

Solent Transport Temporary Danger Area: Stage 4 Airspace Trial ACP-2022-106

Version History

Version	Updates	Date
1	First edition	12.04.2024
2	Second edition following feedback from the CAA. Includes re-engagement activities, updated narrative around the design evaluation, increased detail to the trial plan and noise metrics, and miscellaneous clarifications.	31.01.2025

Referenced Documents

Number	Name	Link
1	CAP1616 (Edition 4): Airspace Change	Link
2	CAP1616g: Guidance on Airspace Change Process for Temporary and Trial Airspace Change Proposals	Link
3	ACP-2022-106 Solent Transport Airspace Trial: [CAA's] Clarification Questions	Link
4	ACP-2021-002 BVLOS UAS Operations – Portsmouth to Isle of Wight	Link
5	CAP1711: Airspace Modernisation Strategy 2023 – 2040 Part 1: Strategic Objectives and Enablers	Link
6	ACP-2022-106 Solent Transport Airspace Trial: Engagement Letter Supplement	Link
7	ACP-2022-106 Solent Transport Airspace Trial: Stage 4 Airspace Trial Submission [Issue 1]	Link
8	ACP-2022-106 Solent Transport Airspace Trial: Assessment Meeting Minutes	Link
9	ACP-2022-106 Solent Transport Airspace Trial: [First] Engagement Letter	Link
10	ACP-2022-106 Solent Transport Airspace Trial: Portal Page	Link
11	ACP-2022-106 Solent Transport Airspace Trial: Statement of Need	Link
12	ACP-2022-106 Solent Transport Airspace Trial: Airspace Change Presentation	Link
13	ACP-2022-106 Solent Transport Airspace Trial: [Second] Engagement Letter	Link
14	ACP-2022-106 Solent Transport Airspace Trial: [Second] Engagement Letter version 2.1	Link
15	CAP2989: Temporary or Trial ACPs for BVLOS – Additional Guidance	Link
16	SARG Policy 133: Policy for the Establishment and Operation of Special Use Airspace	Link
17	A Meta-Analysis of the Impact of Drones on Birds	Link
18	CAP1616i: Environmental Assessment Requirements and Guidance for Airspace Change Proposals	Link
19	Plane Finder	Link

Table of Contents

1. Introduction	4
1.1 Summary of Project	4
2. Landowners and Landing Sites.....	6
3. Stakeholders	6
3.1 Stakeholders	6
3.2 Rationale for Removal of Stakeholders	7
4. Design Evaluation and Stakeholder Engagement	7
4.1 Duration of Engagement Periods	7
4.2 First Engagement Period, February – March 2024.....	8
4.2.1 First Engagement Period: Stakeholder Feedback	9
4.2.2 First Engagement Period: Design Changes.....	20
4.3 Design Changes Resulting from Operational Feedback from the CAA, 2024.....	20
4.4 Second Engagement Period, November – December 2024	21
4.4.1 Second Engagement Period: Stakeholder Feedback.....	22
4.4.2 Second Engagement Period: Design Changes.....	33
4.5 Design Changes Resulting from Operational Feedback from the CAA, 2025.....	33
4.6 Final TDA Design	34
5. Impacts.....	36
5.1 Noise from Operations within the Trial.....	36
5.2 Operational Impacts on Other Airspace Users	37
5.3 Noise from Other Airspace Users	39
5.4 Other Environmental Metrics.....	40
5.5 Impact of Other ACPs	40
6. Safety Assessment	40
6.1 Uncrewed Air Systems Operations.....	40
6.2 Solent CTA Buffer Zone.....	40
7. Next Steps and Summary	41
7.1 Next Steps.....	41
7.2 Summary.....	41
8. Appendix: Trial Plan	42
8.1 Trial Aims and Success Criteria	42
8.2 Before and After Descriptions, Noise Impacts and Stakeholder Engagement.....	42
8.3 What the Trial Involves.....	42
9. Appendix: Stakeholder List	46
10. Appendix: Noise Assessments	51
11. Appendix: Glossary of Terms	56

1. Introduction

This document forms part of the document set in accordance with the requirements of the Civil Aviation Authority's (CAA) CAP1616¹ airspace change process. This document is a resubmission which aims to provide adequate evidence to satisfy CAP1616 Stage 4 Submit Gateway and the CAA's Clarification Questions ^(Ref 3) received in May 2024.

1.1 Summary of Project

As part of the Solent Future Transport Zone, funded by the Department for Transport, this ACP aims to introduce a Temporary Danger Area (TDA) to facilitate Uncrewed Air Systems (UAS) Beyond Visual Line of Sight (BVLOS) operations in the Solent area. The project will operate UAS over the Solent, taking-off and landing near Southsea; this is representative of operating from the mainland to the Isle of Wight². This forms part of a 5-year programme of work led by Solent Transport, a partnership between Hampshire County Council, Isle of Wight Council, Southampton City Council and Portsmouth City Council, working alongside the Universities of Portsmouth and Southampton.

Solent Transport have appointed Skylift UAV Ltd, to act as the Airspace Change Sponsor and operate their UAS in the TDA. They previously operated a similar trial in this area, ACP-2021-002 ^(Ref 4).

The TDA supports the gathering of operational experience incrementally to support the CAA's future airspace roadmap and convince the public of the safety and viability of logistics applications for UAS in the Solent region. This trial will build evidence and experience in support of the CAA's ambition to migrate BVLOS operations from segregated airspace to non-segregated airspace, as outlined under the Airspace Modernisation Strategy ^(Ref 5). The TDA will be used as an opportunity to test the available detect and avoid (DAA) solutions to support the route to approval with the CAA. Currently, this is not possible in any simulated environment known to Skylift UAV Ltd, therefore, must be completed in a live operational environment.

¹ CAP1616 edition 4 ^(Ref 1) was published in 2021, with edition 5 due January 2024. However, CAP1616g (Guidance on Airspace Change Process for Temporary and Trial Airspace Change Proposals) ^(Ref 2) did not come into force until the 18th March 2024. Given the progress of this ACP, up to that point, this ACP continued based on edition 4. Unless otherwise stated, any reference to CAP1616 in this document assumes edition 4.

² Previously, this had been described as between Portsmouth and the Isle of Wight. However, due to population density and associated ground risk, the portion over the Isle of Wight has been removed (see chapter 4 (Design Evaluation and Stakeholder Engagement) for full details).

The trial aims³ to:

- Perform live flying trials with increasing complexity of flying from single operator / aircraft to multiple operators / aircraft crossing the trial airspace and using Visual Line of Sight (VLOS) entry and exit to the main TDA. This scenario enables us to simulate safe approaches and departures into and from the TDA.
- Gather operational evidence testing the available detect and avoid (DAA) solutions to support the CAA's approval of this capability for routine operations.
- Test and develop operational procedures for multiple aircraft type and / or multiple operators who could all have different operating procedures and performance capabilities, whilst capturing lessons learned and enhancing risk mitigation throughout the trials.
- Introduce a network of sensors, placed strategically across the area to receive signals from aircraft, inferring location. Allowing for situational awareness of cooperative and non-cooperative air traffic in the Solent region, whilst testing of sensors to determine network density for each sensor type.
- Test the capabilities of a 4-dimensional (latitude, longitude, height, and speed) flight booking system, alongside the sensor network. It should be noted that this is not being used to provide access to the TDA, and will only be used to record data, which can then be cross checked to confirm its validity.

The proposed TDA is similar to that used in the aforementioned trial ^(Ref 4) in terms of location. Therefore, common stakeholders, operational communications and procedures used are all still appropriate. However, there are two key differences⁴ in this ACP:

- Multiple UAS and / or operators flying in the TDA at the same time to trial deconfliction methods and using procedural separation. This higher traffic density will allow operations to be trialled in a more representative environment than the previous ACP ^(Ref 4).
- UAS will be able to operate up to 600ft above ground level (AGL)⁵ of the highest point within each section of TDA; previously this was 400ft. This allows greater vertical separation, in support of multiple UAS.

The TDA will operate for up to six-months commencing May 2025⁶. Full details can be found in Appendix: Trial Plan.

Further information on this trial can be found on the CAA's portal ^(Ref 10) which includes the rationale for the change (Statement of Need ^(Ref 11) and supporting Airspace Change Presentation ^(Ref 12)); the engagement to date ^(Ref 6, Ref 9, Ref 13, Ref 14); the first ACP Issue 1 ^(Ref 7); and the CAA's clarification questions ^(Ref 3). Table 1 summaries the key project milestones, to date.

³ The trial's aims have been updated since the first engagement period (as written in the Engagement Letter Supplement ^(Ref 6)) and ACP Issue 1 ^(Ref 7). This reflects the progress the project has achieved within the intervening time.

⁴ Two other differences (multiple landing / take-off sites and requesting removal of the Solent CTA buffer) were mentioned within the Assessment Meeting ^(Ref 8) and First ACP Submission ^(Ref 7), these are no longer relevant due to changes in the TDA design over the project lifecycle to date.

⁵ The UAS will be operating above ground level (AGL). However, Skylift UAV Ltd understand that some stakeholders may prefer to know the altitude in relation to above mean sea level (AMSL), therefore, in Table 6 – Details of Final TDA Design, both AGL and AMSL are provided.

⁶ Within the first Engagement Email ^(Ref 9) and Engagement Letter Supplement ^(Ref 6) this had been described as six-months from June to November 2024 inclusive. However, changes to the timelines resulted in updating the operating timescales to July to November 2024, as per ACP Issue 1 ^(Ref 7). A subsequent delay, to address the CAA's Clarification Questions ^(Ref 3), and for a summer weather period, means that the TDA is now proposed to operate for six-months from May to October 2025.

Table 1 - Key Milestones

Activity	Date
Statement of Need submitted	January 2023
First engagement period	February – March 2024
First ACP submission / gateway	Submission: April 2024 Gateway: May 2024
CAA clarification questions received	May 2024
Second engagement period	November – December 2024
Second ACP submission / gateway	Submission: January 2025 Gateway: February 2025
AIC publication	May 2025
Operating period	May – October 2025

This ACP forms part of a series of trials. A future ACP could involve a hub location to allow testing of multiple UAS and operators in the same airspace. The details of this are not yet known, but an ACP and CAA portal page will be created if progressed.

2. Landowners and Landing Sites

Landing sites are a vital component for this proposed trial. The initial proposal (see Figure 1) included a number of landing / take-off sites. The landowners of these sites were engaged throughout the ACP process to make sure they understood the trial's request on them and that the correct permissions and agreements are in place. The final proposal (see Figure 6) involves only one landing / take-off site. The landowner's agreement has been provided to the CAA on request but is commercially sensitive and will not be made publicly available.

3. Stakeholders

It is not just the landowners who could be impacted by this trial. CAP1616 ^(Ref 1) requires targeted engagement with aviation stakeholders to assess if the trial is safe and operable and further stakeholders based on the noise assessment. Subsequently item 4 in the Assessment Meeting ^(Ref 8) requires Skylift UAV Ltd to "...engaging relevant stakeholders, namely airspace users, air navigation service providers and airports...". This is deemed proportionate given the limited noise impact of the trial, see chapter 5.1 (Noise from Operations within the Trial).

Two rounds of wider stakeholder engagement were completed. A formal consultation was not required.

3.1 Stakeholders

Stakeholders have been split into two categories: those identified by the project and those made known to the project by themselves or another stakeholder. All stakeholders are listed in Table 11, Appendix: Stakeholder List.

As discussed at the Assessment Meeting ^(Ref 8) aviation stakeholders were the primary focus of the engagement. Targeted stakeholders were identified using the National Air Traffic Management Advisory Committee (NATMAC) list, in the first instance. The NATMAC list was reviewed and limited to those members who operate in the vicinity of the proposal or could have specific interest in the

trial. Additional organisations were added to the stakeholder list based on their proximity to the TDA. National bodies were only included if a site / activity they manage would be directly impacted by the proposed TDA.

Stakeholders identified, by the project, from the outset are indicated by the phrase “targeted stakeholder for first engagement period” in Table 11. Meanwhile, those identified and added for the second engagement period, are indicated by the phrase “start of second engagement period”.

During the engagement periods, responses were received from stakeholders not previously identified. These responses were included, and the stakeholders added to the stakeholder list to receive all future communications. These stakeholders are indicated by the phrase “added during first engagement period” or “added during second engagement period” in Table 11.

3.2 Rationale for Removal of Stakeholders

In line with the Assessment Meeting ^(Ref 8) the current NATMAC list was rationalised. Members who did not operate in the vicinity of the trial, or have a specific interest based on their area of work were excluded from the stakeholder list.

Furthermore, throughout the engagement periods, stakeholders suggested other stakeholders to be added to the list; these were not added when deemed out of scope of the ACP. It should be noted that within the CAA Clarification Questions ^(Ref 3), the CAA requested that suggested stakeholders (not already added) be included in the stakeholder list. However, after further engagement with the CAA, it was deemed disproportionate to add several suggested stakeholders as this would be outside the requirement of the CAP1616 ^(Ref 1) and the Assessment Meeting ^(Ref 8).

Table 12, in Appendix: Stakeholder List, explains which NATMAC members and suggested stakeholders were not included and why.

4. Design Evaluation and Stakeholder Engagement

4.1 Duration of Engagement Periods

Two formal engagement periods were held, both for a four-week duration. The TDA shape was well defined and low-level in terms of impacts; consequently, the engagement material was inherently succinct allowing stakeholders to understand and respond promptly. There was also no requirement for stakeholders to attend briefings which can add to the required length of an engagement period. Furthermore, this strategy and engagement period was aligned with the strategy used for TDA ACP-2021-002 ^(Ref 4). Additionally, neither engagement period covered public holidays, which may have impacted stakeholders’ time to respond. Lastly, a four-week engagement period is reflected by the CAA’s recently published CAP2989 ^(Ref 15), which proposes engagement for trial ACPs should be a minimum of four-weeks as the likely impacts of the ACP are low. As a result, four-weeks was considered a sufficient engagement period.

The first engagement period was carried out from Friday 2nd February 2024 to Friday 1st March 2024, the second engagement period ran from 22nd November 2024 to 22nd December 2024.

4.2 First Engagement Period, February – March 2024

Figure 1 shows the initially proposed design, which was engaged on during the first engagement period. It consisted of three TDA sections (in red) and four stubs (in yellow). The multiple entry / exit points were envisaged to build a more representative data model of future flying operations using point-to-point routings or multi-point routes, whilst the sensor network would gather data for cooperative and uncooperative traffic. Access to landing / take-off sites would be provided via “stubs” which are defined geographical areas allowing safe entry and exit to the main TDA. The “stubs” would allow for transition from VLOS to BVLOS on route to the main TDA sections. Although a TDA is not required for VLOS operations, because the UAS would transition from VLOS to BVLOS (where a TDA is required) a TDA would have been required in this instance.



Figure 1 - TDA Design Proposed During First Engagement

On the 2nd February 2024, targeted stakeholders were sent an engagement email about the ACP ^(Ref 9) which included the purpose of the trial, proposed TDA design and invited them to respond via email. This was considered sufficient and appropriate as all targeted stakeholders regularly used emails.

Bembridge Airport was initially contacted by phone as no email address could be identified for them. They later provided an email address and therefore received the same engagement materials / method as all other stakeholders.

In response to the email sent on 2nd February, Skylift UAV Ltd received requests for clarifying information. A supplement ^(Ref 6) was sent to all stakeholders on 20th February. This also acted as a reminder that the engagement period was still active. The original email sent on the 2nd February noted that the engagement period closed on Friday 1st March however, the supplement included Monday 4th March as a closing date (instead of Friday 1st March). This three-day extension was not intentional however it was adhered to for continuity and in consideration of any final feedback which acknowledged the later date.

General Aviation (GA) Alliance, an affected NATMAC stakeholder, contacted Skylift UAV Ltd on the 21st March 2024 stating they had not been engaged, although Skylift UAV Ltd's records show they were included on both emails to date. They requested additional time to respond, and a response was received on 4th April and included in the feedback.

Skylift UAV Ltd (or Consortiq⁷ or NATS on behalf of Skylift UAV Ltd) completed some targeted stakeholder engagement activities which are shown in Table 2.

Table 2 – Ad Hoc Engagement Activities

Date	Subject and / or Outcome	Attendees
4 th January 2024	Introduction of the proposed TDA area to Southampton ATC. This early engagement was to allow Southampton ATC to consider the TDA, in line with the buffer policy ⁸ , prior to formal engagement starting in February.	NATS; Southampton Airport ATC
15 th February 2024	Meeting held between the NATS project team and wider NATS departments. Request made for a quick update on the ACP progress as some of the NATS team had changed since the previous trial ACP was engaged on. This was facilitated over a Teams call. Further information agreed to be sent out to all stakeholders, including more detail on affected airspace; after which a formal response will be provided by NATS.	NATS
27 th February 2024	Skylift UAV Ltd offered some background information and highlighted the key elements of the application in terms of its progression from a TDA to a trial. Agreed to notify Southampton ATC by email when the TDA will be active, as this could be helpful additional information for them.	Consortiq; NATS; Southampton Airport ATC; Skylift UAV Ltd
29 th February 2024	Provided a verbal update on the ACP to date. Email sent with ACP documentation.	Barton Estate; Consortiq
4 th March 2024	Sponsor / stakeholder conversation to provide further understanding of the proposed TDA.	Barton Estate; Skylift UAV Ltd
5 th March 2024	Given their proximity to the proposal, Lee-on-Solent Airport were contacted directly. Introduced the ACP to stakeholder and checked if they had received, read, and reviewed the emails.	Lee-on-Solent Airport; Consortiq
6 th March 2024	Follow up conversation and email sent with ACP documentation.	Lee-on-Solent Airport; Consortiq
12 th March 2024	Follow up conversation. Stakeholder confirmed they have no concerns regarding the trial.	Lee-on-Solent Airport; Consortiq

4.2.1 First Engagement Period: Stakeholder Feedback

A total of sixteen responses were received (see Table 11) during the first engagement period (February - March 2024). Eight high-level themes were identified: economic; engagement / consultation; environmental; legal; miscellaneous; operations; safety; and no comment / impact.

Table 3 summarises all received feedback during the first engagement period, sorted by theme.

⁷ Consortiq were commissioned to provide Solent Transport and Skylift UAV with drone project management and consultancy and supported the first engagement period.

⁸ This discussion was based on the previous CAA policy which required 3nm between the CTA and other activities. With the introduction of SARG Policy 133 (Ref 16), published in February 2024 this task resolved itself as the new policy, reduced the required buffer to 1nm, which the proposed TDA remained outside of. Subsequent design changes, means the final TDA shape (Figure 6) is well outside of 1nm from the CTA.

Table 3 – Summary of Feedback from First Engagement Period (February to March 2024)

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Economic - Expect compensation / reimbursement for property devaluation and / or legal costs	Estates Ltd	No	UAS are legally allowed to operate, within CAA regulations. Paying such costs is not a requirement of an ACP and therefore will not be covered.	N/A
Economic - Potential commercial implications for landowners	Barton Estate Association; Estates Ltd	No	Skylift UAV Ltd currently operate over livestock with no known impact on them.	N/A
Economic - Property will be devalued	Estates Ltd	No	UAS are legally allowed to operate, within CAA regulations No expected impact on property value.	N/A
Economic - Wide TDA is only required to be able to sell more services to other clients in the future	Estates Ltd	No	This trial is being led by Solent Transport who are funded by the Department for Transport, Skylift UAV Ltd are the UAS operator. This TDA is not about profiteering or selling future services and future trials would require their own ACP which would be assessed on its own merits.	N/A
Engagement / Consultation - Consultation is flawed	Estates Ltd; Kings Quay Nature Reserve	No	As per CAP1616 ^(Ref 1) paragraph 317, trial airspace changes are required to complete targeted engagement with aviation stakeholders to make sure the trial is safe and operable. There is no requirement for formal consultation.	N/A
Engagement / Consultation - Engagement is written as a directive	Bembridge Airport	No	Engagement is on the proposed TDA, all feedback will be reviewed against the proposed design.	N/A
Engagement / Consultation - Not consulted or engaged on this proposal	Barton Estate Association; Estates Ltd; General Aviation Alliance (GA Alliance); Kings Quay Nature Reserve	No	As per CAP1616 ^(Ref 1) paragraph 317, trial airspace changes are required to complete targeted engagement with aviation stakeholders. There is no requirement for formal consultation. GA Alliance was notified as per Table 11 in Appendix: Stakeholder List. All responses will be reviewed and analysed.	N/A

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Engagement / Consultation - Suggestion of additional landowners / relevant bodies to be added to the stakeholder lists	Estates Ltd; Hampshire & Isle of Wight Wildlife Trust; Kings Quay Nature Reserve	No	Item 4 in the Assessment Meeting ^(Ref 8) requires Skylift UAV Ltd to “...engaging relevant stakeholders, namely airspace users, air navigation service providers and airports...”. All stakeholders have been identified and listed in Appendix: Stakeholder List alongside their rationale for inclusion or exclusion. All responses will be reviewed and analysed.	N/A
Engagement / Consultation - Unaware of communications with Solent Transport on the proposed trial	Barton Estate Association	No	As noted in the Statement of Need ^(Ref 11) , Solent Transport are overseeing this trial with support from other agencies such as Skylift UAV Ltd. Solent Transport have overseen all activities and will continue to do so.	N/A
Environmental - Full ecological assessment should be completed for the designated landscapes and supporting features	Hampshire & Isle of Wight Wildlife Trust	No	As per CAP1616 ^(Ref 1) , paragraph B89, there is no requirement to assess this type of environmental consequence because impacts are expected to be negligible for a short-term change.	N/A
Environmental - Number of designated landscapes (such as Ramsar sites) within the TDA	Chichester Harbour Conservancy; Estates Ltd; Hampshire & Isle of Wight Wildlife Trust; Kings Quay Nature Reserve	Yes	Skylift UAV Ltd currently operate over livestock with no known impact on them. Within the TDA Skylift UAV Ltd will make best endeavours to either: • Route away from identified nature sites. • Or avoid overflying sites at low tide (to minimise impact of feeding) and will fly at low speed (to allow birds to move away from the UAS). No change to TDA design.	No
Environmental - Overflights could be detrimental to nature including the birds at the nature reserve, migrating birds and breeding cattle	Chichester Harbour Conservancy; Estates Ltd; Hampshire & Isle of Wight Wildlife Trust; Kings Quay Nature Reserve	Yes	Skylift UAV Ltd currently operate over livestock with no known impact on them. Within the TDA Skylift UAV Ltd will make best endeavours to either: • Route away from identified nature sites. • Or avoid overflying sites at low tide (to minimise impact of feeding) and will fly at low speed (to allow birds to move away from the UAS). No change to TDA design.	No

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Environmental – Trial will cause noise nuisance	Estates Ltd	No	Aircraft will be at high altitude (the TDA ceiling is 600ft AGL). The UAS are expected to be significantly quieter than other light aircraft who may operate at that height when the TDA is not in place.	N/A
Legal - Access to private land to recover crashed UAS will not be granted, and stakeholder will sue for costs relating to damage and / or contamination to property	Estates Ltd	No	The Operational Safety Case (OSC) will be submitted and reviewed by the CAA. All possible mitigations to avoid crashing have been implemented. All cargo will be securely packaged and attached to the UAS, resulting in almost no risk to cargo being dropped. Furthermore, the packaging has been subject to drop tests and proven as leak proof.	N/A
Legal - Do not allow access to airspace over their land up to 1,000ft	Estates Ltd	Yes	UAS are legally allowed to operate within CAA regulations. Aircraft will be at high altitude (the TDA ceiling is 600ft AGL) and will not be recording any footage, therefore, negligible infringement on landowners overflown. However, TDA section C was redesigned away from property as a good will gesture.	Yes
Legal - Happy to contest the trial via solicitors	Estates Ltd	No	UAS are legally allowed to operate, within CAA regulations.	N/A
Legal - Trespass has already occurred	Estates Ltd	No	Skylift UAV Ltd believe that no trespass has occurred.	N/A
Legal - Reducing the buffer zone does not resolve concerns	Estates Ltd	No	TDA has been redesigned to avoid overflying their property (see “Do not allow access to airspace over their land up to 1,000ft”). There will be no change to the buffer zone. The TDA reduction reduces the area for flight operations, but still includes the required buffer zones between the operating area and the TDA edge.	N/A
Miscellaneous - ACP makes no reference to the private airstrip at the Barton Estate	Bembridge Airport	No	Barton Estate had been previously contacted and were re-engaged at this point and provided with an update on the ACP ⁹ .	N/A

⁹ As a private residence, Barton Estate, were not part of the wider stakeholder engagement but had been previously contacted as a potential landing / take-off site. In response to feedback, Barton Estate were re-engaged via phone and were provided all engagement documents via email. For transparency, this is recorded in Table 2.

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Miscellaneous - Proposed trial will impede upon local privacy, safety and security values	Barton Estate Association; Estates Ltd	No	Aircraft will be at high altitude (the TDA ceiling is 600ft AGL) and will not be recording any footage. Overall, negligible infringement on landowners overflown.	N/A
Miscellaneous - Suggestion to use uncrewed boats or a hydrofoil	Estates Ltd	No	Alternative modes of transport are out of scope of this airspace trial.	N/A
Miscellaneous - Temporary Danger Area (TDA) term may cause concern to the local community	Barton Estate Association	No	A TDA is a temporary airspace structure of defined dimensions within which specific activities – such as this UAS trial – may require a degree of segregation for the protection of other airspace users.	N/A
Operations - Aircraft routinely fly between 500 – 1,000ft around the Isle of Wight	Bembridge Airport	Yes	The 600ft TDA includes a buffer between the top of the TDA and UAS. UAS cannot operate too low due to moving ground risk of tall ships. Operating below 600ft allows us to minimise impact on other airspace users who have to be higher over the sea to allow a safe glide height back to land, in emergencies. If the TDA is approved, then other airspace users would have to operate above 600ft whilst the relevant section(s) are active. No change to TDA design.	No
Operations - Concern about positioning of company’s control buildings on Thorney Island	Chichester and District Model Aero Club (CADMAC)	No	Take-off and landings will be supported with mobile vehicles, no requirement for buildings on the land.	N/A
Operations - Concern temporary airspace may become permanent later	Barton Estate	No	In line with CAP1616 ^[Ref 1] , paragraph 325, if Skylift UAV Ltd wish to make a trial airspace a permanent design, they will have to complete a full airspace change proposal. In this instance, that is not the intention.	N/A
Operations - Confirmation of height of data	General Aviation Alliance (GA Alliance)	No	The TDA is surface to 600ft AGL. Therefore, any data gathered will be within those altitudes.	N/A
Operations - Details of dates / days / times of activations are too vague	General Aviation Alliance (GA Alliance)	No	Table 10 in Appendix: Trial Plan provide details of activities. Activating the TDA will be by notice to aviation (NOTAM) with a minimum of 24-hours’ notice.	N/A

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - Ensure FLARM / collision avoidance and high-intensity stimulus light (HISL) visual acuity are available for operations	Bembridge Airport	No	Activating the TDA by NOTAM is the required means of communicating the activity. UAS will have FLARM ¹⁰ (traffic awareness and collision avoidance technology for GA) and Automatic Dependent Surveillance-Broadcast (ADS-B), allowing the exact location of the UAS to be located.	N/A
Operations - Height of UAS (above 500ft AGL) would increase risk of collision with GA	Bembridge Airport	Yes	The TDA ceiling is 600ft AGL. The TDA includes a buffer between the top of the TDA and UAS. Therefore, the UAS could be operating at between 400 and 500ft AGL. The UAS cannot operate too low due to moving ground risk of tall ships. No change to TDA design.	No
Operations - Little objection if kept below 500ft	Bembridge Airport	Yes	The 600ft AGL TDA includes a buffer between the top of the TDA and UAS. The UAS cannot operate too low due to moving ground risk of tall ships. However, operating below 600ft allows us to minimise impact on other airspace users (who have to be higher over the sea to allow a safe glide height back to land, in emergencies). No change to TDA design.	No

¹⁰ This response reflects that given in the first ACP Issue 1 ^(REF 7) and Skylift UAV Ltd’s expectations at the time. However, at the time of writing this ACP submission, it is proving challenging of Skylift UAV Ltd to source a FLARM device suitable for a UAS. Having said that, they are continuing to progress this. Therefore, this response would be more accurately read as “UAS may have FLARM”. They will have ADS-B.

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - Location (proximity to Solent CTA, Lee-on-Solent ATZ, Barton Estate, Bembridge and Sandown) would increase risk of collision	Barton Estate; Bembridge Airport	Yes	The proposed TDA is designed to minimise impact on neighbouring airfields: - The main section of the TDA (TDA section B) is across the Solent. - And TDA is designed to avoid common operating procedures at these airfields, to reduce risk to aircraft whilst in climb / descent. - Impact assessment with Southampton ATC has been completed, see Safety Assessment. - TDA section C narrowed to be 300m further south from Barton Estate’s airstrip.	Yes
Operations – Move TDA south away from airstrip at Barton Estate	Barton Estate	Yes	TDA section C narrowed to be 300m further south from Barton Estate’s airstrip.	Yes
Operations - N504446 W0011451 [Barton Estate’s runway] is active and often used for missed approaches / training and is a ‘known’ diversion for Island based aircraft	Bembridge Airport	Yes	TDA section C narrowed to be 300m further south from Barton Estate’s airstrip.	Yes
Operations - Overflights at a minimum of 600ft AGL and AMSL across Chichester Harbour National Landscape would minimise impact to nature	Chichester Harbour Conservancy	Yes	The proposed TDA extends up to 600ft AGL and UAS must fly safely within that height. Therefore, the UAS could be operating at between 400 and 500ft AGL. However, Skylift UAV Ltd currently operate over livestock with no known impact on them. Within the TDA Skylift UAV Ltd will make best endeavours to route away from identified nature sites. No change to TDA design.	No

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - Request for routings to be moved to the south of Wootton Creek or directly over water up the Medina River	Estates Ltd	Yes	Moving the TDA south of Wootton Creek would position it between the populations of Fishbourne and Ryde. Moving TDA section C to over the Medina River would disproportionately increase the length of crossings creating a larger environmental impact of the UAS and impact on other airspace users. It would also overfly / fly very close to Cowes which is currently not impacted. Overflying / flying near the populations of Cowes, Fishbourne or Ryde is considered a disproportionate ground safety risk. No change to TDA design.	No
Operations - Request review of TDA over Thorney Island as Thorney Island is not being used as a landing / take-off site	Ministry of Defence – Defence Airspace and Air Traffic Management (MOD DAATM)	Yes	TDA section A moved east of Thorney Island, following the river.	Yes
Operations - Search and Rescue helicopters require 24/7 short notice requirement to get airborne	HM Coastguard	Yes	TDA is designed to avoid common operating procedures at Lee-on-Solent airfield, to reduce risk to aircraft whilst at in climb / descent. Priority will always be given to movements of high priority traffic. No change to TDA design.	No
Operations - Size and weight of UAS would be a risk to GA	Bembridge Airport	No	The operating size and weight are not included in the engagement materials, as specific aircraft to be used (and therefore weight) has not been confirmed at this point.	N/A
Operations - UAS have hi-visibility cameras allowing them to fly in narrow vertical corridors	Estates Ltd	Yes	UAS have highly accurate GPS systems allowing them to fly to a very high level of accuracy. This enables Skylift UAV Ltd to fly very tight flight routes where required. Considering multiple UAS and the required buffer (within the TDA) the TDA is considered as small as practical. No change to TDA design.	No
Operations - Why is the duration six-months instead on three-months?	General Aviation Alliance (GA Alliance)	No	Trial airspaces are allowed to be up to six-months. This allows more opportunity to achieve the trials objectives compared to three-months. In this instance, the TDA is proposed for six-months.	N/A

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - Will TDA be cancelled when activities have finished for the day?	General Aviation Alliance (GA Alliance)	No	TDAs will only be activated as per the flying schedule.	N/A
Operations - Will DACS be provided? Where from?	General Aviation Alliance (GA Alliance)	No	Special Use Airspace Crossing Service (SUACS) ¹¹ will not be provided as part of this ACP as it was not deemed proportionate based on output from previous trials, alongside engagement with local ATC services.	N/A
Operations - Will there be a minimum cloud base for activation?	General Aviation Alliance (GA Alliance)	No	There is no proposed minimum cloud base. However, activation will be limited to suitable days for the purpose of the tests.	N/A
Operations - Wish to pre-tactically deconflict high priority traffic ¹² within the trial airspace	HM Coastguard; Ministry of Defence – Defence Airspace and Air Traffic Management (MOD DAATM)	No	A Record of Agreement (RoA) ¹³ will be agreed with the Aeronautical Rescue team to explain deconfliction details. A Letter of Agreement (LoA) is not required with the MoD due as the TDA has been moved east to avoid Thorney Island.	N/A
Safety - Cattle and / or military may attack UAS	Estates Ltd	Yes	Skylift UAV Ltd currently operate over livestock with no known impact on them. MoD have been engaged and are aware of the proposal. No change to TDA design.	No
Safety - Chemotherapy drugs are radioactive and poisonous hence regulation says they should not be carried	Estates Ltd	No	There are no plans to carry dangerous goods within this trial. All cargo will be securely packaged and attached to the UAS. Furthermore, the packaging has been subject to drop tests and proven as leak proof.	N/A

¹¹ SUACS were previously known as a Danger Area Crossing Service (DACs).

¹² Throughout this document, the phrase “high priority traffic” has been used to describe military, search and rescue, air ambulance, policing, and fire services whilst on critical missions. These organisations operating non-critical activities (such as training flights) would not be considered high priority traffic.

¹³ The ACP Issue 1 (Ref 7) had stated LoAs would be agreed. As the project has progressed, it has been identified that an ROA is sufficient.

Theme "You said"	Stakeholder(s)	Potential impact the design	Rationale "We did"	Design change
Safety - Flight safety / risk assessment has not been correctly evaluated and lacks details and understanding of the operating environment	Bembridge Airport	No	The OSC will be submitted and reviewed by the CAA.	N/A
Safety - Flying over Medina River would mean cargo could be quickly recovered if dropped / aircraft crash	Estates Ltd	Yes	The Medina River increases route miles and risk due to proximity to a large population. All cargo will be securely packaged and attached to the UAS, resulting in almost no risk to cargo being dropped. The OSC will be submitted and reviewed by the CAA. All possible mitigations to avoid crashing have been implemented. No change to TDA design.	No
Safety - GA may not correctly interpret the routes / days / dates of NOTAMs	Bembridge Airport	No	Activating the TDA by NOTAM is the required means of communicating the activity. Furthermore, UAS will have ADS-B, allowing the exact location of the UAS to be located. Dissemination of NOTAM to all airfield users, by airfield operator, could help interpretation.	N/A
Safety - Risk to GA cannot be managed via technology / NOTAMs	Bembridge Airport	No	Activating the TDA by NOTAM is the required means of communicating the activity. UAS will have ADS-B, allowing the exact location of the UAS to be located. The aircraft are very visible, bright white and orange, and have navigation strobes fitted.	N/A
Safety - UAS can glide / crash up to 1 mile from their flight path	Estates Ltd	No	The UAS has onboard geofencing and flight termination system to limit it from drifting, and the TDA has the inbuilt buffer zone as per the CAA stipulations.	N/A
No comment / no impact on operations	Fleetlands; Lee-on-Solent Airport; NATS; Royal Society for the Protection of Birds (RSPB); Southampton ATC	No	No impact on TDA design or operating procedures.	N/A

Theme "You said"	Stakeholder(s)	Potential impact the design	Rationale "We did"	Design change
No impact if operated on weekdays	Chichester and District Model Aero Club (CADMAC)	No	Trial is operating Monday to Friday. No impact on TDA design or operating procedures.	N/A

4.2.2 First Engagement Period: Design Changes

As a result of the feedback received in the first engagement period, four minor changes were made to the TDA design:

- TDA section A was moved away from Thorney Island.
- TDA section C was redesigned to avoid both Barton Estate's airstrip and Estates Ltd's property.
- For operational reasons, one landing site (in the vicinity of Lee-on-Solent and Gosport) was considered no longer suitable. Therefore, this stub was removed.
- A second stub (in the vicinity of Thorney Island and Bosham) was removed, as the landing site is now directly accessible from the redesigned TDA section A.

Figure 2 shows the TDA design post-engagement including the four changes described above. On the 3rd April 2024, this was communicated to the majority of stakeholders¹⁴, via email.

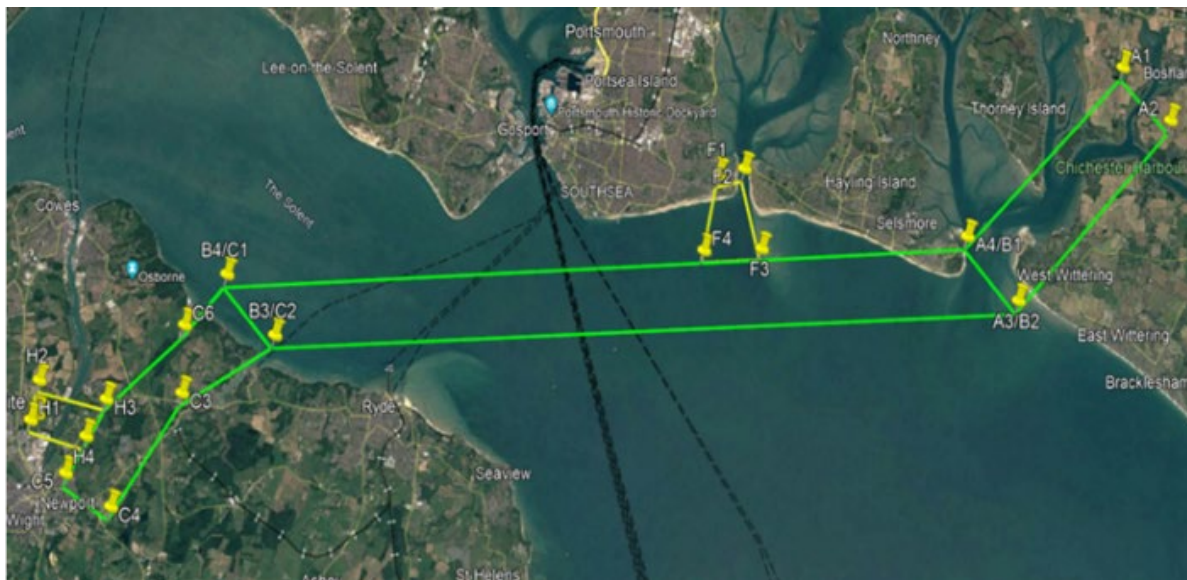


Figure 2 - TDA Design Post- First Engagement

4.3 Design Changes Resulting from Operational Feedback from the CAA, 2024

A subsequent change was made on safety grounds. The safety concern raised was in regard to the TDA breadth around C1 / C6 (see Figure 3) which had deliberately been narrowed to avoid overflying Barton Estate's airstrip and Estate Ltd's property. When considering the need for a safety buffer; a contingency area; avoiding populations; and an operating area within the TDA, this updated design was considered too narrow. Figure 3 displays the three variations of the western part of the TDA. The left TDA image was originally engaged on; the middle TDA was changed to avoid Barton Estate's airstrip and Estate's Ltd following stakeholder feedback received; and the final TDA on the right was adjusted as the CAA's *UAS Sector* had previously recommended avoiding overflying populations. Although the right-hand image is wider than the middle design (post-first engagement), it remains narrower than the TDA originally engaged on. It is also worth noting that the difference between the second and final TDA is negligible but still mitigates against the safety concern of it being too narrow.

¹⁴ Three stakeholders did not receive this email because two-way engagement was still happening around that time and they received a very similar, but personalised, email as part of those conversations.



Figure 3 - TDA Design Changes - Western Side

As a result of all the above changes, there will be no significant change to new stakeholders overflown, or associated impacts when compared to the design which was engaged on. Compared to what was originally proposed, the design submitted to the CAA in the ACP Issue 1 ^(Ref 7), the TDA area:

- Was smaller (narrowed over both the Isle of Wight and Chichester Harbour areas), reducing impact on other airspace users.
- Overflew the land less (due to the narrowing over the Isle of Wight and avoiding Thorney Island), thereby reducing impact on ground-based stakeholders including aircraft noise.

Therefore, it was considered that no further engagement was required at that time.

4.4 Second Engagement Period, November – December 2024

A second phase of engagement was completed from November to December 2024 to address the CAA Clarification Questions ^(Ref 3) and to ensure all stakeholders were fully informed on this proposal. Figure 4 shows the design which was proposed to stakeholders during the second engagement period. This includes all the design changes noted above.



Figure 4 – TDA Design Proposed During the Second Engagement

The materials for the second engagement period ^(Ref 13) included a summary of previous engagement; the operational period; proposed TDA shape; trial plan; and impact assessments. The engagement period was four-weeks, with the rationale provided in chapter 4.1 (Duration of Engagement Periods). Stakeholders were asked to provide feedback via Microsoft Forms which does not require respondents to have a subscription or any additional software above an internet browser, therefore was considered accessible to the full stakeholder list.

In addition to the initial engagement email, stakeholders who had not yet responded also received a reminder email (4th December 2024) and a final reminder email (16th December 2024). Due to a known technical issue, a second final reminder was sent on the 17th December 2024. As responses had been received between 22nd November and 16th December, there was no reason to believe previous emails had not been sent / received by stakeholders. Furthermore, the issue was rectified within twenty-four hours meaning the impact on stakeholders was insignificant. Overall, no extension to the engagement period was considered necessary.

Skylift UAV Ltd also sent individual emails to Chichester Harbour Conservancy and Royal Society for the Protection of Birds to address their feedback regarding UAS operation in / around designated European Sites within the TDA.

In January 2025, Skylift UAV Ltd noticed a cross-reference error on page 6 of the engagement materials as shown:

“The altitudes for each component of the TDA are shown in **Error! Reference source not found..**”

By reading the text surrounding this sentence, stakeholders would be able to infer which referenced table would complete the sentence, therefore meaning the engagement materials was still valid. Illustrating this point, no stakeholder raised any concern or asked for clarification on this point. Therefore, Skylift UAV Ltd have up issued the document ^(Ref 14) on the CAA’s portal, but do not believe it has impacted the effectiveness of the engagement period November – December 2024.

4.4.1 Second Engagement Period: Stakeholder Feedback

A total of twenty-one responses were received (see Table 11) during the second engagement period (November - December 2024).

This engagement period was considered successful as: responses came from a range of stakeholders and no stakeholder(s) asked for additional time or information.

Twenty stakeholders responded via Microsoft Forms, which included a question regarding their overall support for the proposed airspace change, this is depicted in Figure 5. Eight stakeholders either objected or strongly objected to the proposal, reasons cited include: the impact on wildlife; aircraft nuisance to ground based stakeholders; and impact on other airspace users. Meanwhile, twelve of these respondents were either neutral or positive about the proposal.

A further response was received via email, and is included in the feedback, but not in Figure 5 as they did not state their level of overall support.

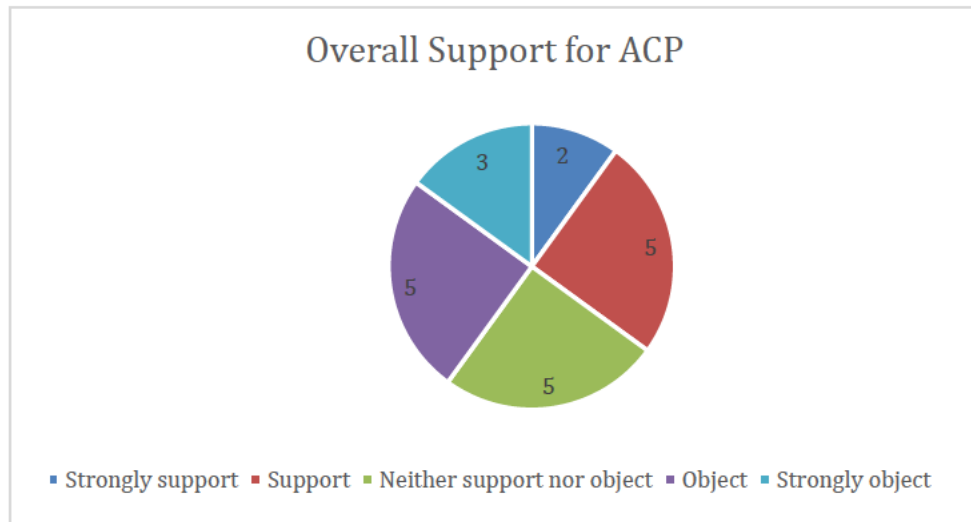


Figure 5 – Stakeholders’ Support for the Proposed ACP

Table 4 summarises all received feedback during the second engagement period, sorted by theme. Eight high-level themes have been identified: economic; engagement / consultation; environmental; legal; miscellaneous; operations; safety; and no comment / impact.

Table 4 - Summary of Feedback from Second Engagement Period (November to December 2024)

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Economic - Commercial interests encroaching on other airspace users' opportunity for free flight	Butterfly Paragliding	No	This trial is being led by Solent Transport who are funded by the Department for Transport, Skylift UAV Ltd are the UAS operator. This TDA is not about profiteering.	N/A
Engagement / consultation - Insufficient engagement on size, weight, and payloads of drones	Bembridge Airport	No	CAP1616 ^(Ref 1) requires targeted engagement with aviation stakeholders to assess if the trial is safe and operable and a further stakeholders based on the noise assessment. Size, weight, and payload information was not included in engagement materials as it was not considered necessary information for stakeholders to be able to confirm the safety, operability, or noise impacts of the trial.	N/A
Engagement - No prior engagement to mitigate risks	Bembridge Airport	No	Bembridge Airport was identified as a stakeholder prior to the first engagement period (see Table 11) and they provided a response (see Table 3). All previously received feedback, from all stakeholders, was taken onboard prior to the second round of engagement.	N/A
Engagement - Previous feedback is still applicable	Ministry of Defence – Defence Airspace and Air Traffic Management (MOD DAATM)	No	All previously received feedback, from all stakeholders, was taken onboard prior to the second round of engagement.	N/A
Engagement / consultation - Questions do not allow for accurate responses e.g. if a respondent wanted to comment on TDA shape, rather than both shape and height	British Gliding Association (BGA)	No	Microsoft Forms offered a yes / no choice, and if the respondent selected "no" they could provide rationale. Furthermore, there was a free text box at the end for any other comments.	N/A
Engagement / consultation - Suggestion of additional organisations to be added to the stakeholder lists	UK Airprox Board (UKAB); National Grid Electricity Transmission UK	No	Item 4 in the Assessment Meeting ^(Ref 8) requires Skylift UAV Ltd to “...engaging relevant stakeholders, namely airspace users, air navigation service providers and airports...”. All stakeholders have been identified and listed in Appendix: Stakeholder List alongside their rationale for inclusion or exclusion. All responses will be reviewed and analysed.	N/A

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Environmental - Gathering actual noise metrics during the trial would be more helpful than modelled data and increase understanding for future operations.	Farnborough Airport Ltd	No	Noise data could be collected during operations as the equipment is available, but it is not part of the current trial plan / success criteria. Noise metrics may be collected ad hoc if deemed useful to this trial.	N/A
Environmental - Noise analysis does not consider echo within valley(s)	Estates Ltd	No	Noise analysis has been carried out in line with CAP1616i. See Appendix: Noise Assessments for full noise assessment.	No
Environmental - Impact on wildlife and designated landscapes (such as Ramsar sites) within the TDA	Chichester Harbour Conservancy; Estates Ltd; P and C S; Royal Society for the Protection of Birds (RSPB)	Yes	Skylift UAV Ltd currently operate over livestock with no known impact on them. Within the TDA Skylift UAV Ltd will make best endeavours to: - Route away from identified nature sites. - Or avoid overflying sites at low tide (to minimise impact of feeding) and will fly at low speed (to allow birds to move away from the UAS). Any secondary disturbance to wildlife would not be from intent or reckless behaviour; with best endeavours made to mitigate and minimise impacts. No change to TDA design.	No
Environmental - Other than noise impacts, environmental assessments have been written off	Royal Society for the Protection of Birds (RSPB)	No	As per CAP1616 ^(Ref 1) , paragraph B89, there is no requirement to assess other types of environmental consequence because impacts are expected to be negligible for a short-term change.	N/A

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Environmental - Operating at 330ft [AGL] can still result in birds flushing from their nests. Furthermore, timing of trial (mid-May) could result in birds flushing their nests during nesting / breeding season	Royal Society for the Protection of Birds (RSPB)	Yes	The UAS' need to operate in fair weather. Operating over the summer increases the chance of fair weather and acceptable flying days. Therefore, May - November has been selected, which includes some contingency periods. Operating over winter (October - March, for example) would decrease the likelihood of fair weather days, and cause significant operational impacts to the trial. Research ^(Ref 17) has shown that operating 100m (330ft) from birds should avoid flushing, in some cases the distance can be as little as 30m (98ft) without causing flushing. Aircraft will be at high altitude, operating at between 400 and 500ft AGL. Within the TDA Skylift UAV Ltd will make best endeavours to: • Route away from identified nature sites. • Or avoid overflying sites at low tide (to minimise impact of feeding) and will fly at low speed (to allow birds to move away from the UAS). No change to TDA design.	N/A
Environmental – Trial will cause noise nuisance	Estates Ltd	No	Aircraft will be at high altitude (the TDA ceiling is 600ft AGL). The UAS are expected to be significantly quieter than other light aircraft who may operate at that height when the TDA is not in place.	N/A
Legal - Access to private land to recover crashed UAS will not be granted	Estates Ltd	No	An OSC will be submitted to and reviewed by the CAA. All possible mitigations to avoid crashing will be implemented.	N/A
Legal - Reserve the right to object to negative impacts of ACP, whilst the ACP is operational	P and C S	No	Feedback will be gathered throughout the trial period, as per CAP1616 ^(Ref 1) paragraph 319.	No

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Legal - Violates freehold interests	Estates Ltd	No	TDA section C was previously redesigned away from this stakeholder's property (see Table 3). Therefore, no potential impact on design at this point. More broadly, UAS are legally allowed to operate, within CAA regulations. Aircraft will be at high altitude (the TDA ceiling is 600ft AGL) and will not be recording any footage, therefore, negligible infringement on landowners overflown.	N/A
Miscellaneous - Boats and land services (e.g. taxis) present a safer and cheaper solution	Estates Ltd	No	Alternative modes of transport are out of scope of this airspace trial.	N/A
Miscellaneous - TDA may impact search and rescue tasks / training. Likely (but not proven) that a high proportion of traffic which does operate below 600ft (AGL) is search and rescue	Bristow Helicopters Ltd	Yes	TDA is designed to avoid common operating procedures at Lee-on-Solent airfield, to reduce risk to aircraft whilst at in climb / descent. Whenever safe to do so, priority will be given to high priority traffic's movements, such as search and rescue missions. Training flights will not be granted access to TDA and should be planned to avoid the area. No change to TDA design.	N/A
Miscellaneous - Trial should be scrapped	Estates Ltd	No	This trial will go ahead, if approved by the CAA.	N/A
Operations - Access for emergency helicopters needs to be more than an offer and published procedures are needed as to not hinder emergency services helicopters' operations / military operations	Bembridge Airport; Bristow Helicopters Ltd; British Helicopter Association; Ministry of Defence - Baker Barracks, Thorney Island; Ministry of Defence – Defence Airspace and Air Traffic Management (MoD DAATM)	Yes	As documented within the engagement, there will be dedicated communication channels and access to TDA for high priority traffic, if requested. Best endeavours will be made to accommodate such requests, but safety of users within the TDA must not be compromised. TDA is designed to avoid common operating procedures at neighbouring airfields, to reduce risk to aircraft whilst at in climb / descent. Whenever safe to do so, precedence will be given to high priority traffic's movements. Necessary, LoAs to be produced / updated to accommodate. No change to TDA design.	No

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - Appropriate TDA activation and deactivation	UK Airprox Board (UKAB)	No	TDAs will only be activated as per the flying schedule. Table 10 in Appendix: Trial Plan provides details of activities. Activating the TDA will be by NOTAM with a minimum of 24-hours’ notice.	N/A
Operations - Barton Estate has its own airstrip which is used for diversions and training	Bembridge Airport	No	TDA section C was previously narrowed to be 300m further south from Barton Estate’s airstrip (see Table 3) to allow access to / from the airfield.	N/A
Operations - Busy airspace for GA traffic	Bembridge Airport	Yes	The proposed TDA is designed to minimise impact on other airspace users by: • The main section of the TDA (TDA section B) is across the Solent. • And TDA is designed to avoid common operating procedures at these airfields, to reduce risk to aircraft whilst in climb / descent. • Impact assessment with Southampton ATC has been completed, see Safety Assessment. • TDA section C was previously narrowed to be 300m further south from Barton Estate’s airstrip (see Table 3). • Operating below 600ft minimises impact on other airspace users (especially for users in proximity to TDA B (the main TDA section) who have to be higher over the sea to allow a safe glide height back to land, in emergencies). Skylift UAV Ltd acknowledge some traffic will have to operate higher to go above or travel further to go around the TDA. No change to TDA design.	No
Operations - Concern about positioning of Skylift’s equipment at the southern end of the runway [at Thorney Island]	Chichester and District Model Aero Club (CADMAC)	No	TDA previously moved away from Thorney Island (see Table 3) and using private land. Additionally, take-off and landings will be supported with mobile vehicles, no requirement for buildings.	N/A

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - Concerned how proposal will vary over time creating greater negative impacts	P and C S	No	Initially trial activities will be completed over a shorter distance, while testing the UAS' operability. As the trial progresses, so will the flight distances. Trial will operate as per Appendix: Trial Plan. Impacts will remain as indicated in chapter 5 (Impacts). Other than within the landing / take-off sites, noise impacts of overflights will be below the noise threshold, see Noise from Operations within the Trial. TDA section C starts offshore to allow climb prior to overland operations. Trial ACP will be approved for a specific operating area and activities - there will be no scope creep. In line with CAP1616 ^(Ref 1) , paragraph 325, if Skylift UAV Ltd wish to make a trial airspace a permanent design, they will have to complete a full airspace change proposal. In this instance, that is not the intention.	N/A
Operations - Hours / time of day unreasonable / nuisance	Estates Ltd	No	Trial will operate between 0900 - 1700, Monday to Friday, as per Appendix: Trial Plan. This aims to mitigate impacts (noise and airspace access) compared to operating evening / weekends.	N/A
Operations - Hours should be limited to a few hours mid-day, weekdays only	P and C S	No	Trial will operate between 0900 - 1700, Monday to Friday, as per Appendix: Trial Plan.	N/A
Operations - Impact of traffic from Bembridge Airport to Goodwood Airport	Bembridge Airport	No	Both Bembridge and Goodwood are outside of the proposed TDA, which has been designed to designed to avoid common operating procedures at these airfields. As per Figure 8 there is a flow of traffic to / from Bembridge to the East Wittering / Selsey area, which could continue to be used for access to / from Goodwood Airport.	N/A
Operations - LoAs to be updated	Babcock: Hampshire and Isle of Wight Air Ambulance	No	Will be reviewed and updated, if necessary, based on the final proposal.	N/A

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - No agreed standard operating procedures	Bembridge Airport	No	TDA is designed to avoid common operating procedures at neighbouring airfields, to reduce risk to aircraft whilst in climb / descent. Therefore, no new standard operating procedures required for access to / from neighbouring airfields. Standard operating procedure for other airspace users within the proximity of the TDA would be to fly above or around, as with any other restricted airspace.	N/A
Operations - Should have a substantial minimum flying height	P&C S	Yes	Aircraft will be at high altitude (the TDA ceiling is 600ft AGL), therefore, operating at between 400 and 500ft AGL. Operating below 600ft allows us to minimise impact on other airspace users (especially for users in proximity to TDA B (the main TDA section) who have to be higher over the sea to allow a safe glide height back to land, in emergencies). Increasing the operating height of the UAS would require an increase in the TDA height which would have unreasonable impacts on other airspace users. No change to TDA design.	No
Operations - Summer months would impact paragliding	Butterfly Paragliding	No	The UAS' need to operate in fair weather. Operating over the summer increases the chance of fair weather and acceptable flying days. Therefore, May - November has been selected, which includes some contingency periods. Operating over winter (October - March, for example) would decrease fair weather days, and cause significant operational impacts to the trial.	N/A
Operations - Wish to tactically deconflict military traffic	Ministry of Defence – Defence Airspace and Air Traffic Management (MoD DAATM)	No	A LoA is not required with the MoD due as the TDA section A was previously moved east to avoid Thorney Island. Whenever safe to do so, precedence will be given to high priority traffic's movements. Direct telephone number will be provided.	N/A
Operations - Would like a direct number for tactical coordination	Southampton Airport ATC	No	Will be provided.	No

Theme “You said”	Stakeholder(s)	Potential impact the design	Rationale “We did”	Design change
Operations - Would like a minimum cloud base to be published	PDG Helicopters (Railtrack Survey)	No	There is no proposed minimum cloud base. However, activation will be limited to suitable days for the purpose of that day's trial / activities.	N/A
Safety - Avoiding UAS increases complexity and safety risk for paragliders / hang gliders	Butterfly Paragliding	No	TDA is being implement as per the requirement for BVLOS operations. TDA should increase safety for other airspace users by segregating trial traffic.	N/A
Safety - General Aviation traffic may not have radio nor conspicuous	Bembridge Airport	No	Activating the TDA will be by NOTAM with a minimum of 24-hours' notice. Airspace users not involved in the trial, will not have access to the TDA with or without a radio / conspicuity. Other airspace users are able to operate as normal outside of the activated TDA.	N/A
Safety - How will the UAS respond if it encounters a shipborne transmitter?	Ministry of Defence – Defence Airspace and Air Traffic Management (MoD DAATM)	No	UAS will alert the pilot if a shipborne automatic identification system (AIS) is on the map. Therefore, the pilot is aware of vessel location and will avoid ground-based hazards (e.g. ships). Cannot directly detect transponders but can pick up radar rebroadcast repeats and ADS-B.	N/A
Safety - Insufficient information provided about risk mitigation	Bembridge Airport	No	The OSC will be submitted and reviewed by the CAA.	N/A
Safety - Must maintain a safe distance vertically and horizontally from large ships	Ministry of Defence – Defence Airspace and Air Traffic Management (MoD DAATM)	Yes	Aircraft will be at high altitude (the TDA ceiling is 600ft AGL), therefore, operating at between 400 and 500ft AGL. Thus, avoiding the moving ground risk of tall ships. No change to TDA design.	No
Safety - Pilots may not be aware of TDA activity	UK Airprox Board (UKAB)	No	Activating the TDA by NOTAM is the required means of communicating the activity. Furthermore, UAS will have ADS-B, allowing the exact location of the UAS to be located. Voluntary dissemination of NOTAM to all airfield users, by airfield operator, could help interpretation but outside of scope of Skylift UAV Ltd.	N/A

Theme "You said"	Stakeholder(s)	Potential impact the design	Rationale "We did"	Design change
Safety - Primary method of raising awareness is only NOTAMs	Bembridge Airport	No	Activating the TDA by NOTAM is the required means of communicating the activity. Furthermore, UAS will have ADS-B, allowing the exact location of the UAS to be located. Voluntary dissemination of NOTAM to all airfield users, by airfield operator, could help interpretation but outside of scope of Skylift UAV Ltd.	N/A
Safety - Unnecessary danger area increases complexity and safety risk for paragliders / hang gliders	Butterfly Paragliding	No	TDA is being implemented as per the requirement for BVLOS operations. TDA should increase safety for other airspace users by segregating trial traffic. Activating the TDA will be by NOTAM with a minimum of 24-hours' notice.	N/A
No comment No impact on operations Support the trial	Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK); Babcock: MCS Onshore; Babcock: Hampshire and Isle of Wight Air Ambulance; British Gliding Association (BGA); Chichester and District Model Aero Club (CADMAC); Farnborough Airport Ltd; NATS; National Grid Electricity Transmission UK; PDG Helicopters (Railtrack Survey); Southampton Airport ATC	No	No impact on TDA design or operating procedures.	N/A

4.4.2 Second Engagement Period: Design Changes

As a result of stakeholder feedback received during the second engagement period, there were no changes made to the TDA design.

4.5 Design Changes Resulting from Operational Feedback from the CAA, 2025

Following on from the second engagement period, the CAA's *UAS Sector* subsequently advised a further reduction in the ground risk or increased mitigation(s). This has resulted in a significant change to the design. In summary:

- TDA A (in the Chichester Harbour area), TDA C (over the Isle of Wight) and H Stub (on the Isle of Wight) have all been removed.
- F Stub (near Southsea) has been absorbed into TDA B over the Solent.

The significant increase in required mitigations has meant that it was no longer operable to avoid both the protected areas and high ground risk areas such as marinas and activities sites, within TDA A. Therefore, this section had to be removed and the landing / take-off site near Chidham will no longer be used.

The H Stub was designed to provide access to the landing site (a field) located within a built-up area surrounding St Mary's Hospital (Newport, Isle of Wight). Once again, this was no longer deemed operable. Skylift UAV Ltd looked at an alternative landing site on the Isle of Wight. Whilst the site was contained within the design engaged on in the first engagement period (Figure 1), it was partially outside the design engaged on in the second engagement period (Figure 4) and would require further engagement as it could change the impacts on stakeholders. To maintain timelines, allowing Skylift UAV Ltd to operate May – October 2025, further engagement was considered unfeasible. Therefore, the new potential landing site was considered inoperable leaving Skylift UAV Ltd with no viable landing / take-off site on the Isle of Wight. Without a landing / take-off site on the island, there was no requirement for a TDA section over the island. As a result, both TDA C and the H Stub were removed from the design.

As the only landing / take-off site remaining, the F Stub would now always be activated to allow access to the TDA section over the water. Therefore, this was absorbed into the main TDA shape.

The final design is shown in Figure 6 and described in Table 6.

Although these design changes were not because of stakeholder feedback, the changes mentioned above do directly relate to several feedback points. These are summarised in Table 5. Additionally, these changes address the main reasons for stakeholders objecting or strongly objecting to the proposal (as per Second Engagement Period: Stakeholder Feedback). Specifically, these are: the impact on wildlife; aircraft nuisance to ground based stakeholders; and impact on other airspace users.

Table 5 - Link Between the TDA Design Change and Previously Received Feedback

Feedback Theme	Impact as a Result of Changes to the TDA
Impact on populations overflowed (noise; commercial implication; property values)	The removal of TDA A, C and H Stub has significantly reduced the amount of land overflowed, and therefore, the impact of populations overflowed.
Environmental impacts on wildlife / designated landscapes within the TDA	The Special Protected Area and RAMSAR sites on the Isle of Wight and within Chichester Harbour will no longer be overflowed. Solent Maritime Special Area of Conservation is still within the TDA, mitigations will remain in place.
Legal access to land and landowners' airspace	The removal of TDA A, C and H Stub has significantly reduced the amount of land overflowed, removing the potential legal implications of overflight individual's property and / or airspace.
Impact on other airspace users (access to / from airfields; flight paths)	The removal of TDA A provides easier routings between Bembridge Airport and Goodwood Airport. No impact was expected for operations into / out of Lee-on-Solent, Barton Estate, Bembridge or Sandown, as the design intentionally avoided their standard routings, this has not changed. The TDA is considerably smaller, and away of a major GA flow around the Isle of Wight, therefore, reducing the impact on their operating activities. The removal of the H Stub moves the TDA further from Solent CTA.

It should be noted that the feedback responses in Table 3 and Table 4 remain valid and correct at the time of the engagement. Therefore, they remain within this document to correctly reflect the design story. Table 5 has been created to highlight the stakeholders' points which are additionally addressed by the changes made because of the CAA's advice.

4.6 Final TDA Design

The final design is shown in Figure 6 with further supporting textual information and the geometrical details provided in Table 6. This also constitutes the draft Aeronautical Information Circular (AIC). The TDA consists of one section. The TDA will be notified for activation, by NOTAM, no less than 24-hours prior to the planned flights.

This design will provide sufficient airspace in which to safely accommodate flying operations for the trial whilst imposing minimal impact on other airspace users.



Figure 6 - Final TDA Design

Table 6 – Details of Final TDA Design

Point	Latitude	Longitude	Activation Height (AGL)	Activation Altitude (AMSL) ¹⁵
A	50°47'00"N	000°56'10"W	surface – 600ft	surface – 600ft
B	50°46'10"N	000°54'50"W		
C	50°44'20"N	001°12'30"W		
D	50°45'05"N	001°13'25"W		
E	50°46'20"N	001°02'30"W		
F	50°47'20"N	001°02'20"W		
G	50°47'25"N	001°01'40"W		
H	50°46'30"N	001°01'00"W		

The initial design (Figure 1) included multiple landing / take-off sites which were envisaged to allow for representative flying operations using point-to-point routings or multi-point routes. Although the final design contains only one landing / take-off site, multiple route options may still be flown within the TDA. Furthermore, this does not impact the sensor network.

Skylift UAV Ltd will continue to undertake regular engagement with stakeholders during the six-month trial and report any complaints to the CAA.

¹⁵ UAS will operate up to 600ft AGL. AMSL would be calculated by adding 100ft to the highest point on the ground. However, in the final design, there is no ground elevation and therefore AGL and AMSL are the same.

5. Impacts

5.1 Noise from Operations within the Trial

Day flights (0700 – 2300) are normally presented with 65dBA L_{max} footprints, and night flights (2300 – 0700) with 60dBA L_{max} footprints. As per Item 4 of the Assessment Meeting ^(Ref 8) noise metrics “can be scaled down if the sponsor believes that the trial presents minimal noise impact”. Therefore, Skylift UAV Ltd believe reduced requirements are appropriate because:

- As per the Appendix: Trial Plan, there will be a maximum of 7-weeks of flying, Monday to Friday, between 0900 – 1700. There will be no weekend flying.
- Whilst there is likely to be six to eight flights per operating day¹⁶.
- The landing / take-off site has been agreed with the landowners and are rural locations.
- The majority of the TDA is over water, therefore not creating overflight noise nuisance for residents.
- UAS will cruise at 400ft AGL.
- TDA ceiling is 600ft AGL. Therefore, very little impact on crewed aviation, except possibly upwards (see Operational Impacts on Other Airspace Users and Noise from Other Airspace Users).

Consequently, it is deemed disproportionate to produce noise footprints based on the duration and impact of the proposed trial.

Spot noise metrics for two UAS have been assessed. Using the equation provided in CAP1616i ^(Ref 18) (transcribed below) the UAS’ noise at 350ft (below the minimum cruise height of 400ft) have been calculated¹⁷ and are presented in Table 7.

The V23 UAS is expected to be the most frequently used UAS within the trial, whilst the FB3 UAS is expected to be the loudest. It is expected that other UAS will be used during the trial period, but it is believed that assessing the most frequent and loudest UAS offer a representative assessment of the noise impacts.

$$LAS_{maxh} = LAS_{max} + 20 \times (\log_{10} \left(\frac{Rh}{h} \right))$$

Table 7 - Noise Metrics per UAS

UAS	LASMAX	Equation Used	LASMAX350 (dB)	LASMAX350 + 10dB tonal correction (dB)
V23	47.55	=47.55+(20*log10(150/350))	30.19	40.19
FB3	54.05	=54.05+(20*log10(328/350))	53.49	63.49

The results above show that, including the tonal correction, both UAS are within the recommended 65dB noise threshold for daytime operations.

¹⁶ This is an increase from “four return flights per day” as per the first engagement period ^(Ref 6). This increase allows Skylift UAV Ltd to maximise the benefit of activating the TDA.

¹⁷ Notes on the calculation:

- The measured LASmax will be in excess of 15dB of the ambient noise recorded.
- Rh is the height of the UAS when the sound pressure level reading was taken. H is the maximum height.

CAP1616 ^(Ref 1) requires equivalent footprints that illustrate where the traffic would have flown if they had not been participating in the trial. However, there is no current operation, and without the trial the UAS would not operate. Therefore, no comparison footprint is available. Appendix: Trial Plan explains the expected frequency and timing of flights. As the operation is being set up for the purposes of the trial, there are no alternative routings / options, therefore 100% of associated traffic will operate within the bounds of the trial airspace. Figure 6 shows the TDA which all trial activities will operate within, this can be used as a substitute to a swathe for the trial flights.

5.2 Operational Impacts on Other Airspace Users

The trial aims to minimise operational impacts on other airspace users.

The upper limit of the proposed TDA is 600ft AGL, which is outside of reliable radar coverage. Therefore, is not possible for Skylift UAV Ltd to obtain radar data information for non-transponder equipped aircraft in this area. Plane Finder ^(Ref 19) data has been used to quantitatively describe the extant traffic patterns¹⁸. Plane Finder uses ADS-B technology to source their data, and it is recorded in feet AMSL. However, aircraft do not have to broadcast their position via ADS-B, therefore, this data is as comprehensive as practical but may not be a complete picture of all traffic in the airspace.

Table 8, Figure 7 and Figure 8 summarise the traffic movements in the proximity of the proposed TDA. The data set is a rectangle intentionally greater than the TDA proposed during the second engagement period (Figure 4). The flight paths, in Figure 8, show the breadth of the data set. Similarly, the data set is 0 – 2,000ft AMSL, which is intentionally higher than the TDA heights proposed. This larger (breadth and height) data set has been included due to those aircrafts' proximity to the proposed TDA and the potential of this ACP to change their traffic patterns as they may choose to: fly higher (to maintain a preferred distance from the TDA); avoid the area entirely; or take a longer route to avoid the area.

Table 8 shows the traffic movements for the 12-months from April 2023 to March 2024. This is the most recent full (financial) year and provides insight into changes in traffic over the 6-month trial period from May to October. It is the same data set used in the second engagement period¹⁹ and deemed to still be representative.

¹⁸ Erroneous rows have been removed from the data set.

¹⁹ Notably, the narrative in the second engagement information was based on 900ft AMSL, which was the heights part of the TDA proposed at that time. The highest part of the final proposed TDA (Figure 6 / Table 6) is only 600ft AGL / AMSL as there is no ground elevation. Therefore, the narrative within this document focuses on 600ft AMSL, not 900ft AMSL.

Table 8 - Traffic Count per Month (Financial Year 2023 - 2024)

Month	Traffic Count
April 2023	1,000
May 2023	1,325
June 2023	1,220
July 2023	946
August 2023	1,216
September 2023	1,241
October 2023	927
November 2023	552
December 2023	708
January 2024	625
February 2024	344
March 2024	560
Full year	10,664

August is considered a representative busy summer month and could be used for further analysis of the impacts. Although 2023 / 2024 is the most complete full financial year, August 2024 is the most up to date busy month, and therefore, has been used for detailed analysis. Figure 7 depicts the vertical distribution of aircraft for August 2024. Traffic at / below 599ft (AMSL) are shown in green (this represents the traffic which would be within the height of the proposed TDA) and the aircraft at / above 600ft (AMSL) are shown in pale pink (this traffic would be above the proposed TDA). It shows that 14% of traffic below 2,000ft AMSL, were within the altitude bands of the proposed TDA. It should be noted that some aircraft will be represented more than once, as they climb and descend, whilst others could be cruising through the airspace.

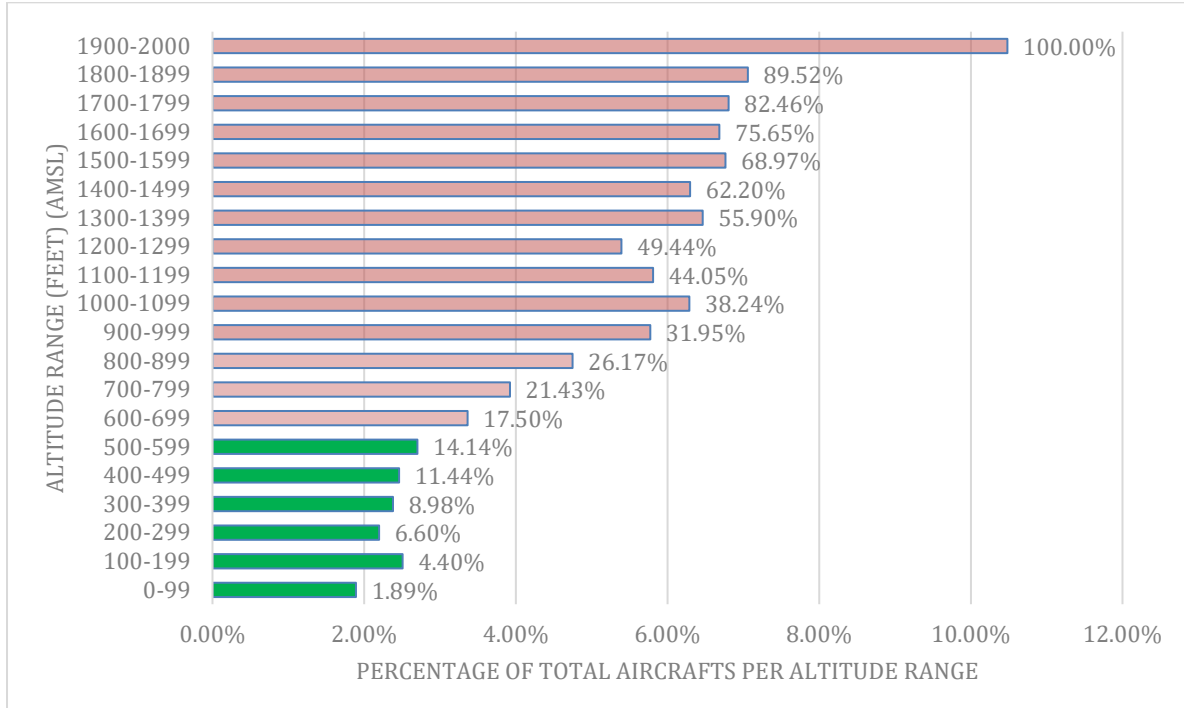


Figure 7 - Aircraft Count by Altitude Range for August 2024 with Cumulative Percentage Label

29th August 2024 was the busiest traffic day of the month and can be used to show representative traffic flows. Figure 8 shows the horizontal flight path (magenta lines) of aircraft for 29th August 2024, with the proposed TDA overlaid.

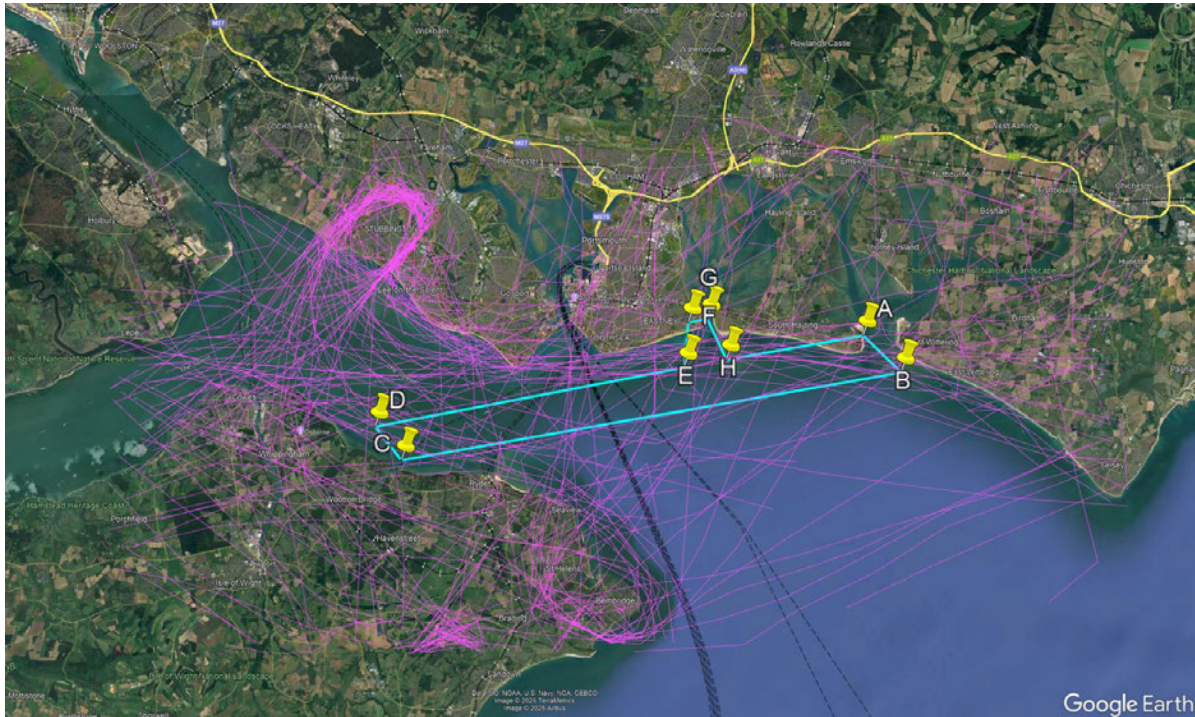


Figure 8 – Flight Paths 29.08.2024

It shows that a significant amount of the traffic is flying in areas outside of the proposed TDA. This is to be expected as the proposed TDA avoids neighbouring airfields' standard arrival and departure routings. Therefore, there should be minimal impact on their climb / descent. Furthermore, to aid navigation, the TDA is a uniformed shape to minimise the number of latitude / longitude points to make them easier for other traffic to manage. Additionally, the majority of the TDA is over the Solent, where crewed aircraft should be higher to allow a safe glide height back to land, in emergencies.

The flows from Cowes to Ryde (along the Isle of Wight coast) and Southsea to East Wittering (along the mainland coast) would be most impacted by the proposal. This traffic would have to fly above or around the proposed TDA. Whenever safe and practical, priority will always be given to high priority traffic.

SUACS will not be provided as part of this ACP. Based on output from previous trials, alongside engagement with local ATC services, it was not deemed proportional to provide a SUACS. As noted in the SARG Policy 133 ^(Ref 16), permanent TRAs and associated SUACS are notified in the AIP which is not applicable for this trial.

The previous engagement material contained the phrase *"collapse the airspace"* to describe a situation where the TDA could be cleared of UAS, as quickly and safely as operable, to allow the transit of high priority vehicles. This will still be the case and high priority traffic, such as military or emergency services, will be given priority over traffic participating in the trial. The TDA will not be "collapsed" to provide access to other vehicles.

5.3 Noise from Other Airspace Users

As noted above, it is expected that the number of impacted aircraft would be minimal, and some of these aircraft would likely opt to go above the TDA rather than around. Therefore, the noise from

other airspace users, operating in the vicinity of the TDA, will likely decrease as some aircraft would be operating higher.

5.4 Other Environmental Metrics

This ACP does not include any further environmental assessments, such as local air quality or fuel burn, as these are anticipated to be negligible for a short-term trial. This is corroborated and in accordance with CAP1616 ^(Ref 1) guidance.

5.5 Impact of Other ACPs

Skylift UAV Ltd are aware of other ACPs in the proximity of this trial, these are expected to not impact this trial as they are not planned to be implemented until after the trial operating period ends.

6. Safety Assessment

Two safety assessments were considered for this airspace trial, as outlined below.

6.1 Uncrewed Air Systems Operations

Skylift UAV Ltd, the UAS operator, have completed an OSC, which has been shared with the CAA for approval. Safety measures include but are not limited to trained staff operating BVLOS activities; communication with other airspace users for activation of the TDA; and to provide access to high priority traffic.

6.2 Solent CTA Buffer Zone

At the time of the Assessment Meeting ^(Ref 8), CAA policy required 3nm between a CTA and other activities. This would have required additional safety work / mitigations due to the proximity of the Solent CTA to the most westerly parts of the proposal (as per Figure 1). However, SARG Policy 133 ^(Ref 16) was published in February 2024 which reduced the buffer to 1nm, removing the need for additional mitigations. Having said that, Skylift UAV Ltd have still actively engaged with Southampton ATC to make sure they are aware of and happy with the trial. As per their engagement response, they have no concerns, therefore, no additional safety work is required.

It is worth noting that the final TDA design (Figure 6) is significantly further than 1nm from the Solent CTA.

7. Next Steps and Summary

7.1 Next Steps

As noted in Appendix: Trial Plan, Skylift UAV Ltd aim for the trial to be operational from May 2025. In the meantime, the following activities remain to be completed:

- This ACP needs to be approved by the CAA.
- RoA to be finalised.
- Complete AIC submission.

7.2 Summary

This document aims to provide the evidence to satisfy the Stage 4 Submit Gateway, for an airspace trial as per CAP1616 ^(Ref 1). Several changes were made to the design initially proposed (Figure 1) because of feedback from the first engagement period and operational / safety reasons. There were no changes because of the second engagement period. Significant changes were then made for operational / safety reasons. The final design can be found in Figure 6 and described in Table 6. Upon approval, the trial will operate from May to October 2025, as described in Appendix: Trial Plan.

8. Appendix: Trial Plan

8.1 Trial Aims and Success Criteria

This trial will be considered a success when as many of the aims, in Table 9, as possible have been achieved based on the presented success criteria.

Table 9 - Success Criteria for Trial and Summarised Trial Aims

Aim (Summarised from Chapter 1.1 (Summary of Project))	Success Criteria
Perform live flying trials with increasing complexity of flying from single operator / aircraft to multiple operators / aircraft.	Successfully completed at least one sortie with multiple operators, within the TDA, at the same time.
Gather operational evidence testing the available detect and avoid (DAA) solutions.	Fly within the TDA to allow the sensor network to pick up cooperative movements, whilst sharing flight planes with the Solent Transport Air Traffic Data Team for cross-referencing.
Test and develop operational procedures for multiple aircraft type and / or multiple operators, whilst capturing lessons learned and enhancing risk mitigation throughout the trials.	Successfully completed at least one sortie with multiple aircraft, within the TDA, at the same time. Successfully completed at least one sortie with multiple operators, within the TDA, at the same time.
Introduce a network of sensors, allowing for situational awareness of cooperative and non-cooperative air traffic in the Solent region, whilst testing of sensors to determine network density for each sensor type.	The sensory network detects a crewed aircraft that would have otherwise been invisible (e.g. they are operating below standard radar height and not fitted with electronic conspicuity) to the UAS operator.
Test the capabilities of a 4-dimensional (latitude, longitude, height, and speed) flight booking system.	The Unmanned Aircraft System Traffic Management (UTM) functions effectively, including the booking system and the inter-operator communications.

8.2 Before and After Descriptions, Noise Impacts and Stakeholder Engagement

There is no current operation, and without the trial the UAS would not operate and the TDA would not exist, further details of the current operational environment can be found in chapter 5.2 (Operational Impacts on Other Airspace Users). The noise impacts of the trial can be found in chapters 5.1 (Noise from Operations within the Trial) and 5.3 (Noise from Other Airspace Users) and Appendix: Noise Assessments. Stakeholder engagement can be found in chapter 4 (Design Evaluation and Stakeholder Engagement).

8.3 What the Trial Involves

It is essential that multiple operators with different objectives and procedures can fly in the same airspace in a safe manner. This is particularly true of emergency services operators with a wide range of aircraft and operational needs. The TDA will support the most complex scenario whereby teams from the emergency services operate in complex multi-operator flight trials alongside a commercial

operator. It is worth noting that the chosen emergency services teams are the drone innovation unit for their national bodies. This ensures any learnings will be disseminated to other relevant drone departments within these organisations. The gathering of this operational experience will further the CAA's future airspace roadmap and convince the public of the safety and viability of logistics applications for UAS.

This trial will build evidence and experience in support of the CAA's ambition to migrate BVLOS operations from segregated airspace to non-segregated airspace, as outlined under the Airspace Modernisation Strategy ^(Ref 5).

The TDA will be used as an opportunity to test the available detect and avoid (DAA) solutions to support the route to approval with the CAA. To achieve this, Skylift UAV Ltd will collect and monitor air traffic data across the Solent area. For this trial a network of sensors will be in operation to allow for situational awareness and to allow radar-type data to be gathered, across the TDA. This will provide operational experience in an incremental way, which can be used to support future operations and airspace strategies.

Table 10 provides details of what activities occur within each period of the trial. Trials will run sequentially, however, to allow for planned non-operational days and other events, it is not the case that flying days will run continuously. Furthermore, flexibility in terms of flying days and periods will be required to account for weather, failed sorties, or other unplanned factors.

Flying days will be spread across the six-month trial period, from May to October 2025. During the trial, the expected operating hours of the airspace will be Monday to Friday, between 0900 and 1700. The airspace will be activated by NOTAM with at least 24 hours' notice. All trials will operate BVLOS²⁰; one or more of the Skylift V23 / Flying Basket FB3 / HD-606 aircraft will be flown; and the full TDA shape and height (surface – 600ft AGL) will be activated.

²⁰ The ACP Issue 1 ^(Ref 7) had noted VLOS activities as the first week's activities. For operational reasons, the trial plan has been updated so that all phases of the trial are expected to include BVLOS activities.

Table 10 – ACP Trial Plan: May to October 2025

Week	Trial Number ²¹	Purpose and Additional Details
Week commencing: 12/05/2025 Activation period: Monday to Friday 0900 – 1700	1	Testing communications, whilst increasing flight distance incrementally from take-off site until midway across the Solent. Aim of this trial is check communications connection across the entire TDA in preparation for crossing the Solent. Opportunity for multiple short flights within the activation period.
	2	Testing communications, whilst increasing flight distance incrementally from take-off site until midway across the Solent. Aim of this trial is check communications connection across the entire TDA in preparation for crossing the Solent. Opportunity for multiple short flights within the activation period.
	3	Testing communications, whilst increasing flight distance incrementally from take-off site until midway across the Solent. Aim of this trial is check communications connection across the entire TDA in preparation for crossing the Solent. Opportunity for multiple short flights within the activation period.
	4	Testing communications, whilst increasing flight distance incrementally from take-off site until midway across the Solent. Aim of this trial is check communications connection across the entire TDA in preparation for crossing the Solent. Opportunity for multiple short flights within the activation period.
Week commencing: 09/06/2025 Activation period: Monday to Friday 0900 – 1700	5	Single aircraft BVLOS flights across the Solent. The aim of this trial is a full systems test at the usable range for each aircraft type. Opportunity for multiple short flights within the activation period.
	6	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of the same type. Opportunity for multiple short flights within the activation period.
	7	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of different types. Opportunity for multiple short flights within the activation period.
Week commencing: 23/06/2025 Activation period: Monday to Friday 0900 – 1700	8	Introduction to multiple operators flying which could include University of Southampton and / or emergency services. Opportunity for multiple short flights within the activation period.
	9	Single aircraft BVLOS flights across the Solent. The aim of this trial is a full systems test at the usable range for each aircraft type. Opportunity for multiple short flights within the activation period.
	10	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of the same type. Opportunity for multiple short flights within the activation period.
	11	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of different types. Opportunity for multiple short flights within the activation period.
Week commencing: 14/07/2025 Activation period: Monday to Friday	12	Introduction to multiple operators flying which could include University of Southampton and / or emergency services. Minimum of three return flights within the activation period. Multiple aircraft will participate in each flight.
	13	Single aircraft BVLOS flights across the Solent. The aim of this trial is a full systems test at the usable range for each aircraft type. Minimum of three return flights within the activation period.

²¹ In some instances, multiple trials can take places within one operating week. In other instances, a trial will take multiple days to achieve and, therefore, there is only one trial per week. It should be noted that one trial per week does not imply only one day of operation, and it should be assumed that the TDA will be active Monday – Friday 0900 – 1700 every operating week.

Week	Trial Number ²¹	Purpose and Additional Details
0900 – 1700	14	Multiple aircraft will participate in each flight.
	15	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of the same type. Minimum of three return flights within the activation period. Multiple aircraft will participate in each flight.
	16	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of different types. Minimum of three return flights within the activation period. Multiple aircraft will participate in each flight.
Week commencing: 11/08/2025 Activation period: Monday to Friday 0900 – 1700	17	Introduction to multiple operators flying which could include University of Southampton and / or emergency services. Minimum of three return flights within the activation period. Multiple aircraft will participate in each flight.
	18	Single aircraft BVLOS flights across the Solent. The aim of this trial is a full systems test at the usable range for each aircraft type. Minimum of three return flights within the activation period. Multiple aircraft will participate in each flight.
	19	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of the same type. Minimum of three return flights within the activation period. Multiple aircraft will participate in each flight.
	20	Multi aircraft BVLOS flights across the Solent. The aim of this trial is full systems and procedures test for multiple aircraft of different types. Minimum of three return flights within the activation period. Multiple aircraft will participate in each flight.

9. Appendix: Stakeholder List

Table 11, identifies each stakeholder and:

- when they were added to the stakeholder list and why
- whether they responded or not and if so, to which engagement round (first, second, or both)
- if their response resulted in a change to the final design.

For ease, those stakeholders that responded have been highlighted in blue.

Table 11 – Stakeholder List for Engagement

Stakeholder	Stakeholder since	Rationale for inclusion	Response received	Subsequent design change
Aircraft Owners and Pilots Association (AOPA)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Airspace Change Organising Group (ACOG)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK)	Targeted stakeholder for first engagement period	NATMAC member	2 nd	No
Aviation Environment Federation (AEF)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Bembridge Airport	Targeted stakeholder for first engagement period	Local aviation stakeholder	1 st and 2 nd	Yes
British Balloon and Airship Club	Targeted stakeholder for first engagement period	NATMAC member	No	No
British Business and General Aviation Association (BBGA)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Barton Estate	Added during first engagement period	Responded to first engagement	1 st	Yes
Barton Estate Association	Added during first engagement period	Responded to first engagement	1 st	No
British Gliding Association (BGA)	Targeted stakeholder for first engagement period	NATMAC member	2 nd	No
British Helicopter Association (BHA)	Targeted stakeholder for first engagement period	NATMAC member	2 nd	No
British Microlight Aircraft Association (BMAA)	Targeted stakeholder for first engagement period	NATMAC member	No	No
British Skydiving	Targeted stakeholder for first engagement period	NATMAC member	No	No
Bristow Helicopters Ltd	Added during second engagement period	Responded to second engagement	2 nd	No

Stakeholder	Stakeholder since	Rationale for inclusion	Response received	Subsequent design change
Butterfly Paragliding ²²	Targeted stakeholder for first engagement period	Local aviation stakeholder	2 nd	No
Chichester/Goodwood Airport	Targeted stakeholder for first engagement period	Local aviation stakeholder	No	No
Chichester Harbour Conservancy	Targeted stakeholder for first engagement period	Overflowed by originally proposed TDA	1 st and 2 nd	No
Chichester and District Model Aero Club (CADMAC)	Targeted stakeholder for first engagement period	Local aviation stakeholder	1 st and 2 nd	No
Drone Major	Targeted stakeholder for first engagement period	NATMAC member	No	No
Estates Ltd	Added during first engagement period	Responded to first engagement	1 st and 2 nd	Yes
Farnborough Airport	Added during second engagement period	Responded to second engagement	2 nd	No
Fleetlands Heliport	Targeted stakeholder for first engagement period	Local aviation stakeholder	1 st	No
General Aviation Alliance (GA Alliance)	Targeted stakeholder for first engagement period	NATMAC member	1 st	No
Hampshire and Isle of Wight Air Ambulance ²³	Targeted stakeholder for first engagement period	Local aviation stakeholder	2 nd	No
Hampshire & Isle of Wight Wildlife Trust	Added during first engagement period	Responded to first engagement	1 st	No
Helicopter Club of Great Britain (HCGB)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Heliair (pipeline patrol)	Targeted stakeholder for first engagement period	Local aviation stakeholder	No	No
Helicentre (pipeline patrol)	Targeted stakeholder for first engagement period	Local aviation stakeholder	No	No
HM Coastguard, Solent Airport ²⁴	Targeted stakeholder for first engagement period	Local aviation stakeholder	1 st and 2 nd	No
HM Prison, Isle of Wight	Start of second engagement period	For their reference due to proximity of TDA to take-off / landing site in Stub H	No	No

²² In previous documentation this stakeholder had been identified as “Hand gliding (near to Little Atherfield)”. This has been updated to “Butterfly Paragliding” in line with their response.

²³ Babcock provided one response but stating their representation for two organisations. Therefore, their response has been counted as two stakeholders, but specific feedback attached to the relevant organisation, if applicable.

²⁴ Babcock provided one response but stating their representation for two organisations. Therefore, their response has been counted as two stakeholders, but specific feedback attached to the relevant organisation, if applicable.

Stakeholder	Stakeholder since	Rationale for inclusion	Response received	Subsequent design change
Honourable Company of Air Pilots (HCAP)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Isle of Wight Airport Sandown	Targeted stakeholder for first engagement period	Local aviation stakeholder	No	No
Kings Quay Nature Reserve	Added during first engagement period	Responded to first engagement	1 st	No
Lee-on-Solent Airport	Targeted stakeholder for first engagement period	Local aviation stakeholder	1 st	No
Light Aircraft Association (LAA)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Military Aviation Authority (MAA)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Ministry of Defence - Baker Barracks, Thorney Island	Targeted stakeholder for first engagement period	Overflowed by originally proposed TDA	2 nd	No
Ministry of Defence – Defence Airspace and Air Traffic Management (MoD DAATM)	Targeted stakeholder for first engagement period	NATMAC member	1 st and 2 nd	Yes
NATS	Targeted stakeholder for first engagement period	NATMAC member	1 st and 2 nd	No
National Grid Electricity Transmission UK	Targeted stakeholder for first engagement period	For their reference due to proximity of TDA and powerlines, especially around landing / take-off sites	2 nd	No
National Police Air Service (NPAS)	Targeted stakeholder for first engagement period	Local aviation stakeholder	No	No
Natural England	Start of second engagement period	Sites overflowed by proposed TDA. Adding Natural England is reflective of the inclusion of Royal Society for the Protection of Birds.	No	No
Navy Command HQ	Targeted stakeholder for first engagement period	NATMAC member	No	No
P and C S ²⁵	Added during second engagement period	Responded to second engagement	2 nd	No
PDG Helicopters (Railtrack Survey)	Targeted stakeholder for first engagement period	Local aviation stakeholder	2 nd	No

²⁵ This stakeholder responded as a private couple, not representing any organisation. For privacy reasons, only their initials have been used.

Stakeholder	Stakeholder since	Rationale for inclusion	Response received	Subsequent design change
Portsmouth Harbour	Targeted stakeholder for first engagement period	Overflowed by originally proposed TDA	No	No
PPL/IR (Europe)	Targeted stakeholder for first engagement period	NATMAC member	No	No
Royal Society for the Protection of Birds (RSPB) Langstone Harbour and Pagham Harbour ²⁶	Targeted stakeholder for first engagement period	Site overflowed by originally proposed TDA	1 st and 2 nd	No
Southampton Airport ATC	Targeted stakeholder for first engagement period	Local aviation stakeholder	1 st and 2 nd	No
Specialist Aviation Services (Children's Air Ambulance)	Targeted stakeholder for first engagement period	Local aviation stakeholder	No	No
UK Airprox Board (UKAB)	Targeted stakeholder for first engagement period	NATMAC member	2 nd	No
UK Flight Safety Committee (UKFSC)	Targeted stakeholder for first engagement period	NATMAC member	No	No

Table 12 explains which NATMAC members and other suggested stakeholders were not included as stakeholders and why.

²⁶ Previously this had been written as "Royal Society for the Protection of Birds (RSPB) Langstone Harbour". They were engaged and responded during the first engagement period. They were engaged again during the second engagement period, but a response came from a colleague based at "Pagham Harbour". The two sites have been considered as one stakeholder - the Royal Society for the Protection of Birds (RSPB) - and included together.

Table 12 – Rationale for Exclusion of Potential Stakeholders

Stakeholder	Identified Via	Rationale for Exclusion
Airlines UK	NATMAC	TDA is not in the same airspace that airlines operate.
Airport Operators Association (AOA)	NATMAC	Specific airports / airfields were added to stakeholder list for direct contact.
Airfield Operators Group (AOG)	NATMAC	Specific airports / airfields were added to stakeholder list for direct contact.
British Airways (BA)	NATMAC	TDA is not in the same airspace as airlines.
BAE Systems	NATMAC	Trial has no impact on their organisation's purpose.
British Airline Pilots Association (BALPA)	NATMAC	TDA is not in the same airspace as airlines.
Guild of Air Traffic Control Officers (GATCO)	NATMAC	Specific airports / airfields were added to stakeholder list for direct contact.
Isle of Man CAA	NATMAC	Out of scope of the impacted area.
Isle of Wight Council AONB	Suggested stakeholder	Isle of Wight Council are co-members of Solent Transport rather than separate stakeholders. Furthermore, Areas of Outstanding Natural Beauty are managed by Natural England, who have been added to the stakeholder list.
Local residents	Suggested stakeholder	Item 4, in the Assessment Meeting ^(Ref 8) requires Skylift UAV Ltd to "...engaging relevant stakeholders, namely airspace users, air navigation service providers and airports...". Therefore, it was considered out of scope to include local residents.
Low Fare Airlines	NATMAC	TDA is not in the same airspace as airlines.
Local MP – Mr Bob Seely	Suggested stakeholder	Item 4, in the Assessment Meeting ^(Ref 8) requires Skylift UAV Ltd to "...engaging relevant stakeholders, namely airspace users, air navigation service providers and airports...". Therefore, it was considered out of scope to include Local Members of Parliament.
National Grid Electricity Distribution (NGET)	Suggested stakeholder	Out of scope of the impacted area as they provide the electricity in East and West Midlands, Southwest and Wales.
Parish councils	Suggested stakeholder	Item 4, in the Assessment Meeting ^(Ref 8) requires Skylift UAV Ltd to "...engaging relevant stakeholders, namely airspace users, air navigation service providers and airports...". Therefore, it was considered out of scope to include parish councils.
United States Visiting Forces (USVF) HQ United States Country Rep-UK	NATMAC	Trial has no impact on their organisation's purpose.

10. Appendix: Noise Assessments

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Report - FTZ UAS Noise Metrics

Version	1.1
Date	Approved by
26/11/2024	
Author	
Review date	Name
17/05/2025	
Change Log	
V1 - Document written V1.1 Equation amended to correct equation	

Introduction

In this report, we present noise data for the flying basket FB3 and V23 airframes. The V23 is planned to be the most frequently used UAS in the trial, whilst the FB3 is deemed to be the loudest airframe that shall be used. This assumption is based on the guidance given in CAP1616I Chapter 11 figure 2 and section 11.5.

Due to the limitations of our authorisation we can only conduct the flight at a maximum of 330ft AGL to remain within the flight volume and a minimum of 150ft AGL due to the minimum distance allowed from uninvolved persons, and shall be using CAP1616I Chapter 11 Section 11.6 equation 2, to calculate the noise decay to provide a noise level at the planned lowest transit height of 350FT AGL.

The entire operation will be monitored and controlled via SkyFleet, Skylift's proprietary Ground Control System (GCS). This system allowed for precise management and coordination of the UAS during the test flights, ensuring that all parameters were adhered to and that the data collected was of high integrity.

FTZ UAS noise Data

Equipment used

SoundTEK ST-109R Class 1 Sound Level Meter



This equipment is a Class 1 Sound Level Meter which conforms to IEC 61672-1 and ANSI S1.4 Class 1 accuracy standard. Recordings were taken with A weighting following the IEC 61672:2003 standard

Test process

The flights for this report are carried out under optimal weather conditions conducive to the test's objectives. The wind speed during the tests will be under 5.1ms metres per second as recommended in CAP2501, and the test conducted away from external acoustic influences (Farm vehicles ,generators ETC). Following the guidance given in CAP 2506 Chapter 4 the test methodology will meet the following Criteria;

1. An initial Ambient noise reading is to be taken and recorded before the start of each flight
2. The SPL reading taken shall be in the format of LASmax with an A weighted reading
3. All reading shall be recorded as a raw number then have the 10dB tonal correction added.
4. The max continuous wind speed must not exceed 5.1ms
5. The microphone shall be mounted over soft ground (typically grass) at 1.2m above the ground
6. The measured LASmax will be in excess of 15dB of the ambient noise recorded.
7. The test flights will commence with the overfly starting at 100m with progressively

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31102024FTZ-TB

lower flybys conducted if the LASmax does not exceed 15dB of the ambient , This differs to the CAP recommendation due to the aforementioned restrictions with authorisations (flight volumes and contingency buffers)

- 8. The flight will be conducted in an autonomous flight mode
- 9. 2 passes will be conducted in opposite directions
- 10. GPS logs shall be used to identify the precise location of of the UAS over the microphone

Test Data

The test was conducted on the 30/10/2024 at Skylift UAV HQ . The test was conducted in a field with the Microphone sitting on a tripod at 1.2m above ground level. The microphone was placed on a grass field to comply with the recommendation in point 5 mentioned above and set to an A weighting .

Weather

Marston Lodge					
	Current	Daily Highs		Daily Lows	
Temperature	11 °C	11 °C	00:09	10 °C	06:34
Humidity	90 %	93 %	05:40	89 %	11:08
Heat Index	11 °C	11 °C	00:09		
THW Index	11 °C	11 °C	00:09	10 °C	06:09
Wind Chill	11 °C			9 °C	06:09
Dew Point	9 °C	10 °C	00:09	9 °C	07:20
Wet Bulb	10 °C			9 °C	06:34
Wind Speed	1 m/s	3 m/s	12:35		
Wind Direction	ESE 102°				
Wind	2 Minutes	10 Minutes			
Avg Wind Speed	2 m/s	1 m/s			
Wind Gust Speed	2 m/s	2 m/s			

The weather conforms with the maximum wind component requirement of 5.1ms as the maximum wind recorded was 2ms

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31102024FTZ-TB

Skylift UAV V23

The Skylift UAV V23 was set to autonomously fly over the microphone location in a circle model. This simulates the UAS in its highest propulsion state during the cruise. The UAS was set to fly at 20ms in a 100m radius. The heights were then reduced until the 15dB increase over the ambient requirement was met.

Ambient	Height (m) AGL	Overfly Horizontal distance from Microphone (M)	LASmax (upwind) dB	LASmax (Downwind) dB	Average (LASmax)	SPL increase over ambient dB	Average LASmax + 10dB tonal Correction
33	100	5.2	34.1	33.0	33.55	0.55	43.55
33	90	5.9	34.5	34.7	34.6	1.6	44.6
33	80	6.2	37.5	37.2	37.35	4.35	47.35
33	70	5.5	39.3	38.6	38.95	5.95	48.95
33	60	5.9	42.6	41.1	41.85	8.85	51.85
33	50	5.7	45.2	45.1	45.15	12.15	55.15
33	46	5.85	47.3	47.8	47.55	16.55	57.55

The results highlighted in Yellow do not meet the 15dB increase above ambient, however we have included them as they provide a full data set for the UAS.

Flying Basket FB3

Ambient	Height (m) AGL	Horizontal distance from Microphone (M)	LASmax (upwind) dB	LASmax (Downwind) dB	Average (LASmax)	Average + 10dB tonal Correction
31.1	100	2	53.9	54.2	54.05	64.05
31.1	90	2	54.6	54.8	54.7	64.7

Result analysis

Based on the minimum cruise height being 350ft in the ACP proposal, we can use the recorded data and the Equation listed in CAP1616I Chapter 11 Section 11.6 equation 2 to calculate the noise levels during transit.

UAS	LASMAX at highest point that 15dB difference was recorded	Equation used $LAS_{maxh} = LAS_{max} + 20 \times \log_{10} (R/h)$ (R=Height of UAS when SPL reading was taken)	LASMAX350 (dB)	LASMAX350 + 10dB tonal Correction (dB)
V23	47.55	$47.55 + (20 \times \log_{10} (150/350))$	30.19	40.19
FB3	54.05	$= 54.05 + (20 \times \log_{10} (328/350))$	53.49	63.49

The results above show that both UAS are within the Recommended 65dB noise threshold during day operations.

11. Appendix: Glossary of Terms

The following acronyms have been used within this document.

Table 13 – Glossary of Terms

Acronym/ Term	Meaning	Description
ACP	Airspace Change Proposal	A formal process by which changes to the design or structure of airspace are proposed and evaluated currently under CAP1616.
ADS-B	Automatic Dependant Surveillance - Broadcast	A surveillance technology and form of electronic conspicuity in which an aircraft determines its position via satellite navigation or other sensors and periodically broadcasts it, enabling it to be tracked.
AGL	Above Ground Level	The vertical distance between an aircraft or object, and the surface of the ground or terrain directly below it.
AIC	Aeronautical Information Circular	Aeronautical Information Circulars (AIC) are notices containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP.
AIS	Automatic Identification System	A surveillance technology and form of electronic conspicuity in which marine vessels determines its position via satellite navigation or other sensors and periodically broadcasts it, enabling it to be tracked.
AMSL	Above Mean Sea Level	The altitude or height above the average height of the oceans and seas.
ATC	Air Traffic Control	A service provided by air traffic controllers, to allow airspace users to safely pass through a specified volume of airspace.
BVLOS	Beyond Visual Line of Sight	A capability that allows UAS to be flown outside the pilot's direct visual range, typically relying on technology such as cameras, GPS, or sensors to navigate and observe the environment.
CAA	Civil Aviation Authority	UK Government regulatory body responsible for overseeing and ensuring the safety, security, and efficiency of civil aviation activities within the UK.
CTA	Control Area	Controlled airspace extending upwards from a specified limit to a specific upper limit.
DAA	Detect and Avoid	A system which enables operators to sense and avoid other aircraft and obstacles autonomously via sensors, such as radar, acoustic, and visuals.
DAATM	Defence Airspace and Air Traffic Management	Acts as the MoD representative organisation, in close collaboration with the CAA, within Europe. The DAATM interacts with NATO, European Aviation Safety Agency and the European Defence Agency to ensure that legislative developments regarding Airspace, ATM and Communication, Navigation and Surveillance requirements are known.
DACS	Danger Area Crossing Service	This is available for certain Danger Areas (or Temporary Danger Areas) and provides information such as whether the DA is active. These are now referred to as Special Use Airspace Crossing Service (SUACS).
dB	Decibel	A logarithmic scale extending from 0 to 140 dB corresponding to the intensity of sound pressure level.
ft	Feet	In aviation, ft are used for short distances. One foot is equal to 0.3048 meters. Feet are also used for altitude measurements below 18,000 feet.
	FLARM	Traffic awareness and collision avoidance technology for GA.
GA	General Aviation	Civil aviation operations other than commercial scheduled and non-scheduled air services. The most common type of GA activity is recreational flying by private light aircraft and gliders.
HISL	High-Intensity Stimulus Light	HISL visual acuity, refers to the UAS's camera ability to provide an accurate in bright light situations.

Acronym/ Term	Meaning	Description
High priority traffic		Throughout this document, the phrase “high priority traffic” has been used to describe military, search and rescue, air ambulance, policing, and fire services whilst on critical missions. These organisations operating non-critical activities (such as training flights) would not be considered high priority traffic.
LoA	Letter of Agreement	The purpose of a LoA is to define the co-ordination procedures to be applied between different aviation units/ authorities when providing ATS to General Air Traffic and/ or Operational Traffic.
MoD	Ministry of Defence	The UK Government department responsible for overseeing the United Kingdom’s defence and military affairs.
NATMAC	National Air Traffic Management Advisory Committee	A non-statutory advisory body chaired by the CAA; the NATMAC is consulted for advice and views on any major matter concerned with airspace management and strategy matters.
NATS		The air navigation service provider for the UK, formerly National Air Traffic Services.
nm	Nautical Mile(s)	A unit of measurement used in navigation and aviation, equal to one minute of latitude. It is approximately 1.15 statute miles or 1.85 kilometres.
NOTAM	Notice to Aviation	A notice containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure, or hazard. It will cover notifications of temporary information, or permanent information not yet included in the Aeronautical Information Publication.
OSC	Operational Safety Case	UAV operators must obtain authorisation from the CAA before carrying out operations in the Specific category. Examples of operations that require an OSC include dropping items from a UAV, flying beyond the visual line of sight (BVLOS) or flying close to crowds.
ROA	Record of Agreement	Similar to a LoA, a ROA is to define the co-ordination procedures to be applied between different aviation units/ authorities when providing ATS to General Air Traffic and/ or Operational Traffic.
Surface		In aviation, this indicates the lowest level of the atmosphere or the earth's surface where various meteorological and aviation phenomena are observed. This term is crucial for pilots and meteorologists in understanding weather conditions at the ground level.
SUACS	Special Use Airspace Crossing Service	The SUACS provider will, when the DA activity permits, provide a clearance for an aircraft to cross the DA under a suitable type of service. This service is not being included in this ACP.
TDA	Temporary Danger Area	These may be established at short notice around unusual aerial activity when it is considered that the activity associated with the incident could be hazardous to flight. TDAs will be notified by NOTAM.
UAS	Uncrewed Air Systems	The totality of everything that makes a UAV work. This includes its GPS module, ground control module, transmission systems, camera, software, and the pilot on the ground controlling the UAV. A UAV is a component of a UAS.
UAV	Unmanned Aerial Vehicle	A powered, aerial vehicle that does not carry a human operator, can fly autonomously, or be piloted remotely, can be expendable or recoverable, and can carry a payload.
UTM	Unmanned aircraft system Traffic Management	An air traffic management ecosystem under development for autonomously controlled operations of UAS. It incorporates concepts of operation, data exchange requirements, and a supporting framework to enable multiple UAS operations BVLOS.
VLOS	Visual Line of Sight	These operations require the UAS pilot to clearly see the unmanned aircraft and the surrounding airspace at all times while the UAV is airborne.