



HORIZON AIRCRAFT SUCCESSFULLY COMPLETES WIND TUNNEL TRANSITION FLIGHT TESTING

News / Manufacturer



Horizon Aircraft has successfully completed initial transition flight testing of its Cavorite X5 50% scale eVTOL prototype in the world class ACE Climatic Wind Tunnel. Brandon Robinson, CEO of Horizon Aircraft commented: "Aircraft performance exceeded our expectation. We explored forward speeds of up to almost 100 km/h, measuring aerodynamic forces, control authority, and mechanical system function with the wings open at varying fan speeds. We were particularly happy with pitch and roll stability and control throughout the entire transition envelope, as well as the embedded fan performance. Having real-world test results match our detailed predictions was further endorsement of our world class engineering. We can now use these results to refine our CFD modeling and further de-risk the outdoor transition flight test program that is beginning soon."

Horizon hybrid eVTOL concept allows the aircraft to fly 98% of its mission in a very low-drag configuration like a traditional aircraft and is one of the only eVTOL aircraft currently able to do so. Flying most of the mission as a normal aircraft is safer, more efficient, and will be easier to certify than radical new eVTOL designs. The unique aircraft can also operate in Short Takeoff and Landing or Conventional Takeoff and Landing modes. The full-scale aircraft will be powered by a hybrid electric architecture that can recharge the battery array in-flight while providing additional system redundancy and flexibility.

Horizon Aircraft will move to outdoor transition flight testing shortly as they continue the detailed design of their full-scale aircraft, anticipating final assembly for flight testing in 2025.

05 APRIL 2023

ARTICLE LINK:

<https://connect.50skyshades.com/news/manufacturer/horizon-aircraft-successfully-completes-wind-tunnel-transition-flight-testing>