Post Trial Report

BVLOS operation of cargo UAS within the Shetland Islands (ACP-2022-051)

Windracers Ltd.

ACP-2022-051

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Revision History

Issue Number	Description	Date	PID
1.0	Initial Release	09/12/02025	J Porter

Acronyms and Abbreviations

ACP	Airspace Change Proposal
CTR	Controlled Area
FISO	Flight Information Service Officer
NOTAM	Notice to Aviation
SATE	Sustainable Aviation Test Environment
SUAAIS	Special Use Airspace Activity Information Service
TDA	Temporary Danger Area
ULTRA	Uncrewed Low-cost TRAnsport
UTC	Coordinated Universal Time
VHF	Very High Frequency

Contents

Section 1 Introduction

Windracers implemented the Temporary Danger Areas (TDAs) proposed as part of ACP-2022-051 in September 2025. TDAs were designed connecting Tingwall Airport and Lamb Holm Airport, as well as a complex of TDAs heading north of Tingwall.

Windracers crews were present in Tingwall from the 8th - 20th of September 2025 and in Lamb Holm from the 15th - 22nd of September 2025. One flight was conducted locally around Tingwall Airport.

Section 2 ACP Process

The Airspace Change Proposal (ACP) process was followed closely, including a thorough stakeholder engagement period including re-engagement after each update to the ACP. The initial application was submitted with routes from a hub at Tingwall to spokes at Baltasound, Fair Isle and Foula. However, during stakeholder engagement with the airfields, the decision was made to remove the routes to the spokes and instead operate from Tingwall to Lamb Holm. This route allowed the demonstration of a potential drone connection between Shetland and Orkney.

The TDAs were designed to avoid the Sumburgh Control Zone (CTR) and minimise overflight of protected areas. Additionally, a floating TDA complex was utilised to minimise the disruption to other air users, including the frequent helicopter operations out of Sumburgh.

Windracers worked closely with both airfields (Tingwall and Lamb Holm) to ensure that the Concept of Operations was in line with their procedures. All operations were deconflicted with the existing airfield movements. Deconfliction was conducted both in advance of operations and on the day to ensure that life-line operations were prioritized and could continue as normal.

The implementation of a Special Use Airspace Activity Information Service (SUAAIS) provided by Tingwall Flight Information Service Officer (FISO) further mitigated the disruption to the airfield.

The ACP process was successful and enabled the implementation of the TDAs to allow the demonstration flight from Tingwall Airport.

Section 3 Operational Details

3.1 Flight Track

One flight was conducted, consisting of a number of circuits local to Tingwall Airfield. The flight took place on the 19th of September at approximately 09:45 UTC and lasted for 29 minutes. The flight track can be seen in Figure 1. No issues were encountered during the flight.

Figure 1 Tingwall 19/09/25 Flight Track

3.2 TDA Activation

The TDAs were activated via Notice to Aviation (NOTAM) at least 24 hours in advance, following standard NOTAM procedures. Where TDAs were activated and then not needed, they were deactivated as soon as possible.

3.3 Weather conditions

There was minimal precipitation during the flight window and temperatures were never a limiting factor. However, there were a number of days when the wind gusts were out of the ULTRA UAVs weather limits, which prevented flight.

Section 4 Stakeholder Feedback

Additional face-to-face stakeholder engagement was conducted while the Windracers team were in Tingwall. This continued local engagement ensured the surrounding community were aware of operations and had an opportunity to provide feedback. No negative feedback was received during operations.

Section 5 Issues Encountered and Lessons Learnt

High winds were encountered that were close to our crosswind limit; this did limit operations. Additionally, there were initially issues encountered with the Very High Frequency (VHF) communications. However, these were resolved with the support of Tingwall Airport and no further issues were encountered.

In future, the full length of the trial period will be better utilised to allow for more flexibility. This will help to limit the impact of adverse weather conditions.

Section 6 Performance against Aims and Objectives

This ACP formed part of the Sustainable Aviation Test Environment (SATE) initiative, aiming to establish the UK's first operationally based low-carbon aviation test centre in Scotland. The specific aims of this ACP were to demonstrate ULTRA's ability to deliver on-demand supplies to remote communities, specifically between Shetland and Orkney.

Unfortunately, due to adverse weather conditions, no flights were conducted from Shetland to Orkney. However, the feasibility of establishing airspace allowing for a connection between the two locations was evidenced through the successful ACP application.

Appendix A Amendment Record

Issue Number	Amendments
1.0	Initial Release