

# Hartzell Earns Type Certificate for 1st Part 35 Electric Engine Propeller, Designed and Tested with BETA Technologies

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Certification testing of Hartzell's propeller was conducted exclusively on BETA's proprietary electric propulsion systems; a validated environment with authenticated data collection

Capable of supporting variable load profile and operating under diverse conditions, BETA's electric propulsion system provides industry high-watermark performance environment for certification testing



Hartzell Propeller has received FAA Part 35 Type Certification for the first propeller designed specifically for advanced air mobility (AAM) aircraft. The company worked with aerospace company BETA Technologies to achieve this landmark, conducting all testing of its propeller on BETA's proprietary electric propulsion systems (electric engines), which are designed and manufactured in-house by BETA.

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*Kyle Clark, Founder and CEO  
of BETA Technologies*

This milestone signifies the maturity, certifiability, and commercialization of the AAM industry, and next-generation electric aviation. It is also a huge practical step forward in the industry's collective ability to support the growing demand for safe, low-cost, and efficient urban and regional air transport.

With this certification, Hartzell's propeller is the first to earn FAA type certification specifically for integration with electric propulsion systems. These systems, like BETA's, are capable of managing a wide range of different loads and conditions — from regenerative braking to startup — all of which Hartzell's propellers are uniquely designed to support. The approval comes after

thousands of hours of ground and flight testing over four years, and verifies that the propeller exceeds the rigorous performance and safety standards of FAA Part 35.

This is a critical endorsement from the FAA of the efficacy and safety of Hartzell's propeller — as well as the performance of BETA's electric engines, which provided the foundation for its testing.

"Hartzell Propeller is very pleased to work with BETA Technologies on this AAM breakthrough development," said Hartzell President JJ Frigge. "Our design specifically for BETA Technologies is a five bladed, carbon fiber, ground adjustable fixed pitch propeller that will have future applications for the entire AAM industry."

Hartzell and BETA have worked on the propeller development since 2021, from initial aerodynamic modeling and design to full-scale testing and

validation. The result is a high-performance, low-noise propeller tailored specifically for electric engines and this next generation of aviation. BETA will utilize Hartzell's propeller to optimize the performance and safety profile of both its ALIA VTOL and ALIA CTOL aircraft. The propeller is also built to serve all AAM aircraft that utilize similar electric propulsion systems.

"With its decades of experience across all types of aircraft, Hartzell Propeller has understood from the beginning the unique challenges and opportunities of electric aviation," said Kyle Clark, Founder and CEO of BETA Technologies. "Their engineering precision and deep certification experience have assisted us as we bring this aircraft to market and walk through our own certification steps. We're proud to have been their counterpart on this project, and look forward to getting this certified propeller in the air as we continue the process of certifying our electric engines, as well as our ALIA CTOL and VTOL."

BETA has been flying its ALIA CTOL and ALIA VTOL aircraft with Hartzell's propellers for more than four years — including completing the industry's first crewed transition of an eVTOL, and several long-range flights with its fixed-wing, including a coast-to-coast trip across the U.S., and



now a Grand Tour of Europe.

This relationship brought Hartzell's decades of expertise in propeller design and certification together with BETA's technology-centric, bleeding-edge approach. As the AAM sector continues to evolve, Hartzell Propeller and BETA Technologies set a precedent for how legacy aerospace expertise and next-generation innovation can come together to deliver safe, certified, and sustainable flight solutions.

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#### About Hartzell Propeller

Hartzell Propeller, a Signia Aerospace company, is the global leader in advanced aircraft propeller design and manufacturing. With more than a century of experience, the company designs next-generation propellers with innovative blended airfoil technology and manufactures them with revolutionary machining centers, robotics and custom resin transfer molding curing stations. Hartzell Propeller is headquartered in Piqua, Ohio. Signia Aerospace is a global, integrated provider of high-performance systems and specialized components for the aerospace industry. For more information, visit <https://hartzellprop.com> and [www.signiaaerospace.com](http://www.signiaaerospace.com).

#### About BETA Technologies

BETA Technologies is a Vermont-based aerospace company manufacturing the future of aviation. The company is producing next-generation aircraft, including conventional fixed wing electric airplanes ("ALIA CTOL") and electric vertical takeoff and landing ("ALIA VTOL"), as well as the technologies that enable them, such as electric propulsion systems, flight controls, and battery packs. In addition, BETA is deploying an infrastructure network across the U.S. to ensure this new class of aircraft has access to reliable charging. To date, the company has installed nearly 50 chargers across the east, west, and gulf coasts. With its low-cost, high reliability, and regional range capabilities, BETA's products are designed to move goods and people to increase connectivity for rural areas and improve access to healthcare and e-commerce across the U.S. — and beyond.

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