

PRESS RELEASE September 29, 2022

USAF SBIR Accelerates Maturation of VerdeGo Aero Hybrid-Electric Powerplants for Both Military and Commercial High-Performance Electric Aircraft

DAYTONA BEACH, Florida – VerdeGo Aero[™] has been awarded a Small Business Innovation Research (SBIR) contract sponsored by the U.S. Air Force Research Laboratory to perform advanced risk reduction on the VH-3-185 hybrid powerplant. The \$1.2 million contract has a period of performance of 14 months and was awarded under a Commercial Solutions Opening (CSO) focused on technologies that have both military and commercial applications. This contract along with a portfolio of other hybrid programs and a recent Series A financing round are leading to substantial growth in VerdeGo's Daytona Beach, FL-based team of hybrid propulsion experts.

The VH-3-185 is VerdeGo's third generation of hybrid powerplant. Designed for use in electric aircraft, it features a certified aircraft diesel engine that burns either jet fuel or sustainable aviation fuel and converts that energy into electric power to drive arrays of electric motors, mechanical shaft horsepower to directly drive a propeller or a gearbox, or a blend of electric and mechanical output.

"Many eVTOL aircraft developers are beginning to realize the limitations in range and endurance when relying upon batteries as the primary energy source," said Dr. Pat Anderson, CTO of VerdeGo Aero. "In the military context, these limitations combined with the need for established charging infrastructure at every operating location make battery-only designs unsuitable for those missions. Hybrid powerplants, which do not have these limitations, are therefore an attractive solution for the military, and for that matter commercial operators, as well."

"The Agility Prime program has been exploring and evaluating hybrid propulsion architectures combined with EVTOLs for dual use applications where additional range over what current battery only solutions may offer is of higher importance. The program office is excited to continue those efforts and better understand what capabilities VerdeGo's VH-3 Powerplant may offer future systems over the course of this Phase 2 effort," said Sterling Alley, Agility Prime program manager and technology transition lead.

The 185kW VH-3 is proving technologies that are also being applied to powerplants up to the 1MW+ power range. The similarities between military missions and high-performance commercial missions lead to a common need for large amounts of reliable onboard propulsion power for VTOL, STOL, and CTOL aircraft.

"This Direct-to-Phase II effort is exciting because it's going to accelerate our efforts to bring the VH-3 to market," said Dave Spitzer, VerdeGo's VP of Product Development. "The VH-3 will be a key enabler for bringing new capabilities to the warfighter, and we're honored that the Air Force recognizes the potential in VerdeGo's hybrid technologies."

About VerdeGo Aero

VerdeGo Aero[™] is the world leader in hybrid propulsion technologies for the next generation of electrified aircraft. We enable our customers to create more competitive aircraft by leveraging VerdeGo Aero's expertise in serial and parallel hybrid-electric propulsion and battery-electric aircraft systems.

With hundreds of hours of full scale and full power durability and hybrid performance testing complete, core engine technology from pistons to turbines and serving commercial and military customers, VerdeGo Aero is working to develop, certify, manufacture, and service the next generation of propulsion units for electrified aviation.

VerdeGo Aero, based at the Embry-Riddle Aeronautical University Research Park in Daytona Beach, FL, is growing rapidly. For more information about current openings in both technical and commercial roles, see www.verdegoaero.com/careers.

About AFRL

The Air Force Research Laboratory (AFRL) is the primary scientific research and development center for the Department of the Air Force. AFRL plays an integral role in leading the discovery, development, and integration of affordable warfighting technologies for our air, space, and cyberspace force. With a workforce of more than 11,000 across nine technology areas and 40 other operations across the globe, AFRL provides a diverse portfolio of science and technology ranging from fundamental to advanced research and technology development. For more information, visit: www.afresearchlab.com.

About AFWERX

AFWERX, a program office at the Air Force Research Laboratory (AFRL), connects innovators across government, industry and academia. Through innovation and collaboration with our nation's top subject matter experts and harnessing the power of ingenuity of internal talent, by expanding technology, talent, and transition partnerships for rapid and affordable commercial and military capability. Additional information is available at: <u>https://www.afwerx.com/</u>.

Media Contact:

Matt Kollar, Director of Marketing and Operations, VerdeGo Aero kollarm@verdegoaero.com https://www.verdegoaero.com