

CAELUS2

AYRSHIRE & ARRAN

ACP-2022-103

REVISED PROPOSAL

11 September 2023



CAELUS



PROJECTCAELUS.CO.UK



Introduction

Dear Stakeholder,

You are receiving this pack because you or your organisation was previously engaged regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal [ACP-2022-103](#) planned as part of CAELUS2 Future Flight Challenge project. The flight route this pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our [proposal](#) further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) TDA coordinates c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

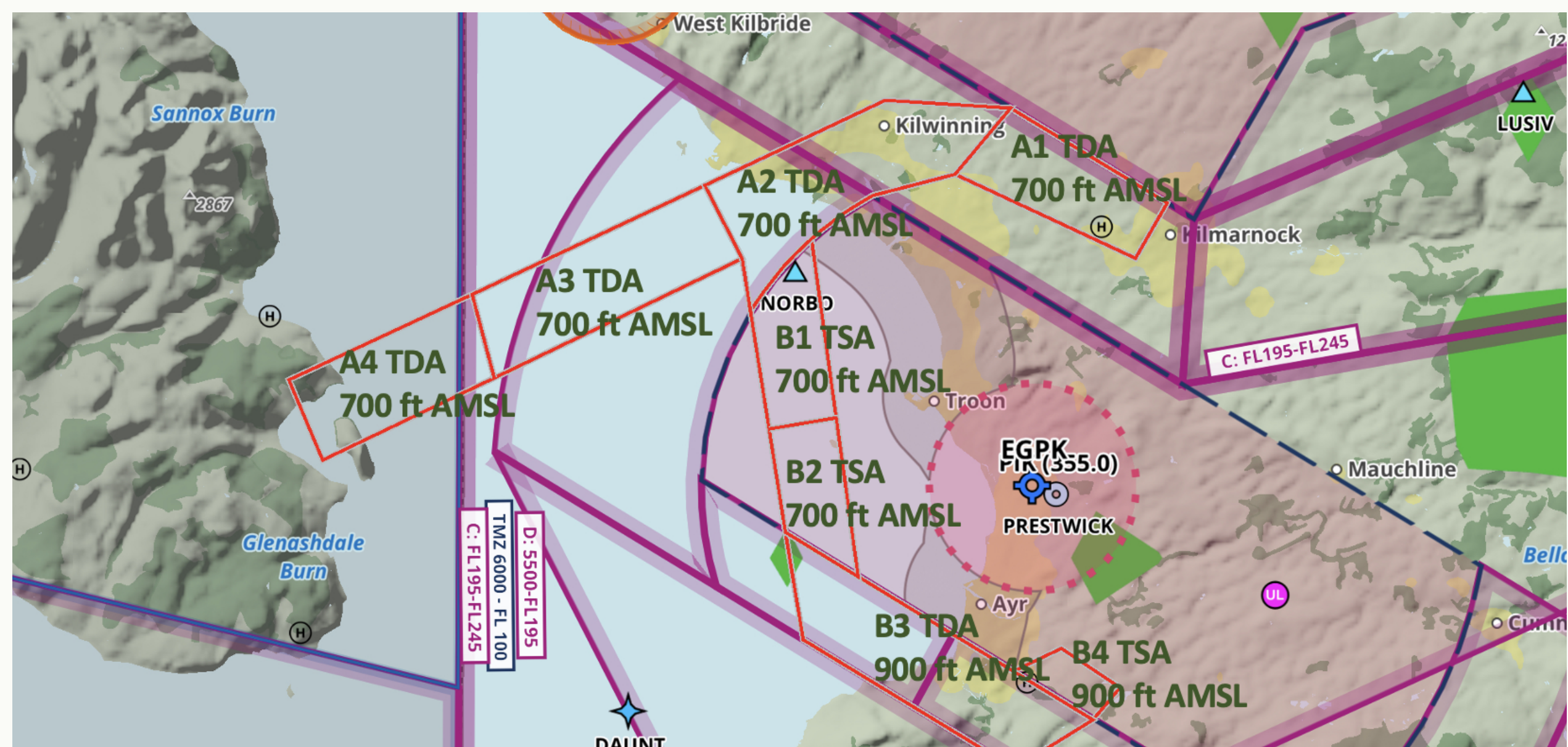
B) The TDA shape and segmentation broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA [portal](#) as soon as it is known to us. Meanwhile, we would like to kindly ask to review this pack in full and get back to us by **replying to this email** (caelus2airspace@traxinternational.co.uk) **no later than 1st of October 2023** to ensure we have enough time to address any concerns that might arise.

Kind regards,

Alex and Lucy on behalf of CAELUS2



N2: Proposed Route + TDA/TSA segments on Airspace Map

KML could be downloaded using [Dropbox Link](#)

SUMMARY OF CHANGES

CHANGE/IMPORTANT UPDATES	DESCRIPTION
PERIOD OF OPERATION	<p>We expect to fly during 4 consecutive weeks starting on January 15th 2024 ideally, but to allow for any unforeseen delays we assume that the consecutive 4 weeks period of flying may occur between 15 January 2024 and 31 July 2024.</p>
TDA/TSA SHAPE & SEGMENTATION	<p>Shape of segments is now better aligned with existing airspace of Prestwick airport (see map on previous slide)</p>
DACS	<ul style="list-style-type: none">- We have received an agreement in principle from Prestwick to support provision of DACS and are now undertaking necessary paperwork to enable DACS provision.- Our draft procedures ensure that CAT A aircraft are able to gain access to any segment of the TSA as quickly and safely as possible. Other aircraft will typically be allowed to cross a segment behind subject to controller workload. Crossing a segment ahead of the RPAS might imply a delay to issue of a clearance. If that occurs - recreational aircraft could consider crossing a "behind" segment or fly above the segregated airspace VFR, which will be possible as RPAS will not operate if cloud base is below 1500 ft (SCT, BKN, OVC)- If a DACS cannot be provided, then a DAAIS would still be available. We will ensure that Scottish Information, or Prestwick are updated with the activity, particularly the cessation of any activity, to enable the area to be utilised by other airspace users.

UAV AIRCRAFT

(THIS SLIDE REMAINS UNCHANGED FROM PREVIOUS ENGAGEMENT PHASE)



SWOOP KITE

TYPE: EVTOL

MTOW: 25 KG

PAYLOAD: 4 KG

CRUISE: 66 KTS IAS

TYPICAL ALT: 400 FT AGL

RANGE: 225 KM

N2 (Ayrshire & Arran) ROUTE

(THIS SLIDE REMAINS UNCHANGED FROM PREVIOUS ENGAGEMENT PHASE)

<p>- DEP/ARR: UNIVERSITY HOSPITAL CROSSHOUSE</p>	<p>- ARR/DEP: ARRAN WAR MEMORIAL HOSPITAL - ARR/DEP: UNIVERSITY HOSPITAL Ayr</p>
<p>REQUIRED AIRSPACE AND DIMENSIONS</p>	<p>TSA + TDA: 2-4 km wide along the route from surface to ceiling of 700 ft AMSL for all segments except two segments in the vicinity of University Hospital Ayr, which have 900 ft AMSL ceiling due to terrain.</p>
<p>REQUIRED WINDOW OF OPPORTUNITY</p>	<p>Operations to be conducted over 4 consecutive weeks once started. It is proposed that the 4 weeks will commence on the 15th January 2024. However, for feedback purposes please consider any impact this proposal may have on your operations up to 31 July 2024 (still only 4 consecutive weeks). This will allow for any delay in the CAA approval process. Final dates will be promulgated in the AIC.</p>
<p>ACTIVATIONS</p>	<p>Activation by NOTAM for short periods up to twice a day. See detailed proposed schedule on following slides.</p>

PROPOSED PERIODS OF ACTIVATIONS

(THIS SLIDE REMAINS UNCHANGED FROM PREVIOUS ENGAGEMENT PHASE)

	AM Activation		PM Activation	COMMENTS
WEEK 1	07:00-10:00 L	OR	13:00-16:00 L	<ul style="list-style-type: none"> - Only one period of flying with morning activation preferred (dependent on weather). Only one appropriate NOTAM with min 24 hours notice will be activated. - 3-6 one-way flights are expected to be completed (1-2 flights per hour). - Only one TDA route (A1-A2-A3-A4 or A1-A2-B1-B2-B3-B4) will be activated.
WEEK 2	07:00-10:00 L	AND	13:00-16:00 L	<ul style="list-style-type: none"> - Afternoon activation will be planned in addition to the morning one - We will be aiming for 2 flights per hour by that point. - Only one TDA route (A1-A2-A3-A4 or A1-A2-B1-B2-B3-B4) will be activated.
WEEK 3	07:00-11:00 L	AND	13:00-16:00 L	<ul style="list-style-type: none"> - Morning activation is increased from 3 to 4 hours. - Both TDA routes (A1-A2-A3-A4 and A1-A2-B1-B2-B3-B4) could be active between 07:00-09:00, but only one route during other times.
WEEK 4	07:00-11:00 L	AND	13:00-17:00 L	<ul style="list-style-type: none"> - Both morning an evening activations are increased to 4h. - Both TDA routes (A1-A2-A3-A4 and A1-A2-B1-B2-B3-B4) could be active for the whole duration of the morning OR afternoon activation (but only one route during the other activation period).
NOTE 1:	- Activation periods described above are maximum durations and could be reduced on particular days if not operationally required. As standard process for deactivating a NOTAM is not immediate - it will be possible to check status directly with the UAV operator via phone number or through ANSP mentioned on the NOTAM.			
NOTE 2:	- Contact details for information as to the activation status of the TDAs will be promulgated via the AIC. We are liaising with Prestwick as the ANSP in the local area and the most appropriate to provide a DACS. If a DACS cannot be provided, and this may occur for a number of reasons, then a DAIS from London Information would be provided.			
NOTE 3:	- Skyports will promulgate the TDA activation times and contact details of the Flight Operations Team by NOTAM at least 24 hours before the planned use.			

How to Respond

ACP-2022-103

We would really appreciate if in your response to the original email thread with CAELUS2AIRSPACE@TRAXINTERNATIONAL.CO.UK you could confirm if:

- Any issues arise from the revised proposal that were not a problem in the original proposal.
- Your organisation requires a detailed letter of agreement.

If you intend to respond - we kindly ask you to do so by COP Sunday 1st of October 2023.



**PRIMARY
CONTACT**

@ CAELUS2AIRSPACE@traxinternational.co.uk

Abbreviations

AGL	Above Ground Level
ATZ	Aerodrome Traffic Zone
BVLOS	Beyond Visual Line of Sight
CAT	Commercial Air Traffic
CTR	Control Zone
EVTOL	Electric Vertical Take off and Landing
FFC	Future Flight Challenge
FRZ	Flight Restriction Zone
GA	General Aviation
NATS	National Air Traffic Services
MTOW	Maximum Take Off Weight
RPAS	Remotely Piloted Aircraft System
UA	Unscrewed Aircraft
UAV	Unscrewed Aerial Vehicle
UKRI	UK Research and Innovation
SAS	Scottish Ambulance Service
TDA	Temporary Danger Area
TOLP	Take off and Landing Point
TSA	Temporary Segregated Area