

VERDEGO AERO ANNOUNCES POWERTRAIN AND EVTOL CONTROL SYSTEMS TO ADVANCE \$30B URBAN AIR MOBILITY MARKET

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VerdeGo Aero launches Integrated Distributed Electric Propulsion (IDEP) powertrain and eVTOL control systems to help the “flying car” industry get off the ground

Erik Lindbergh, grandson of famed aviators Charles and Anne Morrow Lindbergh, has announced the launch of VerdeGo Aero’s Integrated Distributed Electric Propulsion (IDEP) systems for the rapidly growing Urban Air Mobility market. VerdeGo is leveraging its expertise with hybrid powertrains, electric aerospace propulsion, and attitude control of VTOL aircraft to deliver end-to-end powertrain solutions for customers in the Urban Air Mobility market.

More than 100 aircraft companies around the world are now competing for a share of the Urban Air Mobility “Flying car” market. Many of these new aircraft concepts were inspired by small-scale consumer drone designs. There are critical differences in propulsion systems, aircraft control, and safety that make developing a 2,000+ lb aircraft far more challenging than a lightweight drone. Recent demonstrations have illustrated how difficult it is to scale up past the size of a light single-seat recreational VTOL aircraft with limited range, control and excessive noise.

“My grandfather’s 1927 solo flight across the Atlantic jumpstarted the multi-billion dollar long-range air travel market, and today our team is excited to provide the building blocks for short-range air transportation” said Erik Lindbergh, President of VerdeGo Aero. “As our customers focus on designing, developing, and producing more than 20,000 aircraft by 2035, VerdeGo will be helping them open up this \$30B+ transportation market”

VerdeGo Aero’s IDEP systems are designed as end-to-end solutions with integrated hardware and software to provide energy, redundancy, power distribution, propulsion, and attitude control for a wide array of vertical takeoff (VTOL) and distributed electric propulsion (DEP) aircraft platforms. The first generation IDEP systems are sized for 2-3 seat (200-350 hp) and 5-7 seat (500-800 hp) aircraft and contain hybrid generators that enable Urban Air Mobility aircraft to be viable with technologies available today. Electric motors are used to drive rotors that provide responsive attitude control regardless of aircraft weight, without the control lag found in traditional systems. Backup batteries and distributed propulsion units provide a high degree of redundancy and safety.

As battery technologies mature, VerdeGo’s modular IDEP systems will also be configured with rechargeable battery packs providing the primary power. “Everyone has their crystal ball for the timing of new battery technologies” said Dr. Pat Anderson, CTO of VerdeGo Aero. “We have been working for more than a decade with the global battery experts who project it will be 15 to 20 years before commercial levels of performance are achieved from a purely battery-operated VTOL aircraft. VerdeGo’s first-generation IDEP hybrid systems enable aircraft manufacturers to get into the air with technologies available today, with an upgrade path as soon as batteries are available.”

“Commercial VTOL aircraft require high amounts of energy and require a fast turnaround on the landing pad. Our first generation IDEP system offer 4X the endurance and 12X the refuel/recharge rate of all-battery based drivetrains” said Eric Bartsch, COO of VerdeGo Aero

VerdeGo Aero, founded in 2017, is based in Daytona Beach, Florida. VerdeGo is leveraging the most innovative aspects of its original PAT200 aircraft as it shifts focus away from aircraft development and towards powertrain and controls solutions. The modular IDEP architecture offers aerospace industry customers propulsion and control platforms that can be adapted to a wide array of aircraft designs.

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