PteroDynamics and AV Demonstrate Integrated EW Capabilities on Transwing® VTOL UAS at U.S. Navy Silent Swarm 25 Exercise

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ALPENA, Mich.--(BUSINESS WIRE)--Dec. 16, 2025-- PteroDynamics, an innovator in autonomous vertical takeoff and landing (VTOL) aircraft systems, and AeroVironment, Inc. ("AV") (NASDAQ: AVAV), a leading provider of Electronic Warfare (EW) capabilities, recently collaborated for a joint technology demonstration at Silent Swarm 25, hosted by the Naval Surface Warfare Center (NSWC) Crane Division at the Alpena Combat Readiness Training Center in Alpena, Michigan. The companies integrated multiple industry-leading EW sensors from AV on the PteroDynamics P4 Transwing® autonomous VTOL unmanned aircraft system (UAS), highlighting a spectrum of maneuver capabilities available to warfighters with the combined capabilities.

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AV's industry-leading EW sensors were integrated on the PteroDynamics P4 Transwing® autonomous VTOL unmanned aircraft system (UAS) during the Naval Surface Warfare Center (NSWC) Crane Division's Silent Swarm 2025 – highlighting the full spectrum of maneuver capabilities now available to warfighters. [Credit: PteroDynamics]

Equipped with AV's EW capabilities, the autonomous Transwing VTOL aircraft successfully completed three scenarios in operationally relevant, multi-domain environments–observing, detecting, and effecting various representative threats throughout the theater to inform future U.S. Navy operations for littoral surveillance.

"PteroDynamics' Transwing VTOL UAS with AV's EW payloads demonstrated important new capabilities in a realistic and challenging operational environment," said Tim Whitehand, PteroDynamics vice president of engineering. "We are excited to have worked closely with AV to equip the Transwing with these innovative EW capabilities. The Transwing's compact footprint, rapid and disturbance-resilient transition, and highly efficient wing-borne flight enable operations from confined or remote locations without runways, making it an ideal platform for maritime littoral operations."

"Our open, interoperable EW systems are strategically engineered to reduce payload integration timelines for airborne, maritime, and ground ISR platforms, helping us meet unique mission needs with speed and scale," said Conrad Smith, General Manager of Electronic Warfare Systems at AV. "By participating in events, like Silent Swarm 25, and innovating alongside other industry leaders, like PteroDynamics, we are expanding mission-critical capabilities for the U.S. Navy."

AV delivers open-architecture EW chassis and sensors to support mission planning and awareness. These tactical solutions are designed and developed for a full spectrum of readiness capabilities, keeping warfighters ahead of global threats with actionable intelligence at the mission's edge.

PteroDynamics' Group 3 Transwing platform offers the speed, range, and endurance of fixed-wing systems with superior VTOL performance in a simple, highly efficient autonomous platform. The aircraft unfolds its wings to transition smoothly and quickly between vertical and horizontal flight. It delivers superior VTOL stability and gust tolerance, requires no launch and recovery infrastructure, and occupies one-third or less ground footprint than other VTOL aircraft with a comparable wingspan – an ideal platform for multi-mission payloads.

During Silent Swarm 25, the Transwing flew from confined launch and recovery zones along the tree line on the shore of Lake Huron, showcasing its inherent expeditionary capabilities and operating envelope, which is unconstrained by wind direction. The team also took advantage of the Transwing's modular architecture to integrate, and flight test the AV EW payload in a single day.

Transwing Receives FAA Airworthiness Certificate

PteroDynamics received a Special Airworthiness Certificate–Experimental Category (SAC-EC) from the Federal Aviation Administration (FAA) for the P4 Transwing UAS to conduct research and development flights in national airspace near Alpena, Michigan during Silent Swarm 25. Prior U.S. Navy demonstrations were at sea, including those at RIMPAC 2024 and the 2023 Hybrid Fleet Campaign Event.

The SAC-EC allowed PteroDynamics, for the first time, to fly the 89 lb aircraft with an airworthiness certificate in U.S. airspace. The certification review and approval process took over seven months and demonstrated to regulators the maturity and safety of the Transwing and the trust the FAA has in PteroDynamics' aircraft and processes.

About PteroDynamics

PteroDynamics Inc. is an innovation leader in autonomous vertical takeoff and landing (VTOL) aircraft systems. PteroDynamics' patented Transwing® aircraft folds its wings to transition seamlessly between configurations optimized for vertical and winged horizontal flight, combining the speed, range, and endurance of fixed-wing aircraft with superb VTOL performance in a highly efficient unmanned aerial system (UAS) platform that overcomes inherent limitations in other VTOL designs. Transwing's unique capabilities are ideal for automating time-sensitive delivery of critical high-value payloads to hard-to-reach locations with no runways and in austere conditions, including dual-use military and commercial applications like maritime logistics support, payload delivery to remote locations without airstrips, and reconnaissance and surveillance. For more information, please visit www.pterodynamics.com.

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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