

## Building the foundation for a cleaner future: Wright has begun testing a 2MW aviation-grade motor for transport-category zero-emissions aircraft

ALBANY, NY, September 7, 2021 — Wright Electric, Inc., a world leader in zero-emissions commercial aviation, announced today that the company has delivered another key building block towards development and certification of the first commercially viable, zero-emissions single-aisle aircraft.

Scaling electric and hybrid-electric propulsion systems from general aviation to larger aircraft applications requires much more powerful and lighter weight altitude-capable electric motor technology. Their purpose is to convert the DC power from batteries into propulsive thrust that is compatible with industry standard ducted fan and propeller systems for commercial aircraft. "The level of power and weight demonstrated with our new 2 MW motor will become the baseline for any new electric aircraft and is a key technology in our megawatt system," said Jeff Engler, CEO of Wright. The motor is being designed to be scalable from 500 kw to 4 MW systems and the Wright motor targets the following levels of performance:

- **2 MW of propulsive power** a 2x improvement over megawatt scale motors being demonstrated in the industry and designed to be scalable from 500 kW to 4 MW for different applications.
- 10 kW/kg specific power a 2x improvement compared to available aircraft propulsion motors. This allows application of the motor up to the single-aisle class aircraft to enable electric and hybrid-electric flight with little to no emissions.
- Wright will use 10 2MW motors on its Wright 1 aircraft that's a total of 20 MW, which is as powerful as an A320 Airbus aircraft that major airlines operate today. A two-motor system could power a 50-seat aircraft such as the ATR-42.

"In January 2020, we announced the start of our megawatt scale electric motor program for a single-aisle commercial airliner. In May 2021 we announced the testing of our next-generation inverter technology. Building on that momentum, Wright is excited to begin testing of our 2 MW electric powertrain and preparing for flight qualification in the near future," Engler said. "Zero-emissions commercial aircraft are the future, and Wright is focused on delivering on the promise."

The motor now proceeds to the next phase of development including integration with an in-house developed highly efficient inverter, high altitude chamber testing, and qualification for flight readiness. Wright Electric is excited to demonstrate our first system and is committed to continuing to push the development of the motor and inverter to meet the requirements of the aerospace community with progressive development over the next two years. Wright has been funded by NASA, the U.S. Department of Energy, the U.S. Army, and the U.S. Air Force in its motor development efforts.

For additional information about Wright, please visit weflywright.com.

## **About Wright Electric**

Wright Electric, Inc. (Wright) is a U.S.-based company developing the world's first zero-emissions commercial aircraft. The company was founded in 2016 by a team of aerospace engineers, powertrain experts, and battery chemists. By focusing its resources on the technological and component challenges to electrification, Wright Electric is establishing the path towards a carbon-free aviation footprint. Wright's flagship airplane under development is the Wright 1, a 186-seat airliner with an 800-mile range, targeting entry into service in 2030. Wright works with airlines such as easyJet and VivaAerobus, and has development contracts with NASA, the U.S. Army, the U.S. Air Force, and the U.S. Department of



Energy ARPA-E. Wright has been funded through Y Combinator, the Clean Energy Trust, venture funds, and family offices.