



AV Expands AV_Halo™ Platform with INSTINCT and DETECT to Enable Faster, Resilient Decision-Making at the Edge

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Extending AV_Halo with distributed autonomy and resilient RF sensing to enable faster decisions and mission execution in denied environments

ARLINGTON, Va.--(BUSINESS WIRE)--May 19, 2026-- AeroVironment, Inc. ("AV") (NASDAQ: AVAV), a global defense technology leader, today announced the two latest additions to its AV_Halo™ unified mission software platform **AV_Halo INSTINCT**, a next-generation autonomy framework for multi-platform uncrewed systems (UxS), and **AV_Halo DETECT**, an advanced radio frequency (RF) sensing and security solution for contested and denied environments.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20260519070790/en/>



AV showcases its expanding AV_Halo™ ecosystem during SOF Week 2026, highlighting new INSTINCT and DETECT capabilities designed to accelerate autonomous decision-making, resilient sensing, and mission execution across contested, multi-domain battlefield environments.

The announcement was made today at SOF Week in Tampa, Florida, where defense leaders and special operations forces are focused on advancing capabilities for contested, multi-domain operations.

Together, [INSTINCT](#) and [DETECT](#) expand AV_Halo's role as a modular, open-architecture ecosystem, delivering synchronized autonomy, resilient sensing,

and faster, more informed decision-making across intelligence, surveillance, and reconnaissance (ISR), loitering, strike, and counter-Unmanned Aircraft System (C-UAS) missions.

"In an era of contested communications and proliferated autonomy, advantage goes to the force that can decide and act faster at the edge," said Wahid Nawabi, Chairman, President, and Chief Executive Officer at AV. "INSTINCT and DETECT fundamentally change that equation, combining distributed autonomy with resilient sensing so forces can see earlier, decide with confidence, and execute in real time, even when networks are degraded or denied. This is about compressing the time from detection to action while preserving mission effectiveness in the most challenging environments."

[AV_Halo INSTINCT](#) is a next-generation autonomy software framework engineered to empower military forces with superior multi-platform Uncrewed System (UxS) command and control (C2). Designed with rigorous input from operational experts, INSTINCT delivers distributed, collaborative mission execution for new and legacy platforms across Intelligence, Surveillance, and Reconnaissance (ISR), loitering, counter-Uncrewed Aircraft System (C-UAS) and precision strike profiles with C2 integration.

Benefits of INSTINCT:

- **Reduces operator workload**, enabling focus on mission intent over platform control
- **Natural language tasking** for faster, more intuitive command and control
- **Integrates with AV_Halo MENTOR** to accelerate training and Tactics, Techniques, and Procedures (TTP) development with realistic, multi-level simulation
- **Modular, MOSA-based architecture** for rapid integration and deployment on SWaP-C constrained systems
- **Mission-proven performance** in major U.S. military operations across contested, multi-domain environments

[AV_Halo DETECT](#) is a breakthrough RF spectrum sensing and networking software suite designed to empower both new and legacy unmanned platforms with advanced communications and mission autonomy. It is engineered with the mission-critical demands of distributed Intelligence, Surveillance, and Reconnaissance (ISR), loitering, and precision strike operations in mind. DETECT seamlessly integrates with AV_Halo COMMAND, enabling rapid autonomous response informed by real-time threat perception, even in the most challenging and contested environments.

Benefits of DETECT:

- **AI-driven RF Detection** enables automatic threat identification and location
- **Scalable, layered security** that complements and enhances existing perimeter systems
- **Resilient under electronic attack**, maintaining detection, comms, and localization
- **Seamless integration** with radar, cameras, access control, and C2 systems
- **Fills gaps in legacy security architectures** for true defense-in-depth

- **Enterprise-ready, with support, training, and customization to scale with mission needs**

“INSTINCT and DETECT reflect a shift toward integrated autonomy and sensing within a single, open ecosystem,” said Scott Bowman, Chief Technology Officer and Vice President of Global Engineering at AV. “By distributing intelligence across platforms and delivering a resilient RF picture of the battlespace, we enable customers to integrate faster, adapt tactics rapidly, and maintain operational advantage.”

Today’s announcement comes less than six months after [AV rolled out CORTEX and MENTOR](#) and less than a year since AV released the software suite with [COMMAND, PINPOINT and VISION modules](#).

As AV continues to expand the platform with additional mission applications, simulation, and intelligence services, AV_Halo is designed to scale with evolving mission requirements and integrate seamlessly across joint, allied, and commercial systems.

Both AV_Halo INSTINCT and AV_Halo DETECT are available today and can be tailored to specific platforms, sensors, and operational environments.

About AV

AV (NASDAQ: AVAV) is a defense technology leader delivering integrated capabilities across air, land, sea, space, and cyber. The Company develops and deploys autonomous systems, loitering munitions, counter-UAS technologies, space-based platforms, directed energy systems, and cyber and electronic warfare capabilities—built to meet the mission needs of today’s warfighter and tomorrow’s conflicts. At the core of these technologies lies AV_Halo™, a modular, mission-ready suite of AI-powered software tools that empowers warfighters and enables full-battlefield dominance: detect, decide, deliver. With a national manufacturing footprint and a deep innovation pipeline, AV delivers proven systems and future-defining capabilities at speed, scale, and operational relevance. For more information, visit www.avinc.com.

Safe Harbor Statement

Certain statements in this press release may constitute “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. These statements are based on current expectations, forecasts, and assumptions that involve risks and uncertainties, which could cause actual results to differ materially. Factors that may cause such differences include, but are not limited to, our ability to perform under existing contracts and obtain new ones; regulatory changes; competitor activities; market growth; product development challenges; and general economic conditions. For a more detailed discussion of these risks, please refer to AeroVironment’s filings with the Securities and Exchange Commission. We undertake no obligation to update forward-looking statements as a result of new information or future events.

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