



U.S. ARMY AWARDS ELECTRA \$1.9 MILLION CONTRACT FOR POWERED WIND TUNNEL TEST OF CONTESTED LOGISTICS ESTOL AIRCRAFT

News / Manufacturer



Electra announced a Small Business Innovation Research contract from the U.S. Army valued at \$1.9 million that funds powered wind tunnel testing of Electra hybrid eSTOL aircraft. The award enables the U.S. Army to explore Electra's unique blown wing aircraft technology potential to broaden U.S. military capabilities, especially for fuel-efficient, resilient logistics in contested environments. Electra eSTOL represents a new category of aircraft capability, combining helicopter-like operational flexibility with superior fixed wing-like performance and operating costs.

The innovative combination of blown lift and eight distributed electric motors significantly increases wing lift, enabling ultra-short takeoffs and landings from spaces as small as a soccer field, and dramatically reduced noise and fuel use compared to conventional aircraft and helicopters. Hybrid-electric power ensures ranges beyond 1000 miles for national security applications without the need for battery charging stations.

Ben Marchionna, Electra's Director of Technology and Innovation commented: "There is a substantial benefit to employing the right-sized aircraft for a given payload-range mission. It's a very effective method to substantially reduce fuel use – or operational energy – in theater, which really matters for enabling distributed operations in contested locations. Many of the most common deployed military logistics solutions in use today are flown well below their intended payload capacity. Our eSTOL aircraft can fulfill these missions while using dramatically less fuel, providing much more range, operating at significantly reduced noise levels, and utilizing the same constrained operational ground footprints. It's an extremely compelling capability and we're thrilled to be working with the Army team to advance this key national security technology."

The powered wind tunnel testing will advance Electra's novel aerodynamics database for use in performance analysis, simulator, and control law development. These wind tunnel tests, combined with ground tests and the ongoing flight test program of Electra's eSTOL technology demonstrator aircraft, will be used to help guide the design and development of Electra's production aircraft.

18 APRIL 2024

ARTICLE LINK:

<https://50skyshades.com/index.php/news/manufacturer/us-army-awards-electra-19-million-contract-for-powered-wind-tunnel-test-of-contested-logistics-estol-aircraft>