

PteroDynamics Awarded U.S. Navy Contract to Develop Next-Gen Autonomous Transwing VTOL UAS

Expansion to 2021 Blue Water Logistics UAS Contract Calls for Development and Demonstration of Fleet-Deployable, 330-pound P5 Transwing for Critical Repair Cargo

From Pterodynamics Inc.

COLORADO SPRINGS, Colo. - February 18, 2025 – [PteroDynamics](#) Inc., an innovator in autonomous vertical takeoff and landing (VTOL) aircraft systems, today announced an expansion of its contract with the U.S. Naval Air Warfare Center Aircraft Division (NAWCAD) to design, develop, and demonstrate in a maritime environment the next generation of its Transwing® VTOL unmanned aerial system (UAS). The additional \$4.65 million award is the sixth and most important expansion of the company's 2021 Blue Water Logistics UAS (BWUAS) prototype contract and calls for a larger aircraft with more robust capabilities than the company's P4 Transwing VTOL UAS that [successfully demonstrated sea trials](#) during last summer's RIMPAC 2024 Exercise. The new autonomous P5 Transwing UAS aircraft will have a maximum takeoff weight of 330 pounds and a minimum range of 400 nautical miles carrying a 50-pound payload. It is designed to execute long-range tactical ship-to-ship, ship-to-shore, and shore-to-ship deliveries of critical repair cargo in contested maritime environments, currently performed by crewed aircraft. The new award raises the total contract value to over \$7 million, nearly triple the original contract.

“Working with NAWCAD since 2019 has enabled PteroDynamics to

identify and achieve key performance parameters that make the Transwing a uniquely capable VTOL UAS. This sixth contract expansion is so significant because it calls for the clean-sheet design, build, and demonstration of the next-generation P5 Transwing aircraft that will give the U.S. Navy an effective solution for automated just-in-time delivery of critical repair parts and supplies at sea,” said PteroDynamics CEO Matthew Graczyk. “The size and capabilities of the P5 also hit a sweet spot in what we see in broader market demand, not only for other military branches like the Air Force, but also for commercial, governmental, and public safety operators around the world eager to leverage the key advantages of the Transwing platform.”

Historical data from Navy casualty reports show that warships that move to non-mission capable or partially mission capable status often do so due to logistics-related issues like electronics parts or assemblies – 90% of which are logistical deliveries weighing less than 50 pounds. Today, the Navy’s fleet of MH-60 helicopters, V-22 tilt-rotor aircraft, and commercial helicopters fly these missions. Recognizing the cost and inefficiency of using manned aircraft in missions that could be completed by UAS, Military Sealift Command tapped NAWCAD to demonstrate how autonomous vehicles can optimize logistics in contested environments and beyond through the BWUAS program.

“Maritime resupply missions are the lifeblood of naval operations, and for the U.S. Navy and our allies, there is a critical need to automate expensive, resource-intensive deliveries of critical payloads in strategic maritime environments like the Indo-Pacific region,” commented Graczyk.

PteroDynamics’ Transwing is a revolutionary VTOL aircraft system that folds its wings to transition seamlessly between configurations optimized for vertical and winged horizontal

flight. It requires no launch and recovery infrastructure and occupies one-third or less ground footprint than other VTOL aircraft with a comparable wingspan.

NAWCAD awarded PteroDynamics the \$4.65 million contract expansion, funded by the U.S. Defense Innovation Unit (DIU) via an Other Transaction Authority (OTA) agreement to the company's existing 2021 BWUAS Innovative Wing Design contract, raising the current contract to over \$7 million. Upon completion of this phase of the contract, the company will qualify for \$5 million in supplemental program funding, bringing the total future contract value to \$12 million.

PteroDynamics will design, build, test, and demonstrate two P5 Transwing UAS prototypes in a maritime environment to meet the following specifications:

- 330-pound maximum gross takeoff weight
- Ability to carry a 50-pound payload at least 400 nautical miles
- Hybrid electric/internal combustion engine powertrain that can burn JP-5 fuel
- Autonomous multi-aircraft operations
- Satellite communications for beyond visual line of sight (BVLOS) operation
- Detect and avoid (DAA) capability
- Operations in a broader range of environmental conditions
- Transportable via C-130 and C-17 fixed-wing and CH-53 and CH-47 rotor aircraft