



The ZA10 | Photo source Zunum

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## HYBRID AIRCRAFT SAVES TIME, MONEY AND THE ENVIRONMENT

 MOBILITY & TRANSPORT

### A new hybrid aircraft offers reduced emissions, savings on the cost of flying and door-to-door travel time

**Spotted:** Air travel makes a significant contribution to global greenhouse emissions, yet the development of electric planes has lagged behind that of the automobile industry. This is partly due to limitations on battery weight and life – there is nowhere to pull over and recharge in the skies. Seattle-based company Zunum Aero hopes to get around this by developing a hybrid aircraft. The company has recently announced they will be using Safran Helicopter Engines in their first craft, dubbed the ZA10.

The ZA10 will be powered by both propulsion batteries and a jet fuel-powered Safran turboshaft from the company’s Ardiden range. The Safran gas turbine is both lightweight and compact. It will be coupled to a generator capable of delivering 500 kilowatts of electric power — enough for a couple of powerful motors.

The plane will constantly switch between the two modes, using fuel for power-hungry flying such as taking off and flying into headwinds, and battery power for cruising and landing. This will allow the ZA10 to deliver around an 80 per cent saving on emissions, at estimated operating costs of just 7 cents per available seat mile, or €222 per hour for the entire aircraft. This is 60-80 per cent lower than a conventional aircraft of comparable size.

The hybrid engine also allows the ZA10 to fly longer distances, making it a viable option for commuting routes from smaller airports. “Today marks a significant milestone on the path to delivery of the ZA10,” said [Matt Knapp](#), co-founder and CTO of Zunum Aero. “The Zunum ZA10 aircraft will

bring breakthrough performance to regional aviation, paving the way to fast, electrified, affordable high-speed air services to communities everywhere.”

At Springwise, we are following the development of electric and hybrid aircraft closely. Some recent innovations we have covered in this space include a [solar aircraft](#) and an [all-electric](#) passenger plane.

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### **Takeaway:**

Delivery of the new ZA10 is scheduled for the second half of 2020. The company hopes that the small, efficient planes could be a game-changer in the commuter-aircraft market. By reducing noise and emissions by up to 80 per cent, Zunum’s hybrid aircrafts are able to fly from regional airports near residential communities, giving them access to more than 5,000 underutilised airports in the US alone. Using these regional airports would significantly reduce door-to-door travel times, making the planes a popular option for short-haul flights with holiday-makers and weekend commuters.