Practical Zero Emission Aviation

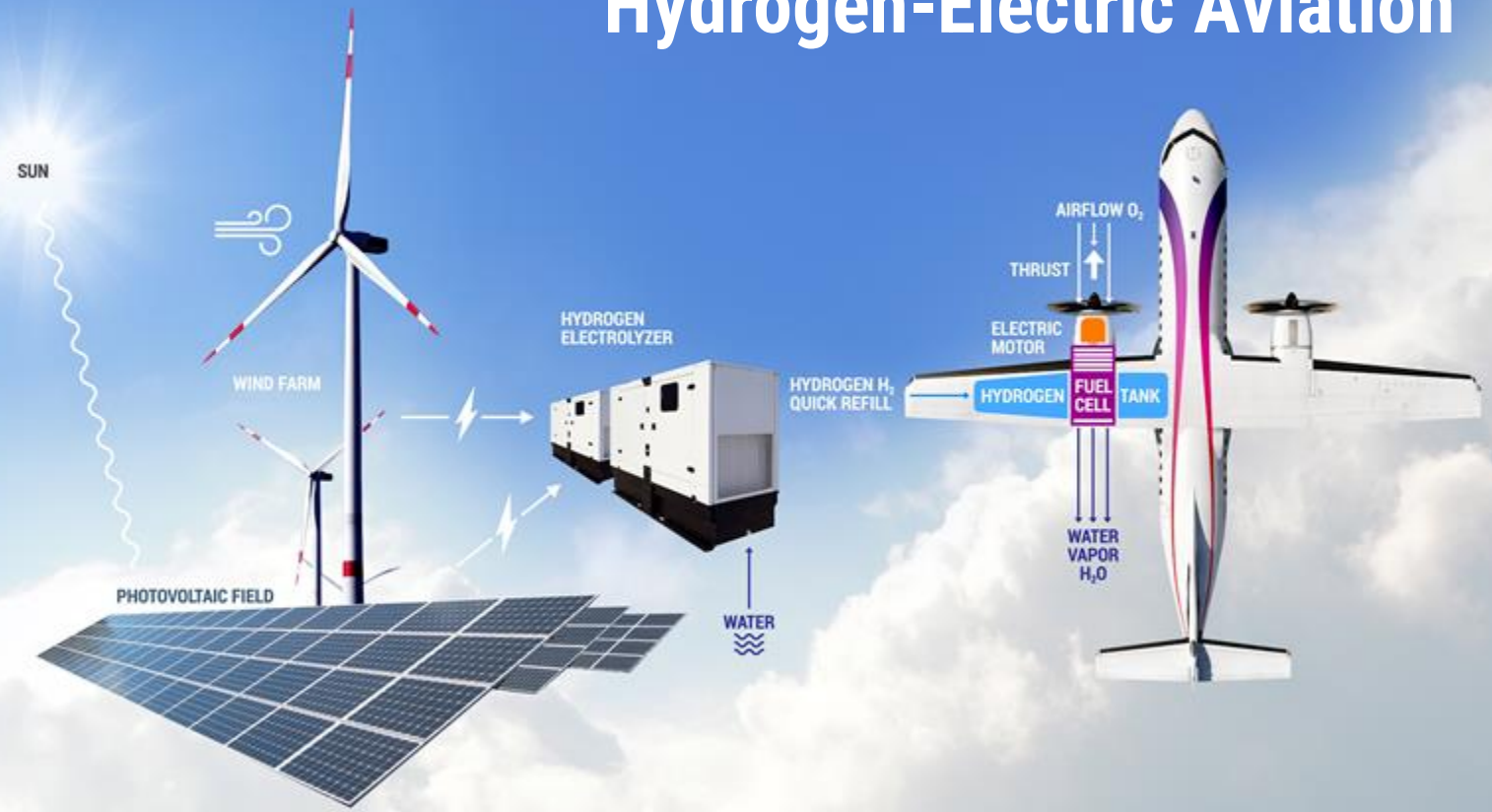
14th October 2021


EV1

Coming Up

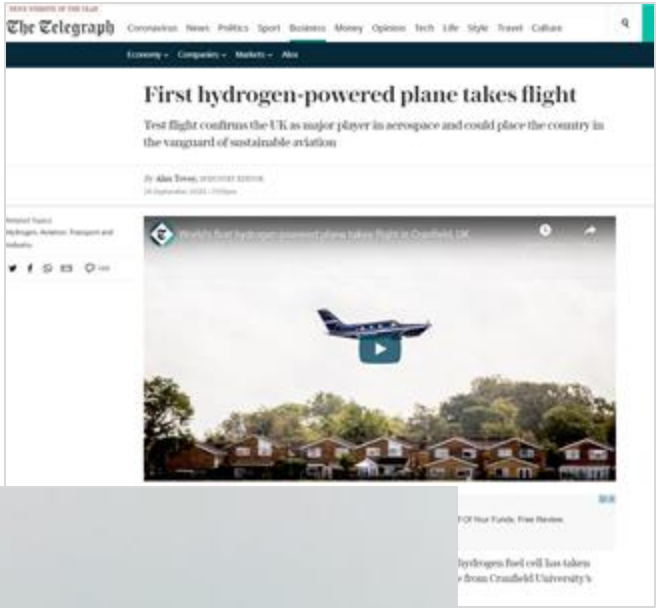
- ZeroAvia's 10-20 seat powertrain technology
- What makes a successful zero emission aviation network
- Three commercially viable zero emission aviation routes

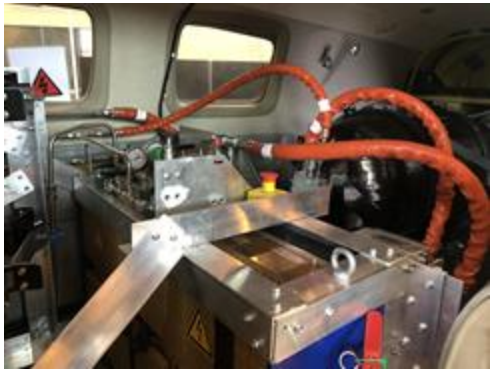
Our Vision: Renewably-Powered Hydrogen-Electric Aviation



Long range, Lower costs & Zero Emission

Step 1 World's Largest Hydrogen-Electric Aircraft





Historic flight on
24th Sep 2020

Step 1 Today: World's First H2 Airport Production & Refueling

On / Near-site Renewables

On-site Electrolysis

On-site storage & mobile airport refueling

Hydrogen fueling support for multi-modal transport

Step 2 600kW Commercial Variant Development Started

Main ZA-600 Specs

- A scaled-up & repackaged version with high redundancy
- PT6 class replacement: 600kW peak, 480kW cont. @2,000 rpm
- 10,000 hour TBO, 3-4x lower hourly MX costs
- Heavier but more efficient, therefore lower fuel weight
- 50% range of PT6 with same payload in 2023, 100% by 2025

Step 2 19-Seat Test Flights Starting in 2021

Lower fuel, maintenance costs; lower noise; zero emissions end-to-end

- **Initial configuration**: One turbine engine PLUS one ZeroAvia powerplant on the second wing; in-fuselage fuel
- **2022 configuration**: Twin ZeroAvia powerplant on both wings; all components certifiable and fuel tanks under wings

Step 2 (ZA-2000): 50+ Seats, 500+ miles by 2026

Step 3 Market Leader in Clean Aviation

ZeroAvia in the news

Jet Zero: Boris Johnson invests in zero-emission plane to make flying 'guilt free'

First meeting of Jet Zero Council will work to create net zero long-haul flights and bring down global emissions

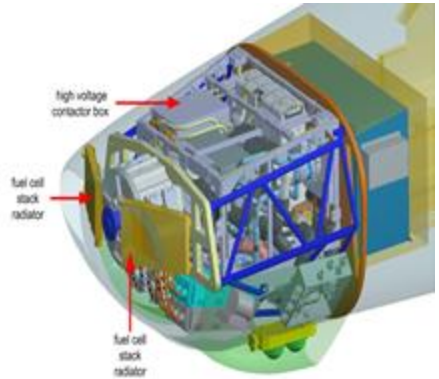
Strong business development traction

- Growing network of operators
- Many are interested in replacing larger vehicles with our entry product
- Engine & Airframe OEMs
- New vehicle manufacturers

What is needed for a successful zero emission regional aviation network?

HEART Hydrogen-Electric Automated Regional Transport

- Sustainable energy source and the infrastructure to make it available nationwide
- Efficient and cost effective means to turn energy into power
- Standards and regulations to ensure safe, commercial viability of solution
- New operations and maintenance eco-systems to support



What routes would maximise the potential of a sub-regional hydrogen-electric network?

Route 1 PSO Route

- **Route**: GLA<>BRR
- **Distance**: 272km, 147NM
- **Time**: 80 minutes
- **H2 required**: 80kg/trip

- **GLA focus**
  - Slots & traffic density
  - Refuelling locations
  - Integrating new and existing operations
- **BRR focus**
  - Space available for A/C
  - Space available for H2 production and re-fuelling
  - Seasonal constraints

Route 2 New Commercial Passenger Route

- **Route**: GLA<>INV
- **Distance**: 278km, 150NM
- **Time**: 80 minutes
- **H2 required**: 80kg/trip

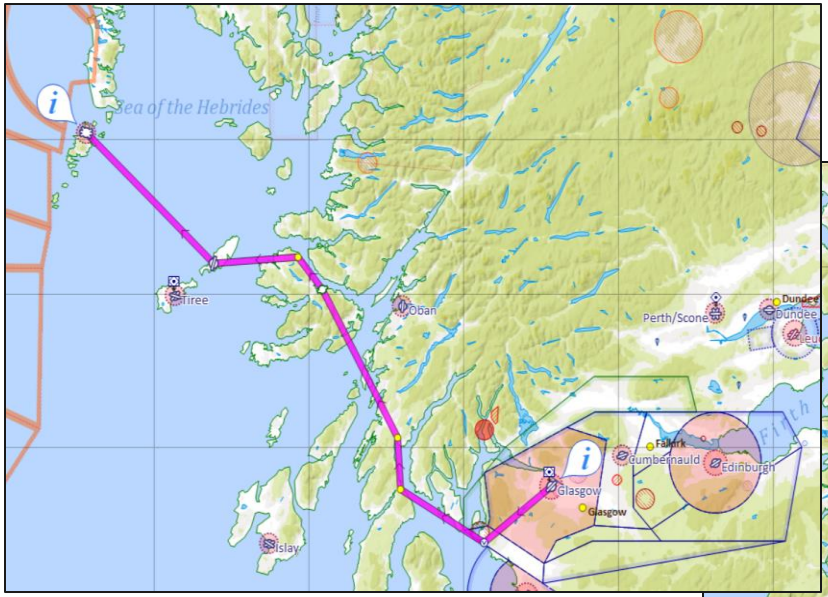
- **INV focus**
  - Passenger facilities
  - Space available for A/C
  - Level of H2 infrastructure

Route 3 Island Cargo Route

- **Route**: KOI<>LSI
- **Distance**: 140km, 76NM
- **Time**: 40 minutes
- **H2 required**: 40kg/trip

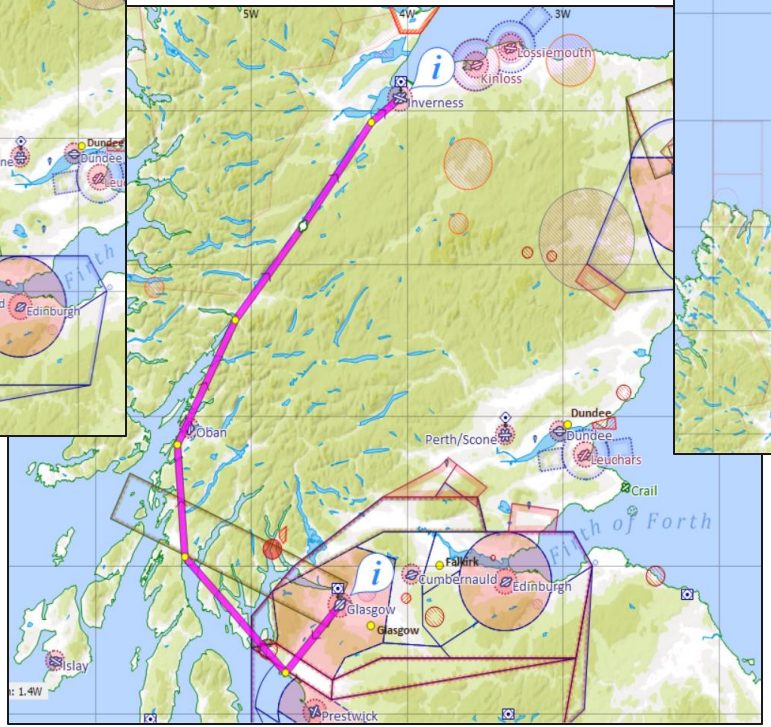
- **KOI & LSI focus**
  - Ground operations capacity
  - Space available for H2 production
  - Space available for A/C
  - Seasonal constraints

Preliminary Flight Plans



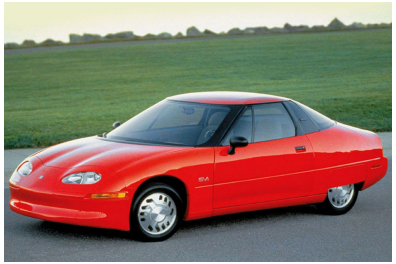
Preliminary flight path planning for GLA – BRR

Preliminary flight path planning for GLA – INV



Preliminary flight path planning for KOI – LSI

ZEROAVIA



Thank You!

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