

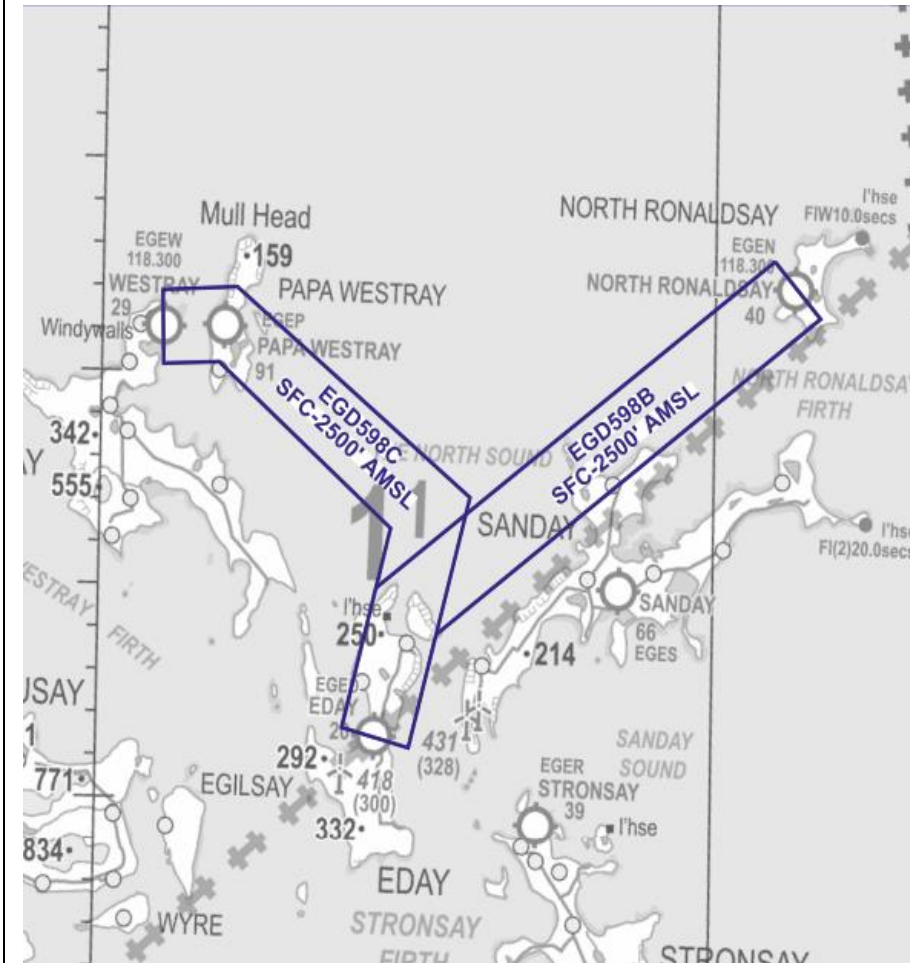


CAA Decision Log

Temporary Airspace Change Proposal Title	BVLOS demonstration of Cargo UAV within the Orkney Islands
Temporary Airspace Change Proposal Reference	ACP-2022-049
Change Sponsor	Windracers Ltd
AIS Submission Target Date	19 April 2024
CAA Decision Target Date	30 May 2024
<p><i>Instructions</i></p> <p>In providing a response to each question and/or status, the following colour coding should be used:</p> <ul style="list-style-type: none"> • COMPLIANT/NOT APPLICABLE • NOT COMPLIANT/ACTION REQUIRED • ISSUE/CONCERN TO HIGHLIGHT 	
<p>Executive Summary</p> <p>This Temporary airspace change proposal (ACP) is sponsored by Windracers Ltd (the sponsor) and is part of the Sustainable Aviation Test Environment (SATE) 2 project (WP3).</p> <p>Phase 1 of the sponsor's project will take place between 3rd June 2024 and 30th August 2024 where the sponsor proposes to operate a Remotely Piloted Aircraft System (RPAS) (ULTRA (Uncrewed Low-cost Transport Aircraft)) Beyond Visual Line of Sight (BVLOS) within two Temporary Danger Areas (TDAs) connecting 4 aerodromes across the Orkney Islands between SURFACE and 2500 FT AMSL to enable the delivery of middle mile logistics and mail transport:</p> <ul style="list-style-type: none"> • Eday Airfield, North Ronaldsay Airfield, Papa Westray Airfield, Westray Airfield. <p>The daily hours of activation would be between 1030-1445, Monday-Friday, although exact timings differ day to day depending on the flight and schedule. The sponsor will promulgate the exact times of activation of the TDAs by NOTAM at least 24 hours in advance of each day of operation. Furthermore, only the required TDA will be active for each flight.</p>	

The overall recommendation is to approve the ACP subject to a number of approval conditions listed below.

Implementation of the ACP will be notified through an Aeronautical Information Circulars (AIC) (published 30 May 2024) and the TDAs (EGD598B and EGD598C) will be activated/deactivated via NOTAM.



PART A – Airspace Change Process		
A.1	Airspace Change Portal	
A.1.1	Airspace Portal - ACP-2022-049	
A.2	CAA SharePoint site	
A.2.1	SharePoint - ACP-2022-049	
A.3	Chronology	
A.3.1	Statement of Need received: 15 July 2022 Assessment Meeting: 23 November 2022 Proposal submitted to CAA: 22 March 2024 CAA Decision: 29 May 2024 AIC Publication: 30 May 2024	
A.4	Are there any additional process requirements of the Civil Aviation Authority (Air Navigation) Directions 2023 (the “Air Navigation Directions”) and/or the Air Navigation Guidance 2017 which apply to this airspace change, and have they been complied with?	<i>N/A</i>
A.4.1	Not Applicable.	

PART B – Airspace Change Process – STAGE 5			
B.1	Subject Matter Expert (SME) Regulatory Assessments NOTE: this captures RAG status only – full details contained within each of assessment (hyperlinks inserted below)		
ATM Safety	COMPLETE (APPROVED)	Environmental	COMPLETE (APPROVED)
Economic Assessment & Statement	NOT APPLICABLE	Instrument Flight Procedure	NOT APPLICABLE
Engagement / Consultation	COMPLETE (APPROVED)	Operational	COMPLETE (APPROVED)
B.1.1	<p><i>Is there any other information outside of the regulatory assessments above which should be brought to the attention of the decision maker (e.g. outstanding Letters of Agreement)?</i></p> <ol style="list-style-type: none"> 1. <i>Letter of Agreement V4.4 requires agreement and sign off by all parties.</i> 2. <i>Concept of Operations V2.2 requires agreement and sign off by all parties.</i> 3. <i>Procedure which documents the handover of responsibilities between Windracers Ltd and Orkney Island Council (OIC) for the relevant OIC aerodromes (outstanding).</i> 		
B.2	Other Relevant Documents		
	Concept of Operations V4.4	Letter of Agreement V2.2	
B.3	<p>Has the relevant legal and policy framework to the airspace change process been taken into account, including:</p> <ul style="list-style-type: none"> • the Air Navigation Directions; • the Airspace Modernisation Strategy; • section 70 of the Transport Act 2000; • the Air Navigation Guidance 2017; and • CAP 1616 and associated publications? 		YES

B.4	<p>CAA consideration of whether the proposal is in accordance with the Airspace Modernisation Strategy (Air Navigation Directions, direction 5(1)).</p> <p>NOTE: the left column captures RAG status only and the right column captures the rationale – full details will be contained within the SME Regulatory Assessments. Reference should be made to the AMS characteristics (CAP 1616f, 6.61). For more information on the AMS strategic objectives, see <i>Airspace Modernisation Strategy 2023-2040 Part 1: Strategic Objectives and Enablers</i> (CAP 1711).</p>
Safety	<p>The AMS states that “Maintaining a high standard of safety has priority over all other ends to be achieved by airspace modernisation”. The activation of a Danger Area is currently the accepted standard means of mitigating the risk of non-participating aircraft interacting with an unmanned aircraft (UA) operating BVLOS without DAA.</p> <p>The sponsor has proposed two Special Use Airspace (SUA) structures (TDAs) in order to segregate the activity from other airspace users in class G airspace. The proposed airspace structures, utilised in accordance with the proposed procedures and processes detailed in the Letter of Agreement (LoA) is considered appropriate to maintain the high standard of aviation safety in the area.</p>
Integration of diverse airspace users	<p>The AMS states that, as well as satisfying the requirements of existing users, airspace should also accommodate “new or rapidly developing users (such as remotely piloted aircraft systems...)” wherever possible. This airspace proposal is seeking the opportunity to trial logistical flights using an UA whilst minimising the impacts to other airspace users.</p>
Simplification of airspace system	<p>This airspace change proposal requires the establishment of two SUA structures (TDAs) to enable segregation of a UA operating BVLOS from other airspace users in order to maintain safety of aviation operations.</p> <p>The activation of a TDA is the currently accepted standard means of mitigating the risk of non-participating aircraft interacting with a UA operating BVLOS without DAA.</p> <p>Where possible, the location and shape of the two proposed TDAs has been designed to minimise impact on other airspace users.</p>
Environmental sustainability	<p>The AMS environmental sustainability strategic objective states that: “environmental sustainability will be an overarching principle applied through all airspace modernisation activities. Airspace modernisation should deliver the Government’s key environmental objectives with respect to air navigation as set out in the Air Navigation Guidance.”</p>

	<p>The ANG 2017 sets out the Government’s environmental objectives with respect to air navigation. These environmental objectives are ‘designed to minimise the environmental impact of aviation within the context of supporting a strong and sustainable aviation sector’. The objectives are to:</p> <ul style="list-style-type: none"> ▪ limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise; ▪ ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions; and ▪ minimise local air quality emissions and in particular ensure that the UK complies with its international obligations on air quality. <p>For temporary ACPs less than 90 days duration, the sponsor is only required to provide typical noise levels at key locations which must be conveyed to those affected. There is no requirement to assess any other environmental impacts because these are likely to be negligible for such a short-term change.</p> <p>In this case, the sponsor has provided an assessment of noise impacts and confirmed that stakeholders at ground level will not be significantly affected by noise from operation of the UAS. The sponsor has also determined that there are likely to be minimal impacts on other airspace users and therefore the Government’s key environmental objectives can be met.</p>
<p>B.5</p>	<p>CAA consideration of factors material to our decision whether to approve the change (section 70, Transport Act 2000).</p> <p><u>NOTE:</u> the left column captures RAG status only and the right column captures a summary of the rationale – full details will be contained within the SME Regulatory Assessments. Reference should be made to the Section 70 characteristics (CAP 1616f, 6.80).</p>
<p>Maintain a high standard of safety in the provision of air traffic services section 70(1)(a)</p>	<p>The purpose of this airspace change is to establish appropriate airspace structures to enable BVLOS operations. The proposed TDAs will ensure safe BVLOS operations through segregation with other airspace users. Segregation of this activity is appropriate, proportionate and in accordance with CAA policy.</p> <p>The activity will need to have an Operational Authorisation (OA) granted by the CAA to ensure that the operator can undertake the activity in a safe manner.</p> <p>A Letter of Agreement (V4.4) has been developed with key stakeholders which details responsibilities and procedures. A procedure to enable access for CAT A flights has also established to ensure that minimal disruption to their activity is caused by activation of the TDAs whilst maintaining segregation.</p>

	NOTAMs will be promulgated for the duration of the activity for both the TDA and closure of the relevant OIC airfields.
Secure the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic section 70(2)(a)	The TDAs are within class G airspace and activated by NOTAM. SUA AIS provided by Kirkwall ATC.
Satisfy requirements of operators and owners of all classes of aircraft section 70(2)(b)	The requirements of operators and owners of all classes of aircraft have been considered and accommodated. The proposed TDAs are designed to segregate a potentially hazardous activity from other airspace users.
Take account of the interests of any other person (other than an operator or owner of an aircraft) in relation to the use of any particular airspace or the use of airspace generally section 70(2)(c)	During the CAP 1616 temporary airspace change process, the sponsor engaged with a range of aviation stakeholders, namely airspace users, air navigation service providers (ANSPs) and airports/aerodromes. Where relevant, the sponsor also engaged with non-aviation stakeholders, for example those representing communities and environmental interests. The feedback received has been dealt with, and where appropriate, acted upon by the sponsor.
Take into account the Secretary of State's guidance relating to spaceflight activities section 70(2)(ca)	Not applicable to this airspace change proposal.
Take into account the Secretary of State's guidance on environmental objectives section 70(2)(d)	The CAA is required to take into account the Air Navigation Guidance 2017. In the Air Navigation Guidance 2017, the Government has set environmental objectives with respect to air navigation. These environmental objectives are 'designed to minimise the environmental impact of aviation within the context of supporting a strong and sustainable aviation sector.' The objectives are, in support of sustainable development, to:

	<ul style="list-style-type: none"> • limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise; • ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions; and • minimise local air quality emissions and in particular ensure that the UK complies with its international obligations on air quality. <p>The sponsor has presented their rationale and supporting evidence to show that there will be no significant adverse noise impacts on stakeholders on the ground resulting either directly from the operation of the UAV or as a result of consequential impacts on other airspace users. There is no requirement to assess any other environmental impacts (i.e. CO2, local air quality, tranquillity) as these are expected to be negligible for such short-term changes.</p> <p>The short duration of the ACP and the minimal operational use of the TDAs means that noise levels in excess of the 51 dB LAeq,16hr daytime Lowest Observed Adverse Effect Level (LOAEL) are unlikely to occur and therefore the change is unlikely to lead to an adverse impact on health and quality of life.</p> <p>The CAA are required to apply the Habitats Regulations to airspace change proposals. In this case, the sponsor has engaged directly with the statutory nature conservation body (SNCB), NatureScot, in respect of an identified Special Protection Area in the vicinity of the TDAs. Based on the initial HRA screening criteria, the CAA consider it unlikely that operation within the TDAs would cause any additional adverse impacts on the protected area however, the sponsor has agreed to conduct a survey, in line with NatureScot’s recommendations, to capture information on the response of species within the protected site. The survey findings are to be assessed in conjunction with NatureScot and the CAA within the first five days of operations commencing and, dependant on the outcome, appropriate action can be taken by the CAA in its role as the competent authority for HRA. The requirements and specification of the survey have been incorporated as a condition of approval, see condition 4 in section C.2.1 below.</p>
<p>Facilitate the integrated operation of air traffic services provided by or on behalf of the armed forces of the Crown and other air traffic services</p> <p>section 70(2)(e)</p>	<p>Not applicable – TDAs in class G airspace.</p>

<p>Take account of the interests of national security section 70(2)(f)</p>	<p>No impact.</p>	
<p>Take account of any international obligations notified to the CAA by the Secretary of State section 70(2)(g)</p>	<p>No such international obligations have been notified to the CAA under section 70(2)(g) of Transport Act 2000.</p>	
<p>B.6</p>	<p>Are there any other associated publications relevant to the proposal and, if so, have the requirements of those publications been met? <u>NOTE:</u> associated publications include Airspace Policy Statements listed here.</p>	<p>YES</p>
<p>B.6.1</p>	<p>SARG Policy 133: Policy for the Establishment and Operation of Special Use Airspace</p>	
<p>B.7</p>	<p>Conclusions in respect of requirement to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users is reflected on an equitable basis. <u>NOTE:</u> this section only applies if the CAA is classifying or amending the classification of UK airspace.</p>	
<p>B.7.1</p>	<p>Not Applicable to this airspace change proposal.</p>	

PART C – Stage 5 Recommendation		
C.1	Taking the above information into account, what is your recommendation to the decision-maker for this proposal?	
C.1.1	<p>The activation of the TDAs, in the absence of any other CAA approved mitigation, should be viewed as proportionate method of ensuring that the risks to non-participating aircraft associated while operating close to a UA, are kept acceptably low.</p> <p>The sponsor has endeavoured to mitigate the impact of the TDAs on other airspace users through stakeholder engagement, notification and promulgation procedures, activation of only the required TDAs for each flight, specific operating procedures enabling access to the TDAs for emergency services, provision of a SUA AIS by Kirkwall ATC, coordination and deconfliction of the UA flights against LoganAir's schedules as well as ensuring the size and shape of the TDAs are the minimum required in line with the operators OSC.</p> <p>Taking the sponsor's submitted ACP documentation and evidence and the subsequent results of the regulatory assessments into consideration against the requirements set out in CAP 1616 (v4), specifically those for temporary airspace changes, the overall recommendation is to approve the airspace change subject to the approval conditions listed.</p>	
C.2	Are there any Recommendations and/or Conditions for the change sponsor to address prior to implementation (if approved)?	YES
C.2.1	<p><u>Condition 1</u></p> <p><i>The Operational Safety Case for this activity shall be accepted and an Operational Authorisation (OA) granted prior to any NOTAMs being promulgated to activate the TDAs. Should there be any changes to the ConOps (V2.2) or LoA (V4.4) prior to all parties signing and following OA, notification must be sent to the CAA immediately.</i></p> <p><u>Condition 2</u></p> <p><i>The ConOps (V2.2) and LoA (V4.4) shall be agreed and signed by all parties. Confirmation of this action is to be provided to the CAA in advance of any NOTAMs are promulgated to activate the TDAs.</i></p> <p><u>Condition 3</u></p> <p><i>The sponsor must submit to the CAA a procedure which documents the handover of responsibilities between Windracers Ltd and Orkney Island Council (OIC) for the relevant OIC aerodromes before any NOTAMs are promulgated to activate the TDAs.</i></p> <p><u>Condition 4</u></p> <p><i>For the first three (3) days of any RPAS operated by the sponsor in relation to this ACP which overfly the Calf of Eday Special</i></p>	

	<p><i>Protection Area (SPA), the sponsor is required to undertake a survey to capture information on the response of species within this SPA to the operation of the RPAS (Survey). The Survey must be conducted by an experienced ornithologist from a land-based vantage point survey on the northern shoreline of Eday looking towards the Calf of Eday, or from an on-board video camera capturing footage of the Calf of Eday SPA as each RPAS overflies the SPA. The footage must be of adequate quality and satisfactory resolution to enable identification of species present. The sponsor must consult with NatureScot regarding the design of the Survey prior to the commencement of the trial, and undertake the Survey in line with any such guidance or advice given by NatureScot. The sponsor must document the findings of the survey and assess these in consultation with NatureScot and the CAA as soon as reasonably practicable (and no later than five (5) days from the first day of any RPAS operated by the sponsor in relation to this ACP overflying the Calf of Eday SPA). The CAA may take appropriate action based on the survey and its findings in its role as competent authority, which may include suspending, varying or revoking the approval for this ACP.</i></p> <p><u>Condition 5</u></p> <p><i>The sponsor shall inform communities that may be affected using operational diagrams overlaid on Ordnance Survey maps (or similar). The level of detail should be sufficient to enable affected communities to easily identify their location in relation to the changes in traffic patterns, proportionate to the assessed level of impact.</i></p> <p><u>Condition 6</u></p> <p><i>In order to reduce the impact on other airspace users and in accordance with FUA principles, the sponsor must deactivate the TDAs at the earliest opportunity should they no longer be required.</i></p> <p><u>Condition 7</u></p> <p><i>The sponsor should inform stakeholders of the decision (when published), and any next steps.</i></p> <p><u>Condition 8</u></p> <p><i>The sponsor is required to collate, monitor, and report to the CAA on the level and contents of feedback received during the period of the TDAs. The CAA expect reporting on the level and contents of any stakeholder feedback received on a fortnightly basis throughout the duration of the TDAs (this should include nil returns). The sponsor should send these reports to the assigned account manager.</i></p>		
C.3	Are any other consents and approvals needed in order to permit the intended operation (title and hyperlinks to be inserted)?		
Operational Authorisation			
C.4	Are there any other comments/observations for the decision maker?	NO	

C.4.1	Nil			
C.5	Regulator's Signature			
Technical Regulator	[REDACTED]	[REDACTED]	[REDACTED]	29/05/2024
PART D – Final Regulatory Decision – Comment/Approval				
Airspace Regulation Principal comments and regulatory decision: PASSED with conditions				
Airspace Regulation Principal	[REDACTED]	[REDACTED]	[REDACTED]	30/05/2024