



## TURBOTECH Revolutionizes Hybrid-Electric Aircraft With ANSYS

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PITTSBURGH, Oct. 15, 2019 /PRNewswire/ -- [TURBOTECH](#) is leveraging [ANSYS](#) (NASDAQ: ANSS) industry-leading simulation solutions to transform aeronautical propulsion. Through the [ANSYS Startup Program](#), TURBOTECH is developing an energy storage system capable of powering the hybrid-electric aircraft of the future.

ANSYS\_with\_TURBOTECH\_rendering

As aerospace manufacturers turn to electrification to reduce emissions, boost efficiency and lower operating costs, engineers race to solve unprecedented design and power challenges. TURBOTECH uses ANSYS fluids solutions to develop regenerative cycle turbogenerators based on small turbines that recover energy from exhaust gases to reduce fuel consumption. By recharging batteries in-flight, the turbogenerators can improve the endurance of electric aircrafts by 10x — enabling significant weight and cost savings. The turbogenerators can produce electricity from virtually any type of renewable flammable material, including bio-fuel, bio-gas, hydrogen and conventional fuels.

"Developing a turbine is a very complex and iterative process. ANSYS simulation solutions enable us to solve complex calculations for turbines and compressors, replace physical prototypes with virtual prototypes and enhance design exploration," said Damien Fauvet, CEO at TURBOTECH. "By 2020, our patented technology will have initiated a revolution in aeronautical propulsion, targeting new markets and opportunities for electrification and autonomy."

"The global microturbines market is projected to reach [\\$420 million by 2025](#). TURBOTECH's vision for the future of hybrid-electric propulsion systems will transform that market and disrupt the aerospace industry," said Paolo Colombo, industry director, aerospace and defense at ANSYS. "As part of the ANSYS Startup Program, TURBOTECH will deliver the next generation of engines with less noise, lower environmental impact and greater flight endurance."

As part of the ANSYS Startup Program, TURBOTECH has access to simulation software bundles that are specifically built to help the company innovate quickly and cost-effectively. The program empowers entrepreneurs around the world to transform their companies from startups to industry leaders. Since inception, the ANSYS Startup Program has worked with over 740 startups, more than 170 in the aerospace and defense industry.

### About ANSYS, Inc.

If you've ever seen a rocket launch, flown on an airplane, driven a car, used a computer, touched a mobile device, crossed a bridge or put on wearable technology, chances are you've used a product where ANSYS software played a critical role in its creation. ANSYS is the global leader in engineering simulation. Through our strategy of Pervasive Engineering Simulation, we help the world's most innovative companies deliver radically better products to their customers. By offering the best and broadest portfolio of engineering simulation software, we help them solve the most complex design challenges and create products limited only by imagination. Founded in 1970, ANSYS is headquartered south of Pittsburgh, Pennsylvania, U.S.A., Visit [www.ansys.com](http://www.ansys.com) for more information.

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