



AMPAIRE SELECTED ELECTRIC POWER SYSTEMS AS BATTERIES SUPPLIER FOR ECO CARAVAN

News / Manufacturer



Ampaire selected Electric Power Systems under an exclusive agreement to supply the propulsion battery pack for Ampaire’s hybrid-electric upgrade of the Cessna Grand Caravan. The nine-passenger Eco Caravan has undergone ground power tests and will fly in the second half of the year. It is the first hybrid-electric aircraft to enter the certification process with the FAA. A supplemental type certification for the upgraded aircraft is expected in 2024.

The EPiCTM energy storage system from EP Systems contains advanced cell technology that offers an energy density of over 200Wh/kg (watt-hours per kilogram) at the battery pack level while providing over 2,000 fast-charge cycles before a replacement is required given typical usage. The EPiC series of products consists of modular building blocks that allow customization at the aircraft level.



Ampaire already has operational experience with EP Systems technology, flying a prototype of the EPiC system on its Electric EEL flying testbed aircraft. The EEL is a hybrid electric Cessna Skymaster supporting the Department of Energy’s ARPA-e advanced technology unit. The EPiC energy storage system is the second major element of the Eco Caravan propulsion system that Ampaire has announced. In July, it revealed the RED Aircraft AO3 series compression ignition engine as the combustion portion of an integrated parallel hybrid-electric propulsion system.

Ampaire Founder and CEO Kevin Noertker, commented: “We are working closely with fellow innovators to bring a new level of efficiency and low emissions to aviation. EP Systems has distinguished itself in tailoring its battery technology to our needs with a near-term certifiable solution.”

EP systems will support Ampaire in its work to certify the Eco Caravan. The aircraft can reduce fuel and emissions as much as 70 percent on shorter trips and 50 percent on longer ones, while preserving payload capability and extending range. When flown on sustainable aviation fuel, emissions are near zero. Eco Caravan operating cost is 25 to 40 percent lower depending on the type of missions flown. The hybrid-electric aircraft charges in flight and does not require ground charging infrastructure, meaning it can use any airport Caravans fly from today.

EP Systems Founder and CEO Nathan Millecam, said: “Ampaire’s practical approach to electrification is the start of a transportation revolution. We share a vision of lowering costs for aircraft operators and their passengers, while moving as quickly as possible to zero emissions aviation.”

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