

UAS TESTING
CAPABILITIES
IN CORNWALL



COME TO CORNWALL TO TEST AND DEVELOP YOUR UNMANNED AERIAL SYSTEMS (UAS)

Benefit from unparalleled open airspace for flight testing.

With thousands of acres of open space, Cornish skies have the airspace you need for UAS flight trials, providing the infrastructure and access to restricted airspace to operate flights beyond the visual line of sight (BVLOS).

Cornwall will provide you with a platform where you can safely operate your UAS; offering the full range of testing, demonstrating and training facilities required to meet your needs and develop your UAV capability, including access to the restricted airspace on the south coast from Predannack Airfield.

Offering you the unique ability to fly between two commercial airports, Cornwall is home to the first ever commercial UAV flight between Land's End and St Mary's on the Isles of Scilly.

Cornwall & Isles of Scilly Local Enterprise Partnership, Cornwall Council and the Isles of Scilly Council are offering strategic support for Cornwall's UAS industry, with the aim to deliver jobs and economic growth, locally and nationally. So your flight is in safe hands.



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The Cornwall and Isles of Scilly LEP would like to welcome you to Cornwall to develop, trial and soon operate your UAS capabilities in earnest. We can offer facilities and airspace at our two commercial airports, as well as access to restricted space on the Lizard. You will be operating in an area leading much of the UK's clean industrial revolution with new energy, space, data and geo resources industries set within our beautiful landscape helping you demonstrate and create new markets for your technologies. AeroSpace Cornwall will be the ideal partner to help you deliver the promise of UAV's for the 21st century. ”

Mark Duddridge,
Chair of Cornwall & Isles of Scilly LEP.

WHY CORNWALL?

Opportunities are increasing for businesses in the UK and beyond to expand into Cornwall and benefit from the skills and expertise within Cornwall's UAS sector thanks to funding and support packages for businesses working in UAS R&D development and flight testing.



SUPPORTING YOUR TECHNOLOGY & SYSTEM DEVELOPMENT

- State-of-the-art infrastructure and radar
- Multiple locations for flying UAS BVLOS over land and sea
- Business and Funding Support from AeroSpace Cornwall
- Extensive EU & UK Enterprise Zone financial incentives



SPACE TO FLY IN CORNWALL

- Uncongested airspace
- Access to segregated airspace
- Low residential build up
- Airfield and remote operating facilities

WE OFFER DEDICATED AIR TRAFFIC CONTROL TEAMS, EXPERIENCED IN UAV FLIGHT MANAGEMENT, WITH CLOSE LINKS TO THE CAA AND NATS

WANT TO FLY? WHAT NEXT?



AeroSpace Cornwall can offer your business R&D funding and support to test and develop your UAV.

We are a team of dedicated people who will work with you to tailor your flight requirements, introduce you to the right people and give you access to funding for testing and development – in fact we will manage the entire process for you.

We have relationships with many of the airfields in Cornwall and can ensure that you fly from the most the most appropriate airfield for your needs.

Decades of experience

With decades of experience in managing UAV flights, Cornwall has dedicated Air Traffic Control Teams, experienced in flight management, with close links to the CAA and NATs.

Talk to AeroSpace Cornwall who can manage the cost and the planning for you.

WHAT'S ON OFFER?

- **R&D Grants** - Want to work on developing and manufacturing your UAV? We offer funding and business support for R&D business development activities in Cornwall.
- **Funding for exploratory visits** - We can pay for travel and accommodation so you can meet the right people and visit airfields and infrastructure, helping you make a decision about where you want to fly.
- **Relocation and planning packages** - We can support your expansion into Cornwall.

To find out more about funding available for testing and developing your UAV, contact james.fairbairn@aerospacecornwall.co.uk www.aerospacecornwall.co.uk

WE OFFER FUNDING
AND BUSINESS SUPPORT
FOR R&D BUSINESS
DEVELOPMENT
ACTIVITIES IN CORNWALL



5 AIRFIELDS IN CORNWALL WITH UAV TESTING



ST MARY'S AIRPORT

Flight route

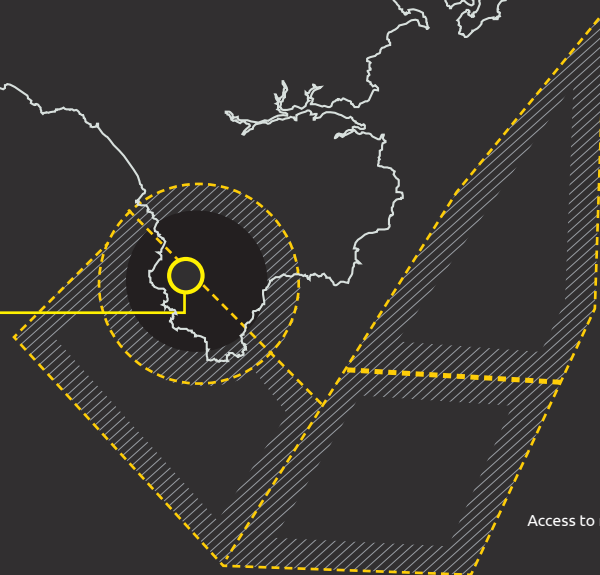
LAND'S END AIRFIELD

PERRANPORTH AIRFIELD

ST MERRYN AIRFIELD

PREDANNACK AIRFIELD

Access to restricted airspace





**UAV
FLY ZONE
PREDANNACK
AIRFIELD**



Predannack Airfield is a military aerodrome near Mullion on The Lizard Peninsula of Cornwall in the United Kingdom. The airfield is operated by the Royal Navy as a satellite airfield for nearby RNAS Culdrose, and also for 700XNAS to conduct RPAS testing and delivery of RPAS operator's courses conducting both visual and BVLOS flying utilising the dedicated danger areas D005A & B.

CONTACT

To find out more about potential availability contact: Culdrose Ops Officer 01326 552447.

**OPERATED BY
THE ROYAL NAVY**

**USED FOR RPAS
TESTING AND
DELIVERY OF RPAS
OPERATOR'S COURSES**

**UAV
FLY ZONE
ST MERRYN
AIRFIELD**



Situated on Cornwall's North Coast, St Merryn Airfield started as a commercial aerodrome in the early 1930's before being acquired by The Admiralty to establish the very first Royal Naval Aerodrome, HMS Vulture, in 1939.

Since the early 1960's St Merryn Airfield has operated as a private unlicensed PPR facility with 3 tarmac runways.

In November 2019 Southampton University and Windracers successfully conducted flight tests for their ULTRA UAV at St Merryn.

St Merryn Airfield is available for flight testing by private arrangement.

CONTACT

To find out more about potential availability and costs, contact: st.merryn.flying@gmail.com

**ST MERRYN AIRFIELD
IS OPERATIONAL FOR
UAV FLIGHT TESTING**



UAV FLY ZONE

LAND'S END AIRPORT



Land's End airport is a small and friendly, but well equipped, Airport situated in West Cornwall nestled amongst stunning coastline and beaches. The home of the first ground-breaking cargo flights to the Isles of Scilly in December 2020, it is one of the best places to fly. Situated in Class G (uncontrolled) airspace, it means that UAV flights are easier to facilitate. With a sparsely populated area surrounding the airport, UAV businesses can rest assured that it assists UAV operations such as Risk Assessments and Safety Case preparation. We have a full Air Traffic Control (ATC) service available enabling easier integration of UAV and manned flight operations.

With eight runways – 4 asphalt and 4 grass – we can support in-to-wind operations for UAV's.

CONTACT

To find out more about potential availability and costs, contact:
Christopher Pearson, Airport Manager/SATCO, Land's End Airport
T: +44 (0)1736 785227
M: +44 (0)7747 468821

**8 RUNWAYS,
DIRECT ACCESS
TO THE SEA**

**SUPPORT FOR
UAV IN-TO-WIND
OPERATIONS**



UAV FLY ZONE

ST MARY'S AIRPORT



St Mary's Airport, situated at Hugh Town on the Isles of Scilly offers access to controlled airspace for UAV's in their Aerodrome Traffic Zone. Please note, this airspace requires permission to enter by Air Traffic Control.

The rectangles at each Runway end are the new Runway Protection Zones intended to protect arriving and departing aircraft at protected airports such as St. Mary's. Dimensions of these zones are 1 x kilometre width extending out to 5 x kilometres with the same vertical limit as the ATZ.

CONTACT

For permission to fly, please Contact Air Traffic Control at atc@scilly.gov.uk or 01720 424335 for permission to fly in the boundary areas

**CONTROLLED
AIRSPACE ACCESS:
2 X NAUTICAL MILE
RADIUS VERTICALLY
UP TO 2000 FEET
ABOVE AERODROME
ELEVATION**



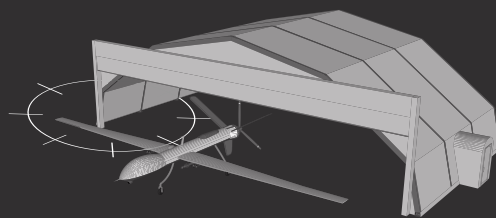
AEROHUB ENTERPRISE ZONE



Aerohub provides a unique R&D and testing environment with direct access to the sea, uncongested airspace and low residential build-up. The special facilities are being utilised by local and national universities where, alongside UAS industry, work is being carried out to identify future markets and commercial opportunities.

Operational Commercial Airport

Adjacent to Aerohub is Cornwall Airport Newquay. With a growing route network including London Heathrow, Manchester, Leeds, Teeside, Faro, Alicante, Edinburgh, Glasgow, Newcastle, Aberdeen, Dublin and Dusseldorf. Making Cornwall even more connected.



OFFER

FINANCIAL INCENTIVES

As an Enterprise Zone, companies can benefit from:

- 100% business rate relief;
- research and development tax credits;
- significant planning freedoms; and
- an unparalleled source of funding packages, through European funding programmes and UK government Regional Growth Funds. Unique to Cornwall – A further \$740m programme of EU Convergence investment is available, and funds are being developed to support business growth.

HANGARS AVAILABLE WITH FUNDING PACKAGES TO SUPPORT

SKILLS AND ACADEMIA

Cornwall has strong links with Academia. Electrical, mechanical and materials engineering skills are readily available through Combined Universities in Cornwall, which incorporates University of Exeter, University of Plymouth and Falmouth University along with higher education colleges, such as Truro & Penwith College.

Soton UAV

Based at the University of Southampton, Soton UAV is a research group who designs, manufactures and flies UAVs for research. Working closely with UAV operators in Cornwall, Soton UAV is aiming to achieve a global top five reputation, providing continuity of funding for world class science and research in the autonomous systems industry. Their systems make use of cutting-edge design methods, state of the art manufacturing techniques and novel applications of technology.

University of Exeter's DroneLab

The DroneLab is a research-group at the University of Exeter's Environment and Sustainability Institute, where they undertake cutting-edge scientific research, investigate spatial and temporal dynamics of environmental systems using lightweight, open-source drone technology. Drone Lab's aim is to produce high quality, quantitative aerial data, that allows a new fine-grained understanding of landscape processes.



This data is produced by combining customised drone surveys, with state-of-the-art image processing approaches such as structure-from-motion photogrammetry. The data products have very high spatial resolution and accuracy as the drone flights are complements with rigorous ground surveys and differential GPS. **To find out more email dronelab@exeter.ac.uk.**

Cornwall's partnership with NATS.

NATS is the UK's leading provider of air traffic control services. Each year we handle 2.4 million flights and 250 million passengers in UK airspace. Global leaders in air traffic control management, NATS are the UK's leading provider of air traffic control services. Each year they handle 2.4 million flights and 250 million passengers in UK airspace. Cornwall is developing a partnership with NATS, drawing on their expertise in airspace and aviation rules and procurement. To find out more about Cornwall's skills and links to academia, contact www.aerospacecornwall.co.uk

JOIN OTHER BUSINESSES WHO HAVE USED AIRSPACE IN CORNWALL



Landmark Commercial Flight from Land's End to the Isles of Scilly.

Flylogix, in partnership with the Isles of Scilly Steamship Company were the first ever freight drone business to fly from Land's End Airport in West Cornwall to St Mary's Airport on the Isles of Scilly.

The flight took the unmanned aircraft over the Atlantic carrying an NHS supply box on the outward leg and returned with a selection of local produce from the Isles of Scilly, including flowers and gin.

Financially supported by AeroSpace Cornwall, Flylogix and The Steamship Company have entered a two-year partnership the UK's first scheduled freight delivery service by drone, including plans to develop a larger, purpose-built UAV to meet islanders' needs.



FLYLOGIX COMPLETED FIRST SUCCESSFUL UAV FLIGHT VIA AN AIR CORRIDOR BETWEEN MAINLAND CORNWALL AND THE ISLES OF SCILLY



The Cornish Drone Airbridge

The Cornish Drone Airbridge is being developed by Droneprep Ltd, Consortiq Limited and Windracers Limited. It's the first project of its kind in the UK to use both long-range, large payload drones as well as flexible Vertical Takeoff and Landing (VTOL) drones, which will allow for both point-to-point and inter-island delivery.

The aim of Cornish Drone Airbridge is to transport medical supplies and equipment to St Marys NHS, Isles of Scilly from mainland Cornwall in only 30 minutes.

The trial will use the Windracers ULTRA UAV drone, which has already proven its capabilities during the first national lockdown with a successful trial across the Solent Water, from Solent Airport to the Isle of Wight.

The Windracers ULTRA UAV is a twin-engine, fixed-winged aircraft with a carrying capacity of up to 100Kg, over 1,000 km.

Cornish Drone Airbridge is one of 20 winning ideas to receive a share of £7 million funding. 'Clean energy' solutions and responses to the coronavirus pandemic are among the projects supported.

The Future Flight Challenge fund aims to increase mobility, reduce reliance on road travel thereby improving road congestion, and increase UK manufacturing opportunities.

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The potential for drones to deliver medical supplies to the Isles of Scilly demonstrate how the aviation industry is responding and adapting to twenty-first century issues, helping us to build back better from the coronavirus crisis.

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