and assumptions that involve risks and uncertainties, including, but not limited to, economic, competitive, governmental and technological factors outside of our control, that may cause our business, strategy or actual results to differ materially from those expressed or implied. Factors that could cause actual results to differ materially from the forward-looking statements include, but are not limited to, our ability to perform under existing contracts and obtain additional contracts; our reliance on sales to the U.S. government; changes in the timing and/or amount of government spending; changes in the supply and/or demand and/or prices for our products and services; changes in the regulatory environment; the activities of competitors; failure of the markets in which we operate to grow; failure to expand into new markets; failure to develop new products or integrate new technology with current products; and general economic and business conditions in the United States and elsewhere in the world. For a further list and description of such risks and uncertainties, see the reports we file with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K and Quarterly Reports on 10-Q. We do not intend, and undertake no obligation, to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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