



DAP1916 - Statement of Need

Tracking Code: 4C4XXBN

BEFORE YOU BEGIN

- Please ensure the contents of CAP 1616f, Guidance on airspace change process for permanent airspace change proposals are referred to prior to completing this form. *

TYPE OF CHANGE

1. Category of Airspace Change

Does your proposal concern Changes to Notified Airspace Design or Planned and Permanent Redistribution of Air Traffic? *

- Changes to Notified Airspace Design Planned and Permanent Redistribution of Air Traffic

- Have you previously submitted a Statement of Need?

Please enter a title for this intended change, (max 80 characters - the title should be succinct and include a location (where appropriate)): *

TDA to enable BVLOS demonstration of Cargo UAV within the Shetland Islands

2. Title of proposal

Which of the following categories is the proposal being progressed under? *

- Permanent Temporary Trial

If known, please provide the ACP/PPR reference number (###-YYYY-NNN)

ACP-2022-051

Please provide your rationale for submitting a revised Statement of Need below: *

The Statement of Need for ACP-2022-051 is to be re-submitted as requested by the CAA. This is due to updates in guidance within CAP1616g since the initial submission.

SPONSOR

3. Change Sponsor Details

Please select the appropriate category and complete. *

- A Company
 An Unincorporated Association or other body
 Individual (including sole traders and partnerships)

3a. A Company

Registered Company name (in full) *

Windracers Limited

Registered Company Number

[REDACTED]

Trading Address (primary site)

[REDACTED]

Trading name (if applicable)

E-mail

[REDACTED]

Postcode

[REDACTED]

Registered Office Address

[REDACTED]

Country of Company Registration

[REDACTED]

Country

[REDACTED]

Postcode

[REDACTED]

Email *

[REDACTED]

Confirm Email *

[REDACTED]

Do you require access to the CAA's Airspace Change Portal?

Telephone *

[REDACTED]

Primary Point of Contact Name *

[REDACTED]

Website address

<https://windracers.com/>

Additional Contacts

You can add up to 4 additional contacts (this is useful to ensure that periods of absence are covered)

Contact 1

Contact Name *

Do you require access to the CAA's Airspace Change Portal?

Telephone *

Email *

Confirm Email *

 DELETE CONTACT

Contact 2

Contact Name *


Do you require access to the CAA's Airspace Change Portal?

Telephone *

Email *

Confirm Email *

 DELETE CONTACT

 Add Contact

STATEMENT OF NEED

Independent Aviation/Airspace Consultancy

Is an Independent Aviation/Airspace Consultancy involved in this proposal?

Statement of Need

Please complete the following four sections.

What is the objective of the proposed change? *

This Temporary Airspace Change Proposal (ACP) forms part of the Sustainable Aviation Test Environment (SATE) initiative, which aims to establish the UK's first operationally based low-carbon aviation test centre in Scotland.

Partly funded by UK Research and Innovation (UKRI) through the Industrial Strategy Challenge Fund, the SATE consortium seeks to integrate advancements in electrification, aviation systems, and autonomy to pioneer new modes of air transport and operational capabilities.

As a UK-first, SATE intends to test and showcase innovative technologies that can be scaled for use in island communities and beyond, with the dual objectives of generating social benefits and fostering economic prosperity.

This Temporary ACP will specifically support Windracers in demonstrating the ULTRA Unmanned Aircraft System (UAS) for delivering on-demand supplies to remote communities currently hindered by unreliable or limited logistics. To facilitate these Beyond Visual Line-of-Sight (BVLOS) operations, a Temporary Danger Area (TDA) complex will be established, connecting several Shetland Islands from the central hub at Tingwall Airport. Additionally, a corridor will be created between Kirkwall and Tingwall Airports, linking the Orkney and Shetland Islands.

Please provide a summary of the issue or opportunity this proposal is seeking to address including any safety, operational, technical, environmental or economic factors. *

Windracers aims to utilize the ULTRA Unmanned Aircraft System (UAS) to address the critical logistical challenges faced by remote communities, particularly in the Shetland and Orkney Islands, where conventional supply chains are often disrupted or limited. These communities currently suffer from mistimed and unreliable deliveries of essential goods, including medical supplies, mail, and other logistical support for local industries.

Preliminary trials and consultations with key local stakeholders have identified a clear need for reliable, timely logistics to improve service delivery to healthcare providers, island residents, and businesses. The proposed solution seeks to overcome these barriers by using ULTRA UAS to enable on-demand deliveries via Beyond Visual Line-of-Sight (BVLOS) operations. By establishing a Temporary Danger Area (TDA) complex, this airspace change proposal will allow the safe demonstration of advanced unmanned aviation technologies, creating opportunities for operational improvements in supply chains, fostering economic growth, and ensuring critical resources reach those in need.

Please provide a description of the current airspace design (i.e. the airspace structure and flight procedures) relevant to this proposal. *

The proposed Temporary Danger Area (TDA) complex will primarily be located within Class G airspace, which is uncontrolled airspace. However, there are several notable exceptions, including the aerodrome traffic zones (ATZ) of Kirkwall, and Tingwall. For operations within these ATZs, the necessary permissions will be obtained from the respective Air Traffic Service (ATS) units or aerodrome operators to ensure compliance with local air traffic regulations and safe operations.

Additionally, Baltasound airfield is situated within the existing Danger Area EGD902C, for which the SaxaVord Spaceport serves as the Special Use Airspace (SUA) Authority. Coordination with the SaxaVord Spaceport will be required to obtain permissions for entry into this Danger Area and ensure deconfliction with any ongoing spaceport activities.

A Fast Jet Danger Area, encompassing the Orkney Islands and including Fair Isle, is also present between FL245 and FL550. Since operations related to this proposal are not expected to exceed FL040, there will be adequate vertical separation from military activities within this Danger Area.

The TDA complex will avoid the Sumburgh ATZ and CTR, ensuring minimal disruption to other aviation activities in the region and maintaining the safety of all airspace users.

Please provide a description of the current prevailing air traffic situation (i.e. frequency and number of movements) and an indication of estimated forecast growth (where applicable). *

The current prevailing air traffic in the region consists primarily of scheduled flights operated by small aircraft and helicopter services, serving both passenger and logistical needs.

From Kirkwall Airport, Loganair operates regular Islander flights to several Orkney Island Council airfields, which are spread across the northern Orkney Islands. These flights provide essential connectivity for the local communities. Similarly, Airtask operates Islander services from Tingwall Airport, offering critical links to the remote islands of Foula and Fair Isle.

In addition to these intra-island connections, Kirkwall and Sumburgh airports also facilitate flights to and from mainland Scotland, supporting both regional travel and tourism. These flights are key in maintaining connections between the islands and the rest of the UK, contributing to local economic activity.

Further air traffic in the region is generated by Bristow Group, which operates helicopter services between Shetland and offshore oil platforms, providing vital crew changes and supply transport for the energy sector. Bristow Group also operate SAR from Sumburgh Airport.

The current volume of air traffic in the region remains relatively low, with movements primarily focused on essential inter-island connections and offshore logistics. Given the existing demand patterns, no significant increase in traffic numbers is forecasted in the short term.

Five-Letter Name Codes (5LNC)

Does this request solely concern the reservation of new Five-Letter Name Codes (5LNC) in advance of a future proposal?

Secretary of State for Transport's priorities

Is the proposal being progressed under any of the priorities set by the Secretary of State for Transport or any other CAA priority such as safety or national security?

Airspace Modernisation Strategy *

Is the proposal supporting the delivery of the Airspace Modernisation Strategy? If not, please use the text box below to explain how the proposal is not inconsistent with the Airspace Modernisation Strategy

This ACP aims to set up a TDA complex to support BVLOS operations. This is a critical stepping stone on the path to routine BVLOS operations - a key use-case of the Airspace Modernisation Strategy (AMS).

Additional Information

Please use the box below to add any further information which the CAA should be aware of when considering this submission (for example dependencies on other airspace change proposals, proposed operating date(s) and/or funding deadlines)

Windracers operates ULTRA UAS under the Specific Category, therefore an application for an Operational Authorisation to carry out this operation will be submitted to the UAS Sector.

SUBMISSION INSTRUCTIONS

Submission

Your form has been successfully submitted. Please keep a copy of this acknowledgement for your records.

Date and Time:

23 Sep 2024 6:32:55 PM

Application Submission Number:

DAP1916V2-1288

Please note that the Airspace Regulation team will contact you to acknowledge receipt of your Statement of Need and to confirm the unique ACP reference number (ACP-YYYY-NNN) allocated to this submission. Following receipt of your unique ACP reference number, you will be required to create an associated airspace change proposal on the [CAA's Airspace Change Portal \(https://airspacechange.caa.co.uk/\)](https://airspacechange.caa.co.uk/). Please refer to CAP 2385 Airspace Change Portal Important Information Guide.

Given the high number of new airspace change proposals (ACP), together with those proposals which are already in the system, it is possible that the proposal may not be assigned to a Technical Regulator/Account Manager immediately following submission of the Statement of Need. New proposals are allocated on a first come first served basis, unless the proposal is directly related to safety or national security matters, or as directed by the Secretary of State for Transport's priorities.

Once your submission has been assigned to an Account Manager/Case Officer, arrangements will be made for you to attend an Assessment Meeting. One of the key outputs from this meeting will be an indicative timeline for the proposed PPR. For Permanent changes, to enable the CAA to consider your proposed timescales, you will be expected to present dates for the following milestones at the Assessment Meeting:

- DEFINE Gateway
- DEVELOP & ASSESS Gateway
- CONSULT Gateway
- Formal Airspace Change Proposal Submission
- DECIDE Gateway
- Target AIRAC

The CAA holds Gateway Assessment Meetings on a monthly basis and the annual schedule is published on the [CAA's airspace change portal \(https://airspacechange.caa.co.uk/about-airspace-change/\)](https://airspacechange.caa.co.uk/about-airspace-change/).

Finally, you should also note that from September 2018 any amendments submitted by a Data Originator or ANSP for onward promulgation in the UK IAIP will be subject to the Aeronautical Data Quality Requirements. See Regulation (EU) No. 73/2010 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and [CAP 1054: Aeronautical Information Management \(https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=6808\)](https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=6808) guidance material for further information. These requirements will be discussed in greater details during the course of your initial meeting with the CAA.

When you have completed this form, click this button to submit the form for processing. Do not click this button more than once. You will then be provided with further instructions.