**PRESS RELEASE**

**£1.7 million funding boost for Orkney based SATE net zero regional aviation project**

**Kirkwall, Scotland, & Edinburgh, Scotland, 6 March 2023** A project set to deliver the blueprint for net zero regional aviation in the UK, has secured new funding of £1.7 million and added three new partners as it enters the next stage of development.

The Orkney-based Sustainable Aviation Test Environment (SATE) project, which was launched in November 2020, secured the investment from the Future Flight Challenge at UK Research and Innovation as part of their Phase 3 funding competition.

Phase 2 of SATE, which is led by Highlands and Islands Airports Ltd (HIAL), aims to build on the success of the project which has already created the UK’s first low-carbon aviation test centre embedded at a commercial airport.

HIAL’s Kirkwall Airport is home to the test centre and builds upon the pioneering role Orkney has played in innovative community energy projects.

ARC Aero Systems, Hybrid Air Vehicles (HAV), and Cormorant SEAplanes have now joined the international consortium as technology partners, to bring access to new technologies which will complement the existing offering, while demonstrating a wider range of sustainable aviation technology.

**HIAL managing director, Inglis Lyon, welcomed the new developments and said**: “SATE plays a key role in supporting HIAL’s environmental objective to decarbonise our airport operations as well as our long-term vision to become a net-zero carbon regional airport group.

“The addition of these new technology partners will help take us a step closer to real solutions for the future of sustainable aviation.“

SATE aims to demonstrate the next generation of air services and how they can be deployed within a regional aviation system, providing real solutions for the Highlands and Islands region.

The added technology includes:

* ARC Aero Systems’ heavy lift civil hybrid-electric vertical take-off and landing (eVTOL) aircraft.
* HAV’s Airlander aircraft, an entirely new category of aircraft using a combination of buoyant lift from helium, aerodynamic lift (from air flow) to take off and vectored thrust to stay airborne.
* Cormorant SEAplanes electric, hybrid-powertrain, 7-seat aircraft with both land-only and amphibious capabilities.

**Chris Rijff, Cormorant SEAplanes Ltd managing director commented**: “Cormorant looks forward to working with partners across the SATE programme. For a company such as ours, the opportunities from participation cannot be over-emphasised. SATE provides an ideal, practical developmental ecosystem with opportunities for working together such that Cormorant can progress toward realisation as a sustainable, air transport solution for remoter communities’ needs.

“Beyond this current, short-term project, we are looking to develop our flying proof-of-concept within the favourable development environment provided in Scotland – where significant market potential is apparent for Cormorant.”

**Tom Grundy, CEO Hybrid Air Vehicles said**: We think of Airlander as the world’s most efficient large aircraft. It is a game- changer for regional air transportation.

“We are excited to demonstrate how our technology can contribute to a greener and more connected future in the Highlands and Islands and, in time, around the world. With the support of the SATE project and our fellow technology partners, we are confident that we can make a significant impact in advancing the next generation of air services in this wonderful part of Scotland.”

**Dr Seyed Mohseni , CEO ARC Aerosystems, added**: “We are very grateful for Innovate UK support via SATE. This project will enable ARC Aerosystems to demonstrate and test our UAV capabilities within CAA regulatory requirements. It will support in creating system proved flight evidence at the first stage of our UK flight trials.

 “This will demonstrate end user cases to support the needs of rural Scotland such as mail deliveries, fisheries, oil and gas, windfarms with our eVTOL aircraft. ARC's mission is to connect communities and empower individuals via affordable, clean, fast, and accessible transportation.”

Launched in November 2020, the SATE project has seen pioneering sustainable aviation technology demonstration flights delivered, including:

* a successful collaboration between drone specialist technology firm Windracers with Royal Mail on autonomous flights
* demonstrations of Flare Bright’s parcel-sized gliding drone system
* the first hybrid electric flights for Scotland pioneered by Ampaire.

SATE provides the blueprint for net zero regional aviation, placing the UK at the forefront of the transition to low carbon aviation. The project will provide an important step towards delivering HIAL’s ambitions to decarbonise operations by 2040.

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**Note for editors**

**The Sustainable Aviation Test Environment project (SATE):**

The Sustainable Aviation Test Environment project, SATE, was launched in November 2020 and is the UK's first operation-based, low carbon aviation test centre, based at Highlands and Islands Airports Limited's (HIAL) Kirkwall airport in the Orkney Islands.

SATE provides the blueprint for net zero regional aviation, placing the UK at the forefront of the transition to low carbon aviation. It will support HIAL's ambition to decarbonise operations by 2040. The project has delivered pioneering sustainable aviation technology demonstration flights including hybrid electric, drones and autonomous flights.

SATE website: <https://www.hial.co.uk/homepage/21/sustainable-aviation-test-environment>

**UK Research and Innovation (UKRI):**

UK Research and Innovation (UKRI) is the largest public funder of research and innovation in the UK, with a budget of around £8bn. It is composed of seven disciplinary research councils, Innovate UK and Research England.

We operate across the whole country and work with our many partners in higher education, research organisations businesses, government, and charities.

UKRI’s vision is for an outstanding research and innovation system in the UK that gives everyone the opportunity to contribute and to benefit, enriching lives locally, nationally and internationally.

UKRI’s mission is to convene, catalyse and invest in close collaboration with others to build a thriving, inclusive research and innovation system that connects discovery to prosperity and public good.

[www.ukri.org](http://www.ukri.org)

**ARC Aerosystems Limited:**

ARC Aerosystems Limited (ARC) is primarily an e-VTOL aircraft development company based in Cranfield Technology Park, having a core business in aircraft design and integration. The technical team brings experience from Airbus, Boeing, BAE Systems and others and demonstrate a track record of innovation and creativity.

ARC also has strong links with Cranfield, The Universities of Manchester, Nottingham and West of England and maintains a strong network within the aerospace and automotive engineering community. In its development programme, ARC has successfully tested several e-VTOL demonstrators proving transition between hover and wing-borne flight.

ARC is a member the FFC programme as the provider of the electric aircraft for the demonstration of e-VTOL technology.

**Cormorant:**

Cormorant SEAplanes Ltd is developing a practical, adaptable, 7-seat, amphibious aircraft with a focus on sustainability. Sustainability is viewed holistically, beyond zero emissions, to consider: construction materials; the supply chain; and, as a minimal / low infrastructure requirement transport solution, the enhancement of socioeconomic viability for its target markets.

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**Highlands and Islands Airports Limited:**

Highlands and Islands Airports Limited (HIAL) is a private limited company wholly owned by the Scottish Ministers and responsible for the management and operation of 11 regional airports located at: Barra, Benbecula, Campbeltown, Dundee, Inverness, Islay, Kirkwall, Stornoway, Sumburgh, Tiree and Wick John O’Groats.

Working with our stakeholders, we are committed to supporting the essential socio-economic role of aviation in Scotland by maintaining and developing our airports and the connections they provide for some of our country’s more remote communities.

HIAL’s airports enable lifeline and emergency services and act as regional travel hubs for their communities. Our airports connect the communities we serve to the UK and International destinations via Amsterdam, London, Dublin, Edinburgh, Glasgow and Manchester.

As a private limited company wholly owned by the Scottish Ministers, HIAL receives subsidies from the Scottish Government in accordance with section 34 of the Civil Aviation Act 1982 and is sponsored by Transport Scotland – Aviation, Maritime, Freight and Canals Directorate.

Kirkwall Airport is particularly suited to acting as a test environment location as it offers a variety of short routes, connecting Orkney’s island communities through short hops to inter-island airfields. For example, the connection to Westray - best known for being one of the two airports joined by the shortest scheduled flight in the world and operated by Orkney Island Council.

**Hybrid Air Vehicles Ltd:**

Hybrid Air Vehicles is the company behind Airlander technology. Their first production aircraft, Airlander 10, will deliver up to a 90% reduction in carbon emissions compared to other aircraft in its various roles, before attaining zero emissions by 2030.

The company’s vision is to be the future of zero-emissions aviation. It expects Airlander to be the first large scale aircraft (capable of carrying up to 100 passengers or 10 tonnes) to achieve zero emissions flight. The production standard aircraft is expected to be in flight from 2023 and in service in 2026.

The Airlander family of aircraft serve customers in mobility, logistics, experiential travel, and communications & surveillance.

Please visit [HAV's website](https://www.hybridairvehicles.com/) for more information.