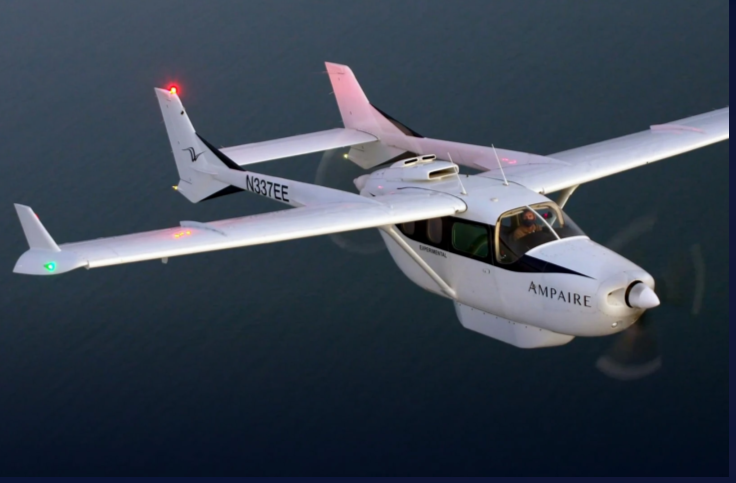
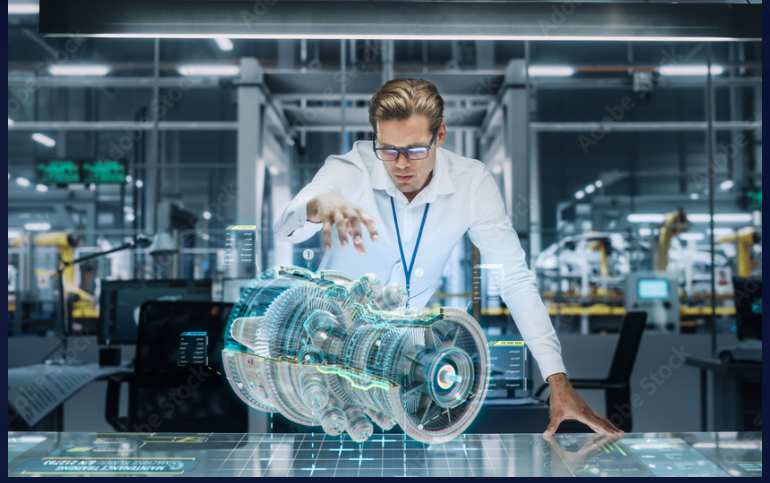
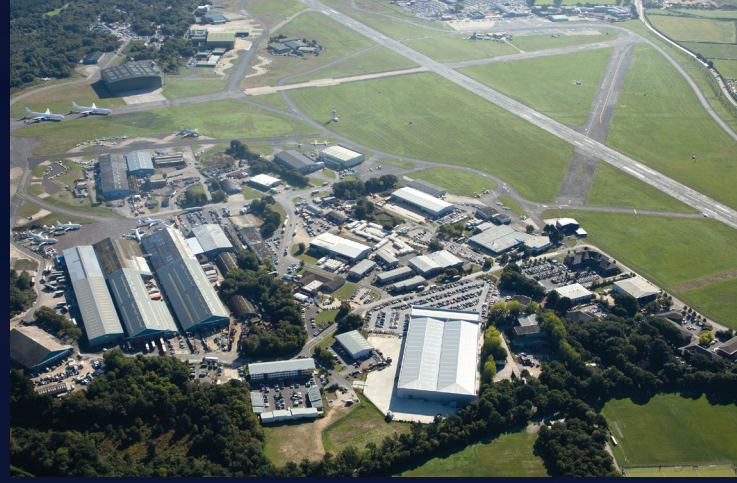






JANUARY 2024

A catalyst for a smart, sustainable aviation and air industry in the UK

UK Future Flight Innovation Zone

A catalyst for a smart, sustainable aviation industry.

MISSION STATEMENT

UK Future Flight Innovation Zone

Delivering significant socio-economic benefits to the UK

Our mission is to create the UK's real-world testing facility for tomorrow's sustainable aviation and future flight technologies.

The South West's established aerospace ecosystem provides solid foundations for the transition to a net zero future. The UK Future Flight Innovation Zone, will help to accelerate the development of future flight technologies to create a smart, sustainable aviation and advanced air mobility industry.

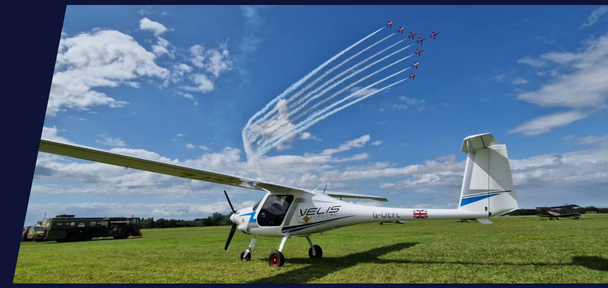
Building on the South West's world-class capabilities and facilities, the zone will become a living lab developing, testing and commercialising new future flight technologies under real world conditions, both in the air and on the ground. From drones to unmanned aerial vehicles and traditional aircraft, the zone will be a testbed for hybrid, electric and hydrogen-powered future flight technologies.

It is estimated that the future flight technology sector will contribute more than £45bn to the UK's economy, creating thousands of jobs and delivering significant GVA by 2030. With its long-established aerospace ecosystem, the UK Future Flight Innovation Zone is ideally placed to secure a large proportion of this market and drive the commercialisation of future flight technologies to decarbonise the industry.

The zone is a strategically crucial investment for the region and the UK. By encouraging cross-sector collaboration, the UK Future Flight Innovation Zone will provide stimulus for the nation's aviation and air mobility industry to ensure that it remains globally competitive. It will play a major role in securing the long-term sustainable future and decarbonisation of the British aviation industry.

£45bn

Contribution to the UK Economy



Decarbonising the UK's traditional aviation sector and accelerating the advanced air mobility industry

The UK Future Flight Innovation Zone gives unprecedented access to some of the most experienced aerospace and aviation experts in the world. Acting as a single point of contact, the UK Future Flight Innovation Zone's team connects industry representatives with academia and regulatory authorities to support the development of future flight technologies.

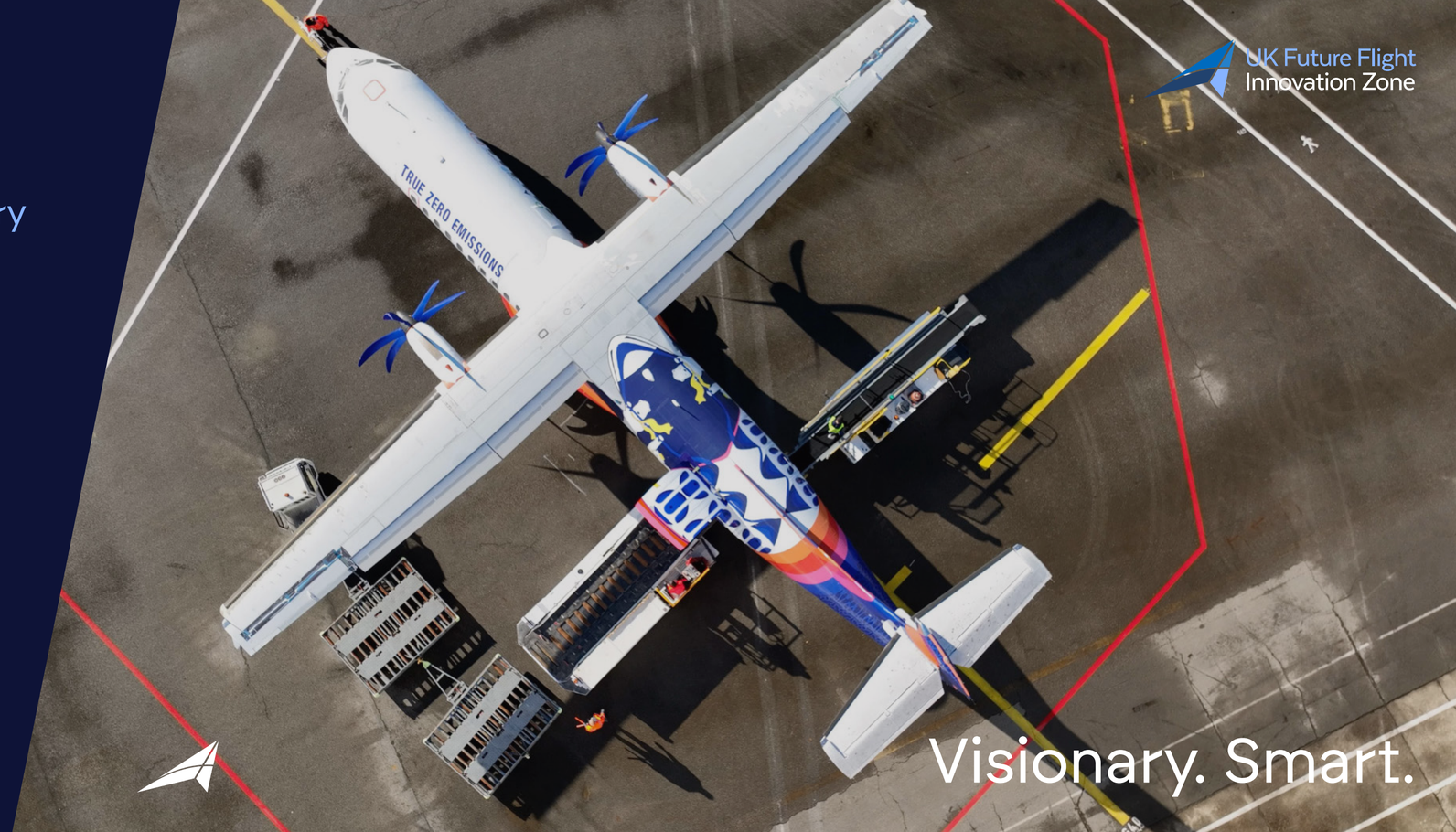
The initiative will offer access to a range of aviation assets including runway, airspace and infrastructure test from Exeter's regional airport, the iAero Innovation Centre & flight zone in Yeovil, as well as a network of other local airfields. It will be supported by world-class research, manufacturing, academia, skills and workforce development from across the South West.

Working alongside the Civil Aviation Authority (CAA) it will enable future regulatory development, future air technology testing, skills development, collaboration and future commercialisation both nationally and regionally.

The UK Future Flight Innovation Zone will provide access to an Innovation Advisor who will be the first point of contact with the CAA, providing regulatory guidance and support on options available to enable innovative operations, providing critical review of proposed trials and documentation, facilitating exchange of knowledge and information between member organisations and CAA Subject Matter Experts, and providing additional support as required to help innovation projects deliver against their objectives.

As part of the Government's commitment to decarbonise the aerospace industry, the UK Future Flight Innovation Zone, will deliver the UK's ambition to become the global centre of excellence for the development of future flight technologies.

This is a visionary partnership of industry, local government, national government, regulators and academia. These include Devon, Plymouth, Somerset and East Devon Councils; the University of Exeter; Met Office; Exeter and Yeovil Colleges; Connected Places Catapult; the West of England Aerospace Forum (WEAF); Leonardo Helicopters and the Rigby Group – owner of Exeter Airport.



UK Future Flight Innovation Zone

Visionary. Smart.

A world-class aerospace ecosystem in the South West

The South West is a globally significant aerospace cluster and is the second largest in Europe:

- More than 110 key aerospace companies providing 23,000 jobs within a sector currently worth £2.6bn.
- 20 Centres of Excellence driving innovation across the sector.
- Eight universities and colleges specialising in advanced engineering.
- Exeter Airport hosted the first electric test flight in England in 2021. It is ideally located adjacent to the Exeter Aerospace MRO facility and linked to the Future Skills Centre.
- Leonardo Helicopters is the only aerospace OEM to have complete end-to-end capability.
- Plymouth Smart Sound Connect 5G Testbed is ideally placed to support the development of smart, sustainable aviation in the region.
- Land and Sea Test Flight Corridors between Exeter, Newquay, Yeovil and beyond.

8
Universities and Colleges

20
Centres of Excellence

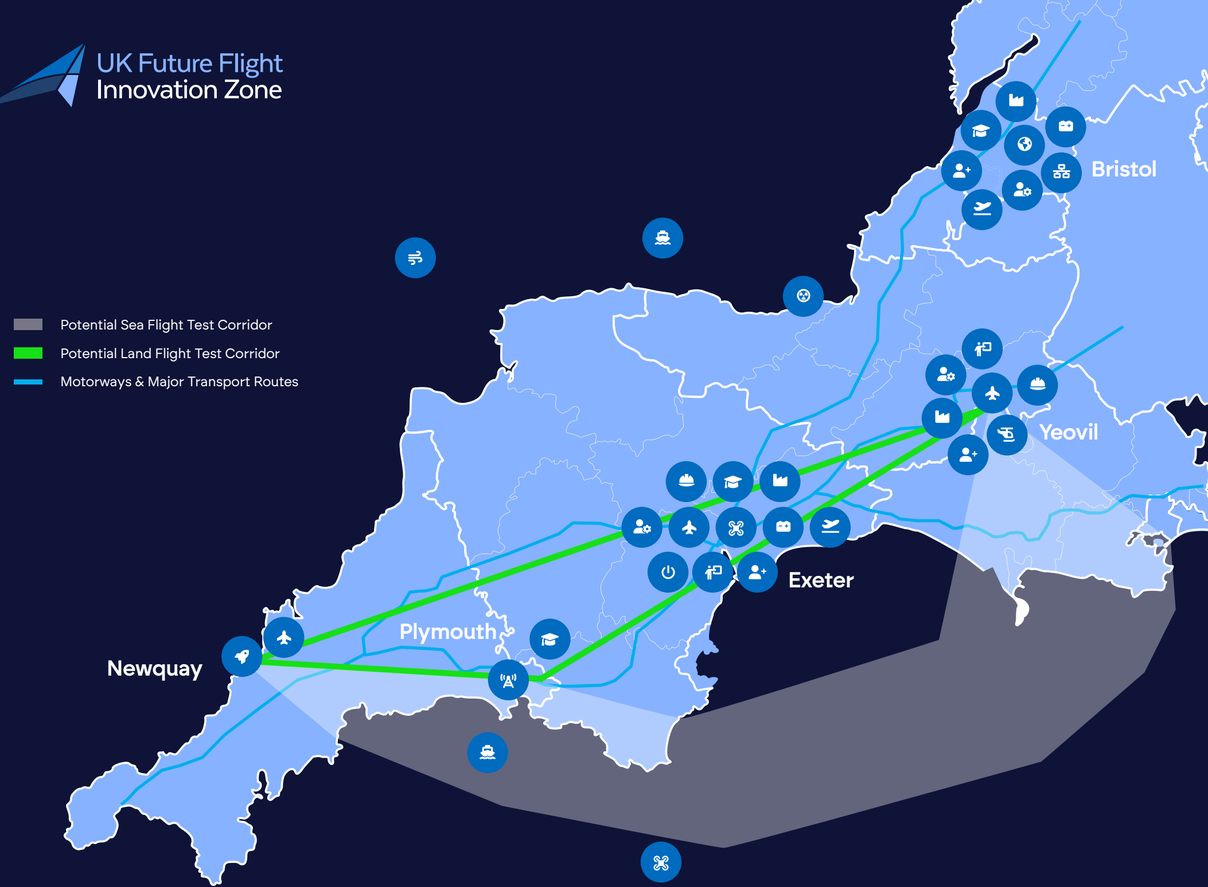
110
Key Aerospace Companies

23,000
Jobs Provided

£2.6bn
Sector Worth

- Airport
- Colleges & Further Education
- Energy Infrastructure
- Existing Skills
- Future Skills Need
- Global Connections
- Infrastructure Support and Skills
- Manufacturing & MRO Facilities
- Networking Hubs
- Nuclear Power Plant
- Potential Battery Production & Test Facilities
- Potential Flight Testing Areas
- Potential UAS Testing Areas
- Rotary Wing Expertise
- Shipping Connections
- Spaceport
- University
- Offshore Wind
- 5G Test Bed

UK Future Flight Innovation Zone



Innovation, expertise and experience

Businesses from around the world have expressed a keen interest in the region to take advantage of the unique ecosystem and facilities that the zone offers. The UK Future Flight Innovation Zone is already working on projects including hybrid electric test flights; electric infrastructure at airports; electric planes for pilot training; hydrogen infrastructure at regional airports; hydrogen executive jets; delivery drones and drones for MRO.

Innovation and Centres of Excellence

iAero (Yeovil) Centre drives research, development and innovation through the supply chain. Dedicated to rotorcraft technologies, it enhances design and manufacturing capabilities across the South West, supporting the development and introduction of new innovative processes to the market. iAero strongly encourages and facilitates engagement with SMEs as well as knowledge and technology transfer.

The Centre for Clean Future Mobility partners with businesses to develop low-emissions, high-efficiency integrated power systems for applications in the marine, off-highway, rail, defence and energy sectors.
It has expertise in:

- Powertrain design and test for optimal fuel efficiency, ranges and cost.
- Battery pack test and design.

Infrastructure

Exeter Airport is an ideally placed regional airport that has already hosted the first electric test flight in England. Located next to the Exeter Aerospace MRO facility and linked to the Future Skills Centre.

Plymouth Smart Sound Connect 5G Testbed is supported by a digital twin and 5G maritime testbed to enhance the understanding of the ocean and leading the transition to a future of integrated autonomous operation, resilient smart ports and short sea shipping.

Through cross-sector collaboration and learning, the testbed can support the development of smart and sustainable future flight technologies.

Training the Workforce

Located next to Exeter Airport, **Exeter College Future Skills Centre** delivers current aviation skills required via apprenticeships, technical and higher education routes. Working with industry partners, it is scoping out the future skills requirement for smart and sustainable aviation.

Yeovil College trains the future engineers who will develop future flight technologies to deliver decarbonisation of the current aviation industry and advanced air mobility. They provide a personalised study programme tailored to the specialist knowledge that employers need.

Institutions and Other Key Organisations

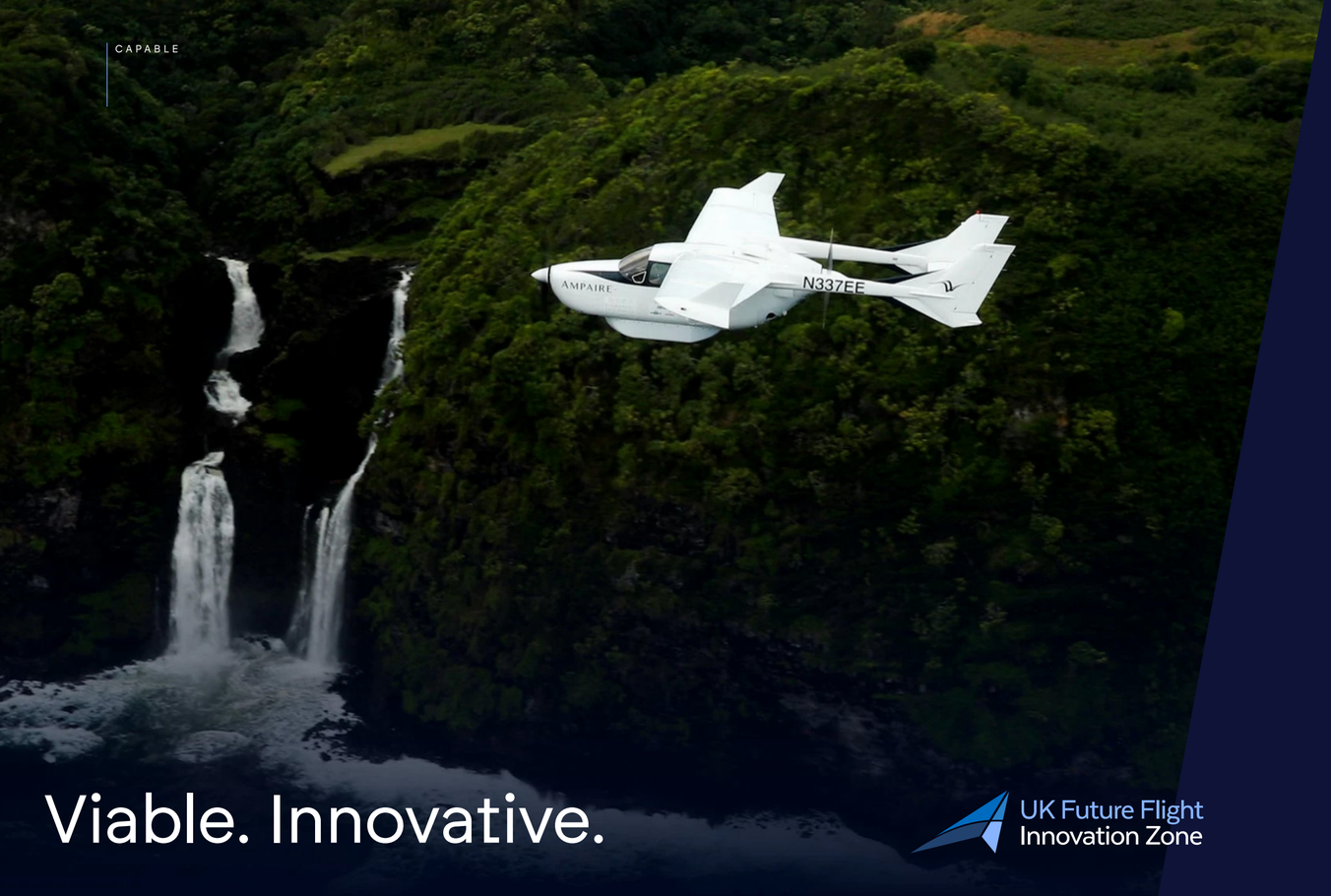
The **West of England Aerospace Forum** is a membership trade organisation for the South West focused on aerospace and defence associations in Europe. It provides a strong voice, representation and access to prominent regional, national and international decision makers in both industry and government.

Based in Exeter, the **Met Office** is the national meteorological service for the UK. It provides critical weather services and world-leading climate science. With world-leading technology underpinning the Met Office's scientific capabilities, it has a reputation for continually pushing the boundaries of scientific, technological and operational expertise.

Its investment in data science, machine learning and artificial intelligence will support the development of future flight technologies.

Local Authority Partners Devon, Somerset, Plymouth and East Devon Councils are important stakeholders in our region supporting planning and local development for future flight technologies as well as championing their local communities in terms of public perception and acceptance.

Resilient. Capable.



Viable. Innovative.

UK Future Flight Innovation Zone

Case Study: Ampaire

Ampaire is a global leader in the development of Hybrid-Electric Aircraft and the retrofit of electric propulsion systems to aircraft. Ampaire's initial series hybrid electric system aims to cut fuel and maintenance costs by 25% to 30% for small workhorse airplanes like the Cessna Caravan and DHC Twin Otter seating between nine and 19 passengers, with no loss in range compared to conventional versions.

The South West is renowned for its aerospace excellence, the investment landscape, and support at government level. An added benefit for Ampaire was the forward-looking approach to certification of Novel Electric Propulsion Aircraft. The certification basis within the UK is already quite advanced, and the development process is eased versus areas of mainland Europe, with the provision of E-Conditions. The South West of England also has an excellent aerospace supply chain, strong engineering talent and plenty of opportunity in the underdeveloped transport links.

Ampaire was delighted with the support they received from Exeter Airport both in providing extensive data and information for informing the modelling and simulation research, but as importantly for facilitating a series of successful test flights with the Electric Eel.

25%-30%

Fuel and Maintenance Cost Reduction for Small Workhorse Airplanes

UK Future Flight Innovation Zone

A CATALYST FOR A SMART, SUSTAINABLE AVIATION AND AIR INDUSTRY IN THE UK

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