



Skyports

Skyports Limited

**Airspace Change – ACP-2022-001 – UAS BVLOS in Segregated Airspace
(Ipswich and South East Suffolk)**

Final Airspace Change Proposal and Stakeholder Engagement Summary Report

Version 2.1 – Dated: 06/03/2023

Amendment Record

Issue	Amendment	Date
v1.0	Initial Issue	19/05/2022
v1.1	Updated the coordinates of TDA B in Final Design (6.2.2)	27/06/2022
v1.2	Included additional information on route choices (6.1.1), frequency of flights (6.1.2), assessment of impact on traffic $\leq 7000\text{ft}$ (6.3) and noise impact (5.7, 6.3)	26/07/2022
v1.3	Updated the TDA design (size reduced) to cater for the new TOLPs (6.1, 6.2, 6.2.1, 6.2.2)	12/08/2022
v2.0	Updated the TDA design and included the summary of additional stakeholder engagement conducted between 1 Feb 2023 and 21 Feb 2023	23/02/2023
v2.1	Updated to include additional engagement evidence (4, 4.9, 4.11, 6.2, Appendix 8I, Appendix 8K) and the dates of operations (3.4.2)	06/03/2023

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If this document is updated following meetings with the Civil Aviation Authority (CAA) or for any other reason, the UAS Operator as Change Sponsor will publish a new version (redacted) on the CAA Airspace Change Portal for all to see. This is to enable the CAA to refer to the correct version if it needs to publish a determination of whether an airspace change is a relevant option to investigate.

Referenced documents

Document	Version	Version & Date	Source
DA/TDA Policy 20200721	CAA Policy for the Establishment of Permanent and Temporary Danger Areas	Version 1.0 21 July 2020	DA/TDA Policy 20200721
CAP1616	Airspace Change – Guidance on the regulatory process for changing the notified airspace design and planning and planned and permanent redistribution of air traffic, and on providing airspace information	Version 4 1 March 2021	CAP 1616
CAP1827	Beyond Visual Line of Sight (BVLOS) operations of unmanned aircraft systems (UAS) in unsegregated airspace: Sandbox brief	Version 1.0 1 August 2019	CAP 1827

Acronyms and abbreviations

ACP	Airspace Change Proposal
ADS-B	Automatic Dependent Surveillance-Broadcast
AGL	Above Ground Level
AFISO	Aerodrome Flight Information Service Officer
AIC	Aeronautical Information Circular
ALT	Altitude
AMSL	Above Mean Sea Level
ANSP	Air Navigation Services Provider
BVLOS	Beyond Visual Line of Sight
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CTR	Controlled Traffic Region
DA	Danger Area
DAA	Detect and Avoid
DAAIS	Danger Area Activity Information Service
DACS	Danger Area Crossing Service
ESA	European Space Agency
EC	Electronic Conspicuity
FIS	Flight Information Service
FLT	Flight
Freq	Frequency
GA	General Aviation
HEMS	Helicopter Emergency Medical Service
HESLO	Helicopter External Sling Load Operation
HLS	Helicopter Landing Site
NHS	National Health Service
MOD	Ministry of Defence
NOTAM	Notice to Aviation
LAT	Latitude
LONG	Longitude
LTD	Limited
POC	Proof of Concept
RA(T)	Restricted Area (Temporary)
RP	Remote Pilot
SFC	Surface
SIL	Source Integrity Level
TDA	Temporary Danger Area
TOI	Temporary Operating Instruction
UA	Unmanned Aircraft
UAS	Unmanned Aircraft System
UKSA	United Kingdom Space Agency
UTM	Unmanned Traffic Management
VFR	Visual Flight Rules

Glossary

Aeronautical Information Publication	Long-term information essential to air navigation, including the detailed structure of UK airspace and flight procedures, which forms part of the UK Integrated Aeronautical Information Package. Sometimes informally known as the Air Pilot. Publication is the responsibility of the CAA but is carried out under licence by NATS. www.ais.org.uk
Air navigation service provider	An organisation which operates the technical system, infrastructure, procedures, and rules of an air navigation service system, which may include air traffic control.
Airspace change proposal	A request (usually from an airport or air navigation service provider) for a permanent change to the design of UK airspace.
Airspace design	Together, the airspace structure and flight procedures.
Airspace change process	The staged process an airspace change sponsor follows to submit an airspace change to the CAA for a decision. The process includes actions associated with implementation and post-implementation review, after the CAA or, where applicable Secretary of State, decision.
Airspace Modernisation Strategy	A co-ordinated strategy and plan for the use of UK airspace for air navigation up to 2040, including for the modernisation of the use of such airspace, prepared and maintained by the CAA, incorporating the previous Future Airspace Strategy. It is a requirement of the Air Navigation Directions 2017. https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-ModernisationStrategy/Aboutthe-strategy/
Airspace structure	<p>Designated volumes of airspace within identified characteristics, including the equipment aircraft wanting to enter that airspace must carry and actions pilots must carry out before entering that airspace.</p> <p>The volumes of airspace are designed to ensure the safe and optimal operation of aircraft.</p> <p>Airspace structures consist of:</p> <ol style="list-style-type: none"> controlled airspace, namely control zones, control areas, terminal control areas and airways; airspace restrictions, namely danger, restricted and prohibited areas; radio mandatory zones, transponder mandatory zones; other airspaces specified by the CAA when defining the airspace change process, such as, for example, flight information zones, aerodrome traffic zones, temporary segregated areas, temporary reserved areas or free-route airspace.
Beyond Visual Line of Sight (BVLOS)	An operation in which the remote pilot or observer does not use visual reference to the remotely piloted aircraft in the conduct of flight.
Consultation	Formal process seeking input into a decision, undertaken in line with the Gunning Principles, and government guidance.
Danger Area	Airspace within which activities dangerous to the flight of aircraft may exist at notified times.

Design principles	The principles encompassing the safety, environmental and operational criteria and the strategic policy objectives that the change sponsor seeks to achieve in developing the airspace change proposal. They are an opportunity to combine local context with technical considerations, and are therefore drawn up through discussion with affected stakeholders.
Engagement	Catch-all term for developing relationships with stakeholders, covering a variety of activities including but not limited to consultation, information provision, regular and one-off meetings and fora, workshops and town hall discussions.
Feedback	Informal response to engagement – change sponsors may be expected to seek feedback from stakeholders in addition to formally consulting them.
Military operations	Operations undertaken by military aircraft, or military aerodromes.
Overflight	For the purposes of airspace changes, overflight is defined according to the CAA's report, CAP 1498 which outlines a measurement based upon community perception. It does not portray noise impacts. See www.caa.co.uk/cap1498 .
Portal	The CAA's airspace change portal – an online portal containing details of all current and previous airspace changes, including the ability to respond to consultations: https://airspacechange.caa.co.uk
Representative group	Stakeholder group that gathers together those with similar interests in a proposal. It could be at an industry level (for instance the Airport Operators Association), national level (for instance the Aviation Environment Federation) or local level (for instance HACAN).
Sponsor (or change sponsor)	An organisation that proposes, or sponsors, a change to the airspace design in accordance with the CAA's airspace change process.
Stakeholder	An interested third party in an airspace change or PPR proposal.
Statement of Need	The means by which the change sponsor sets out what airspace issue or opportunity it is seeking to address and what outcome it wishes to achieve, without specifying solutions, technical or otherwise.
Uncontrolled airspace	Airspace in which aircraft are able to fly freely through the airspace without being constrained by instructions in routing or by air traffic control, unless they require an air traffic control service.
Unmanned aircraft system (UAS)	An Unmanned Aircraft System (UAS) comprises individual 'System Elements' consisting of the Unmanned Aircraft (UA) and any other System Elements necessary to enable flight, such as a Remote Pilot Station, Communication Link and Launch and Recovery Element. There may be multiple UAs, RPS or Launch and Recovery Elements within a UAS.

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1 Introduction

Skyports (the change sponsor) is seeking to establish a Temporary Danger Area (TDA) complex during notified periods to enable safe UAS BVLOS operations for a medical delivery business trial operation. Skyports will operate unmanned aircraft (UA) to transport medical supplies, equipment, medical/pathology samples (including dangerous goods) and medicine to and from healthcare facilities in Ipswich and South East Suffolk. This airspace change will last no more than 10 weeks.

This project is jointly developed by the East Suffolk and North Essex NHS Foundation Trust (ESNEFT) and ERS Medical to trial a faster, more frequent and eco-friendlier means of medical delivery. In particular, they would like to explore the use of UAS to strengthen their existing healthcare services and logistic network, whilst reducing carbon footprint.

The CAA Policy for the Establishment of Permanent and Temporary Danger Areas – 20200721 (a scaled down version of CAP1616) includes a statutory obligation to engage aviation stakeholders and other relevant stakeholders and give due consideration to the potential positive and negative impacts of the change on the airspace users.

Following an Assessment Meeting with CAA Airspace Regulators on 9 February 2022 to discuss Skyports' Statement of Need, it was agreed that to facilitate the proposed UAS BVLOS operations, a TDA complex would be required. The proposals for which would be subject to a targeted aviation stakeholder engagement exercise in accordance with the CAA Policy for the Establishment of Permanent and Temporary Danger Areas.

Due to the delay in regulatory process, the implementation of this airspace change has been postponed to Q2 2023, and the operations are now scheduled for Q2 2023 in the latest proposal, subject to regulatory approval. To comply with CAA requirements, the proposed operations have also been scaled down from the original 4 routes to just one between Ipswich and Alderton. In this regard, a 3-week additional engagement was conducted between 1 February 2023 and 21 February 2023 to notify stakeholders of the changes and seek their comments on the latest proposal, as per the CAA's requirement. For details of the original proposal and the revised proposal following the first round of engagement, refer to the previous versions of the stakeholder engagement report.

2 Engagement Strategy and Methodology

2.1 Stakeholder identification

The aviation stakeholders Skyports engaged with are considered to be directly affected and potentially impacted, as well as those that would likely have an interest in the ACP. In particular, Skyports referred to the National Air Traffic Management Advisory Committee (NATMAC) to assist with the identification of relevant stakeholders. Prior to the engagement process, the CAA has reviewed the stakeholder list and suggested additional stakeholders for Skyports to engage. See [Section 6 - Stakeholders](#).

2.2 Engagement material

Skyports shared the engagement material containing details of the proposed airspace change with a map of the TDA. The engagement material also includes information about the proposed UAS operations. The materials containing technical information were presented in an accessible way as possible so as not to create a barrier to the provision of feedback.

2.3 Communications and Engagement

2.3.1 Initial Engagement (Feb 2022)

The engagement material was sent to the stakeholders via email and uploaded to the CAA Airspace Change Portal on 22 February 2022, i.e. the start of the engagement period.

Skyports wished to encourage a good level of engagement with the process from stakeholders. For this reason, reminder communications were provided by email on 20 April 2022 and 10 May 2022 to those that had not responded by these dates respectively.

A number of targeted stakeholders, especially those who may be subject to the TOI for deconfliction, were offered a briefing session which provides an opportunity for Skyports to explain the project in greater details, and the stakeholders to ask any questions regarding the airspace change proposal. The same was also offered to all stakeholders who have not responded by 10 May 2022.

2.3.2 Additional Engagement (Feb 2023)

The engagement material was sent to the stakeholders email and uploaded to the CAA Airspace Change Portal on 1 February 2023. A reminder email was issued to stakeholders on 18 February 2023. Targeted stakeholders who may be subject to the TOI for deconfliction were contacted separately in this round of engagement as well.

2.4 Feedback

Where stakeholders asked that we share their feedback in full with the CAA, Skyports has done this in this document and will share this information at the Step 3d – Collate & Review Responses stage of the ACP. Some feedback was anonymised as per the request by the stakeholder. Personal information of stakeholders will always be redacted when the responses are published on the Airspace Change Portal.

All feedback was collated and stored on Skyports secure server as a record of the activity and ready for sharing with the CAA when necessary.

Where stakeholders requested that Skyports keeps them up-to-date with progress of the airspace change and the final designs agree with the CAA, Skyports will do this at the soonest opportunity within the airspace change process.

3 Airspace Change Proposal

3.1 Version 1 – Original Proposal

Skyports presented the original proposal to the CAA during the Assessment Meeting with a TDA complex formed of 7 sections. The TDA complex was designed to minimise the impact on other airspace users in the area. When the UA is operating on a particular route, only the relevant sections will be activated. They do not need to be activated concurrently.

For details of this proposal, refer to stakeholder engagement material v1.0 and the previous version of the stakeholder engagement report.

3.1.1 Overview of the TDA Design (Version 1)

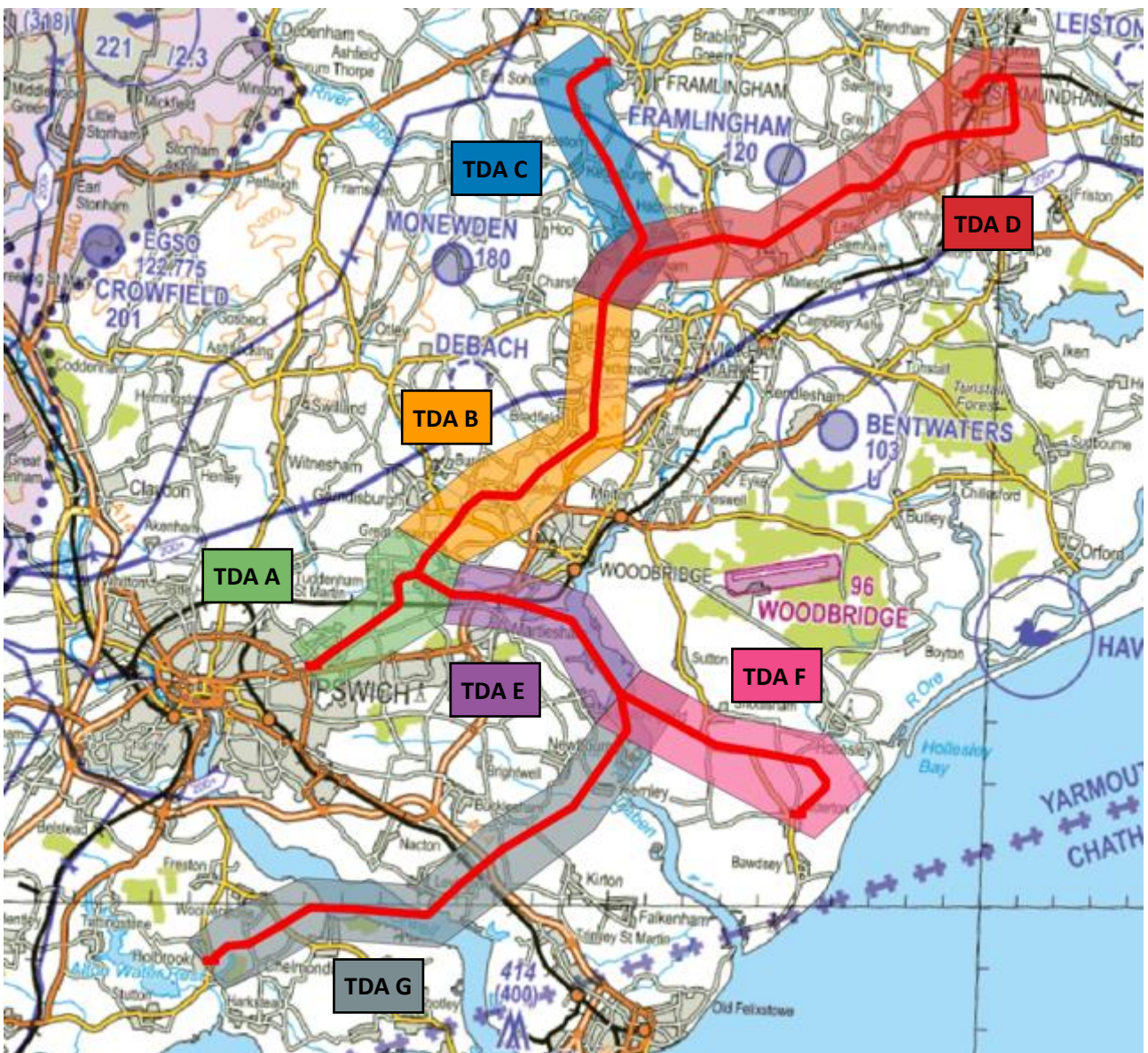


Figure 1: The design of the original TDA complex

3.1.2 Activation Timings of the Original Proposal (Version 1)

Date	Time (local)
11 August 2022 – 3 November 2022 (weekdays only)	Up to 5 consecutive hours per day, typically within the window between 09:00 and 15:30

3.2 Version 2 – Revised Proposal (Post Initial Engagement)

Following the first round of stakeholder engagement, Skyports reduced the number of routes, simplified the TDA design and shortened the period of operations to minimise the impact on other local airspace users.

In this version, only two sections of TDA remain, connecting Ipswich and Saxmundham and Ipswich and Alderton respectively. As per the CAA’s advice, the boundaries and edges of both TDAs have been smoothed out for a simpler shape, which should be easier for other airspace users to visualise.

For details of this proposal, refer to Section 6 of the previous version of the stakeholder engagement report.

3.2.1 Overview of the TDA Design (Version 2)

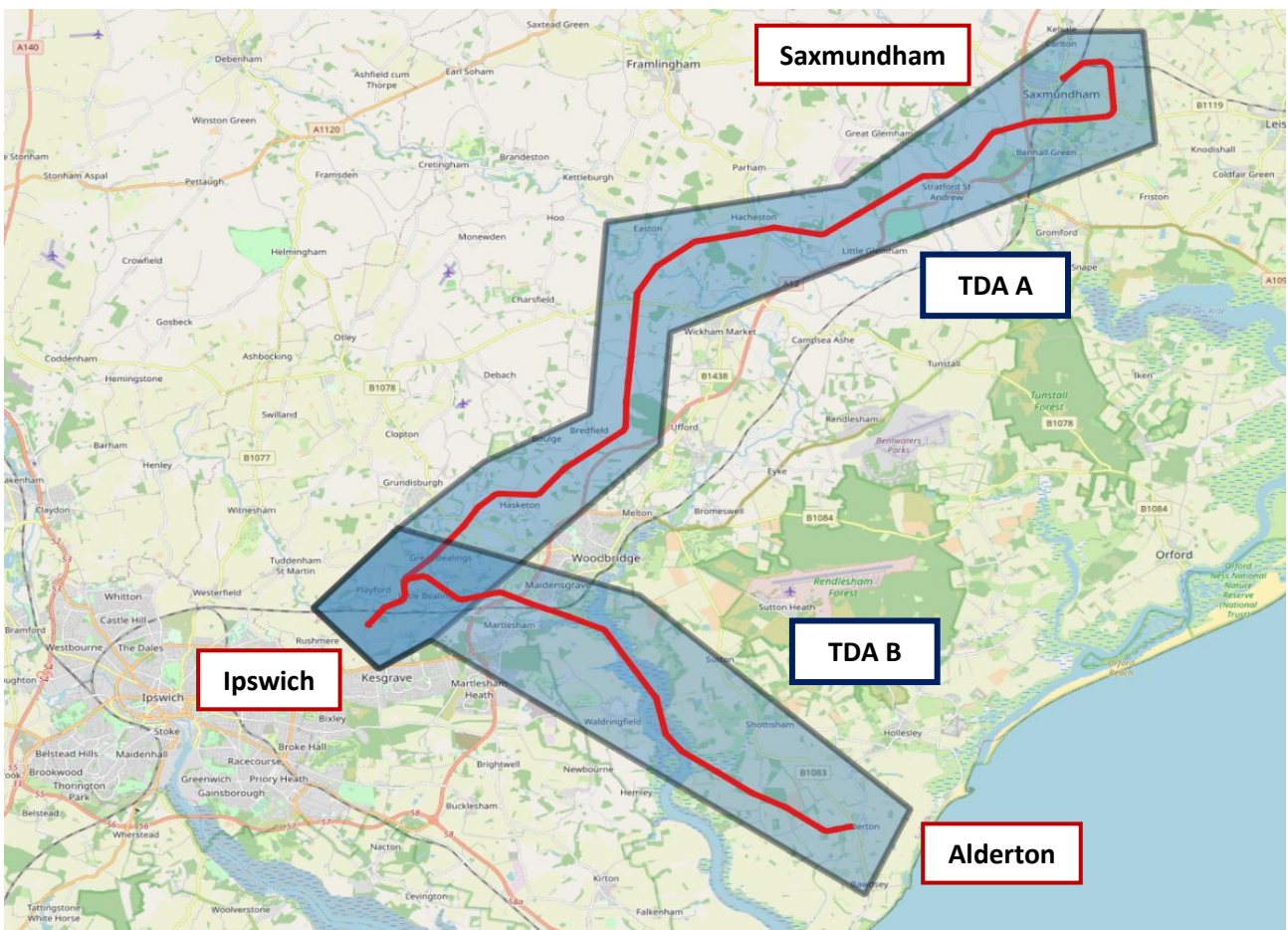


Figure 2: TDA design following the first round of engagement

3.2.2 Activation Timings of the Revised Proposal (Version 2)

Routes	Dates	Time (local)	
Ipswich – Saxmundham (TDA A will be active)	26/9/2022 – 28/10/2022 (5 weeks, weekdays only)	Any 5 consecutive hours between 09:00 and 15:30 <i>(Actual timings to be promulgated via NOTAM 24 hours before activation)</i>	Tentatively 10:30 – 15:30
Ipswich – Alderton (TDA B will be active)	31/10/2022 – 2/12/2022 (5 weeks, weekdays only)		Tentatively 09:30 – 14:30

3.3 Version 3 – Further Revised Proposal (Presented for Engagement in Feb 2023)

Following the CAA’s assessment on the ConOps, in order to reduce to ground risk to ALARP, Skyports has further reduced the scale of operations. In the additional stakeholder engagement conducted in February 2023, the stakeholders were presented with the design shown below. Only the TDA linking Ipswich and Alderton remains. The shape and design of the TDA is the same as TDA B in Version 2.

For details of this proposal, refer to stakeholder engagement material v2.0.

3.3.1 Overview of the TDA Design (Version 3)



Figure 3: TDA design for stakeholder engagement in Feb 2023

3.3.2 Activation Timings of the Further Revised Proposal (Version 3)

Date	Time (local)
10 April 2023 – 16 June 2023 (weekdays only)	Up to 5 consecutive hours per day, typically within the window between 09:00 and 15:30

3.4 Version 4 – Final Proposal (Post Additional Engagement)

During the additional stakeholder engagement period, Skyports received a request from MoD Wattisham Station to shift the TDA towards the west, preferably along River Deben for as long as possible as it provides traffic to/from the nearby Woodbridge Airfield more space to manoeuvre and the river can be used as a visual reference for pilots to identify the TDA. For this reason, Skyports has modified the UA flight route and the shape of the TDA as follows:

3.4.1 Overview of the TDA Design (Version 4)

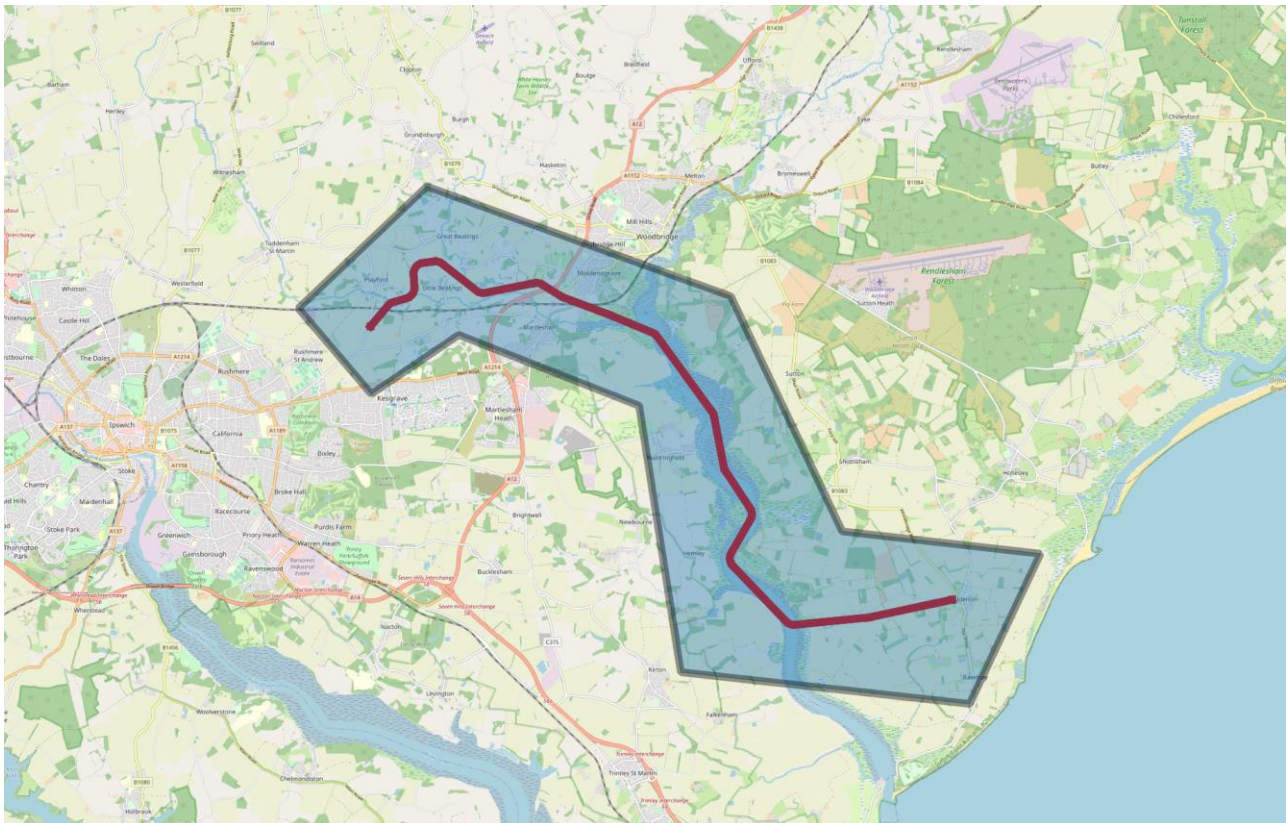


Figure 4: Final TDA design

3.4.2 Activation Timings of the Final Proposal (Version 4)

Date	Time (local)
<p>9 May 2023 – 14 July 2023 (weekdays only)</p> <p>Note: Final dates approved by the CAA: 15 May 2023 – 21 July 2023</p> <p>See CAA Decision Email on Airspace Change Portal</p>	<p>Up to 5 consecutive hours per day, typically within the window between 09:00 and 15:30</p>

Skyports envisages to operate a minimum of 10 flights per activation.

3.4.3 Details of the Finalised Route

Route (reciprocal)	Distance (m)	Max Altitude Flown (AGL)	Avg. cruise speed (m/s)	Estimated Time (mins)	% of Max Endurance (of 68 mins)
Ipswich – Alderton	20	360	55	15	22

3.4.4 Coordinates of TDA Boundary – Final Proposal (Version 4)

Identification and lateral limits						
Area bound by straight lines joining:						
WP	Lat (N)	Lon (S)	Lat (N)	Lon (W)	Upper & lower limit	Remarks
1	52.1037236	1.2479095	52° 06' 13.40" N	001° 14' 52.47" E	Lower: SFC Upper: 550ft AMSL	<u>Activity:</u> UAS BVLOS <u>Hours:</u> When notified <u>Sponsor:</u> Skyports
2	52.0826320	1.3429292	52° 04' 57.47" N	001° 20' 34.54" E		
3	52.0374450	1.3777519	52° 02' 14.80" N	001° 22' 39.90" E		
4	52.0331540	1.4397200	52° 01' 59.35" N	001° 26' 22.99" E		
5	52.0042636	1.4175952	52° 00' 15.34" N	001° 25' 03.34" E		
6	52.0103598	1.3272982	52° 00' 37.29" N	001° 19' 38.27" E		
7	52.0616013	1.3142663	52° 03' 41.76" N	001° 18' 51.35" E		
8	52.0752151	1.2578733	52° 04' 30.77" N	001° 15' 28.34" E		
9	52.0638448	1.2305682	52° 03' 49.84" N	001° 13' 50.04" E		
10	52.0803024	1.2077484	52° 04' 49.08" N	001° 12' 27.89" E		

3.5 Notification and Communication

The exact timings of the 5-hour activation may vary each day, subject to factors such as weather conditions and operational needs. Skyports will promulgate TDA activations by NOTAM at least 24 hours before the day of planned use. The contact details of the duty flight operations crew will be promulgated by NOTAM as well. In the event the use of a telephone is not possible, or the phone has become unserviceable, stakeholders and other airspace users may contact London FIS and they will relay the message to Skyports' flight operations team.

When aware that Skyports will not be flying for any whole or parts of days e.g. due to adverse weather conditions or technical difficulties, Skyports will deactivate the TDA and notify relevant stakeholders as quickly as reasonably practicable.

3.6 Danger Area Activity Information Service (DAAIS)

Skyports has liaised with NATS in both rounds of engagement, and it is confirmed that London FIS will provide a DAAIS for this TDA. A FISO will be available from London FIS.

4 Summary of feedback

Skyports received written feedback from 12 stakeholders in the initial round of engagement. In the additional round of engagement, 13 responses were received, including responses from new stakeholders. These responses came from a wide range of parties such as ANSP, HEMS operators, helicopter operators, the military, flying clubs and associations, as well as some self-identifying stakeholders and interested parties. Stakeholders who responded have either shown support, expressed no objection, raised comments on safety and operational issues or provided suggestions to improve the proposed operations. For those whose operations may be affected by the proposed TDA, Skyports endeavoured to find a workable solution for deconfliction.

The following sections summarise the feedback from each stakeholder on the safety and operational aspects of the airspace change proposal, Skyports' responses, and the action(s) taken to address the issue(s), if applicable. The stakeholder feedback are presented in chronological order. Other comments that fall outside the scope of this ACP, or not directly related to safety and operational aspects of the proposed operations, are not listed in these sections, however, full version of all stakeholder responses can be found in Sections 7 and 8.

4.1 Association of Remotely Piloted Aircraft Systems (ARPAS-UK)

- ARPAS-UK expressed support to the proposed UAS operations and the associated airspace change proposal in both rounds of engagement.

4.2 Babcock International

- Babcock as a HEMS operator highlighted potential conflict with the proposed UAS operations as their aircraft may need to fly close to or enter the TDA during emergency operations. Skyports assured Babcock that emergency services aircraft will have primacy over Skyports' UAS operations at all times. Skyports has also developed a TOI for deconfliction which was later reviewed and accepted by Babcock.
- Babcock did not provide any further comments/response in the additional engagement.

4.3 British Gliding Association (BGA)

- BGA expressed no concern in both rounds of engagement as they are content that the ACP is unlikely to impact their operations. However, in the initial engagement, they expressed that they would like to see progression in regulations to enable unsegregated operations.

4.4 British Helicopter Association (BHA)

- BHA expressed no objection to the ACP in the initial engagement. They did not provide any further comments/response in the additional engagement.

4.5 British Microlight Aircraft Association (BMAA)

- BMAA questioned the purpose of the project, the differences from other similar projects in the past, the future plans beyond the trial period and the need for a TDA in the initial engagement. Skyports explained that there are environment, conditions and challenges unique to each location, and a TDA is required as UAS BVLOS operations of this kind are to be conducted within segregated airspace, according to the current regulatory framework and CAA policy.

- BMAA suggested Skyports to provide a DACS for the TDA, however Skyports believe that a DAAIS would be sufficient and proportionate for this kind of operation.
- BMAA reported that they were only being made aware of the ACP at the very late stage of engagement despite the contact points provided by BMAA were included in all correspondence from Skyports. Skyports is open for continuous engagement with BMAA and address any comments or questions that they may have.

4.6 Defence Airspace and Air Traffic Management (DAATM)

- DAATM consolidated the comments from nearby squadrons and MoD/RAF airfields. Flights to/from Woodbridge is most likely to be impacted by the TDA. Skyports, in response to this comment, has developed a TOI for deconfliction which was reviewed and accepted by DAATM. In general, they have no objection to the TDA as long as a robust communication and coordination with Wattisham is in place.
- In the additional engagement, Wattisham requested Skyports to consider rerouting the UA flight route to the west as fly along River Deben for as long as possible so that it allows more space for traffic to/from Woodbridge to manoeuvre and the river can be used as a visual reference by the pilots. Skyports has redesigned the route and TDA in response to this comment.
- Wattisham also requested Skyports RP to call them before each take-off and after each landing for their situational awareness. Skyports will comply and have incorporated this procedure into the updated TOI, which was subsequently sent to DAATM for their review.

4.7 Monewden Airfield

- The representative of Monewden Airfield expressed some personal views on the ACP without going into details. Skyports attempted to contact them and asked them to elaborate but received no response from them. They did not provide any further comments/response in the additional engagement.

4.8 National Grid

- National Grid operates helicopters and performs low-level flying routinely for powerline surveying and inspection. They identified potential conflict with Skyports' Ipswich – Saxmundham and Framlingham route in the original proposal which Skyports addressed it by developing a TOI for deconfliction.
- In the additional engagement, National Grid noted the concerned routes have been removed and they confirmed that the new proposal (Ipswich – Alderton only) will have no conflict with their operations.

4.9 National Police Air Service (NPAS)

- The NPAC did not participate in the initial engagement but responded during the additional engagement.
- They confirmed that the proposal would have negligible/nil effect on their operations.

4.10 NATS

- NATS has expressed no comment/objection to the ACP in both rounds of engagement. London FIS is happy to provide a DAAIS for the TDA as long as the activities are promulgated by NOTAM.

4.11 Norfolk Hang Gliding and Paragliding Club (NHPC)

- NHPC did not participate in the initial engagement but responded during the additional engagement as a self-identifying stakeholder.
- They raised the issue of EC devices incompatibility as the gliding community mainly uses FLARM systems but not ADS-B. Skyports noted their comment and explained that the ADS-B onboard the UA is only used to enhance RP's situational awareness and is not used as a tactical means of deconfliction. NHPC acknowledged understanding of the UAS's capabilities and confirmed that pilots can make an attempt at avoidance of the TDA.

4.12 Suffolk Coastal Strut (member of Light Aircraft Association)

- Suffolk Coastal Strut did not participate in the initial engagement but responded during the additional engagement as a self-identifying stakeholder.
- They expressed objection to the ongoing use of TDA which they see as an obstruction. Skyports explained that this is to comply with the currently regulatory requirements for UAS BVLOS operations.
- They raised a few questions regarding the safety of the UAS operations and integrity of the UAS. Skyports assured them that the UAS operation is supported by a robust OSC which was reviewed and provisionally approved by the CAA.
- They suggested a number of stakeholders that may not be included in Skyports' email list. Skyports noted their suggestions and subsequently reached out to a stakeholder that Skyports had not contacted before. Skyports will remain open for continuous engagement with all stakeholders beyond the engagement period and throughout the implementation phase.

4.13 Suffolk Hang Gliding Club (member of British Hang Gliding and Paragliding Association)

- Suffolk Hang Gliding Club did not participate in the initial engagement but responded during the additional engagement as a self-identifying stakeholder.
- They highlighted that there could be potential conflict between the proposed UAS operations and their flying activities if the wind is coming from the NW or in case of an emergency. They suggested some form of coordination to be made between Skyports and them, and establish an effective and flexible way to deconflict. Skyports explained to them that TOI are used with other aircraft operators for deconfliction, and Skyports is happy to develop something similar with them if necessary.
- Skyports also made some clarifications to their comments, for example, according to the CAA Policy Statement on the Establishment of DA/TDA, only those activities for which the DA/TDA has been specifically approved by the CAA are to be conducted within the DA/TDA, so they should not be flying into the active TDA without prior agreement. It is also the current regulatory requirements that UAS BVLOS operations of this kind should be conducted within segregated airspace, and in this case, it should be in form of a TDA.

4.14 TGC (member of Suffolk Coastal Strut)

- TGC was a self-identifying stakeholder who responded during the initial engagement. They commented that the airspace change policy and engagement process/strategy was ineffective and inadequate. Skyports noted their comment but explained that Skyports had adhered to the requirements under CAP1616 and Skyports believes the engagement conducted was proportionate to the type of operations proposed by Skyports. They were advised to contact the CAA direct should they have any comments on the regulatory process.
- TGC did not provide any further comments/response in the additional engagement.

4.15 Individual Stakeholder 1

- This stakeholder responded in both rounds of engagement with similar comments on the necessity and repetitiveness of the project, unsustainability of TDA, the choice of routes and environmental impact etc. Skyports explained to them that each project will have its unique locationally challenges and the proposal was designed to meet the operational needs from the NHS and ERS Medical, while minimising the impact on other local flying activities. Skyports will comply with all relevant regulations and requirements to ensure safe operations.
- This stakeholder stressed the importance of having a DAAIS for the TDA. Skyports confirmed with him that London FIS will be providing a DAAIS for this TDA.

4.16 Individual Stakeholder 2

- This stakeholder opined that the approach for UAS BVLOS operations should adopt an integrated approach instead of creating segregated airspace on a temporary basis. Skyports explained to him that the current regulatory requirements are to be complied with and any future changes and development of the policy is outside the scope of this stakeholder engagement.

4.17 Individual Stakeholder 3

- This stakeholder did not participate in the initial engagement exercise but responded to the ACP in the additional engagement as a self-identifying stakeholder. They commented on the operating altitude being too high in their opinion. Skyports responded that the chose altitude is to allow the UA to have sufficient clearance from any ground obstacle and vertical buffer from the ceiling of the TDA.

5 Impact Assessment

5.1 Deconfliction

As mentioned in Section 4, Skyports has developed temporary operating instructions (TOI) for the purpose of deconfliction with other aircraft operators in the region. A high-level summary of the TOI is as follows:

- Skyports acknowledges the primacy of commercial air transport operations and emergency service operations; they will be able to access an active TDA with prior notice and in accordance with the procedures defined in the TOI.
- To accommodate low-flying commercial traffic, Skyports will cease operations as soon as reasonably practicable upon notification when the helicopters are required to operate within the TDA complex, cross a TDA or are flying in the vicinity of the TDA(s).
- Emergency services operators, especially those conducting Category A operations, will have primacy at all times; Skyports will ground its UA as soon as possible upon notification. Grounding will be confirmed and communicated.
- Skyports will cease operations if the cloud base is <1500ft AGL. London FIS will be notified. If the cloud base remains <1500ft AGL for a prolonged period of time, the active TDA(s) will be deactivated.

The finalised TOI that has been agreed and approved by relevant stakeholder will be adopted. Details of the TOI is documented in a separate document.

5.2 Impact on traffic pattern and distribution ≤7000ft

Skyports have conducted a detailed airspace analysis as part of the OSC ConOps submission to the CAA, detailing all potential aviation stakeholders that could be affected by the proposed TDAs (utilising low level VFR charts, previous ACP intelligence & CAA NATMAC list). The UAS operational altitude is 360ft AGL for the entirety of the proposed routing and contained within the proposed TDAs, whose maximum vertical altitude extend to 600ft AMSL. Only low-level traffic has the potential to be affected.

In addition, the routing is predominately over sparsely populated areas, thus minimising the impact on inhabited areas.

The traffic assessment has been deemed to have little impact due to:

- 14 CFR Subpart B flight rules – where minimum safe altitudes dictate altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.
 - Skyports operations are <400ft AGL (cruising altitude is 360ft AGL in normal circumstances), predominately over land and rural areas.
- On occasion where other airspace users require access to the proposed TDA locations, an appropriate LoA or TOI has been agreed to ensure traffic can safely be facilitated during the proposed hours of operation. This includes CAT A HEMS operators, who have primacy at all times:
 - Babcock International (service provider for East Anglia Air Ambulance)
 - Wattisham Station (MoD)

Despite the minimal traffic impact assessment the following mitigations will be in place, being proportionate to the size and duration of the operation:

- All TDA activations will be promulgated by NOTAM to alert other airspace users to the UAS presence, with two direct mobile phone numbers provided to contact the deployed flight operations team.
- London Information will provide a DAAIS service in accordance with the agreed TOI.
- Skyports' operating instruction states the UA will not operate when cloud base is <1500ft AGL, to ensure any VFR aircraft is safe when descending below cloud in unforeseen circumstances, that could infringe the minimum safe altitude rule.

5.3 Environmental and Noise impact

As part of ConOps development, the flights were carefully planned to minimise noise in the areas of operations. Skyports do not envisage any adverse impact on tranquility when operating over inhabited areas due to the following reasons:

- **Noise of the UA** – According to previous measurements, the mean maximum sound pressure level ($L_{A_{Smax}}$) of the Swoop Kookaburra Mk III UA during take-off and landing is 76dB, and that when the UA is cruising at a height of 200ft AGL is 49dB which is virtually undetectable from ground¹. The most audible part of the flight, i.e. take-off and landing, typically takes 17.57 seconds at standard climb/descend rate, and 8.98 seconds at maximum climb/descend rate. The UA is a hybrid-powered lift transitional platform which takes off and lands vertically. In normal circumstances, the UA will cruise at a height of 360ft AGL. Skyports believes the noise impact with such a short span of time, and small noise footprint, is negligible.
- **Routes and TOLPs planning** – The routes were carefully designed that we prioritise operating over sparsely populated areas (see Figure 5) below; yellow denotes populated areas). At key locations such as TOLPs, they were also chosen to be located outside/away from residential areas to minimise the noise impact during take-off and landing (see Figure 6 and Figure 7).

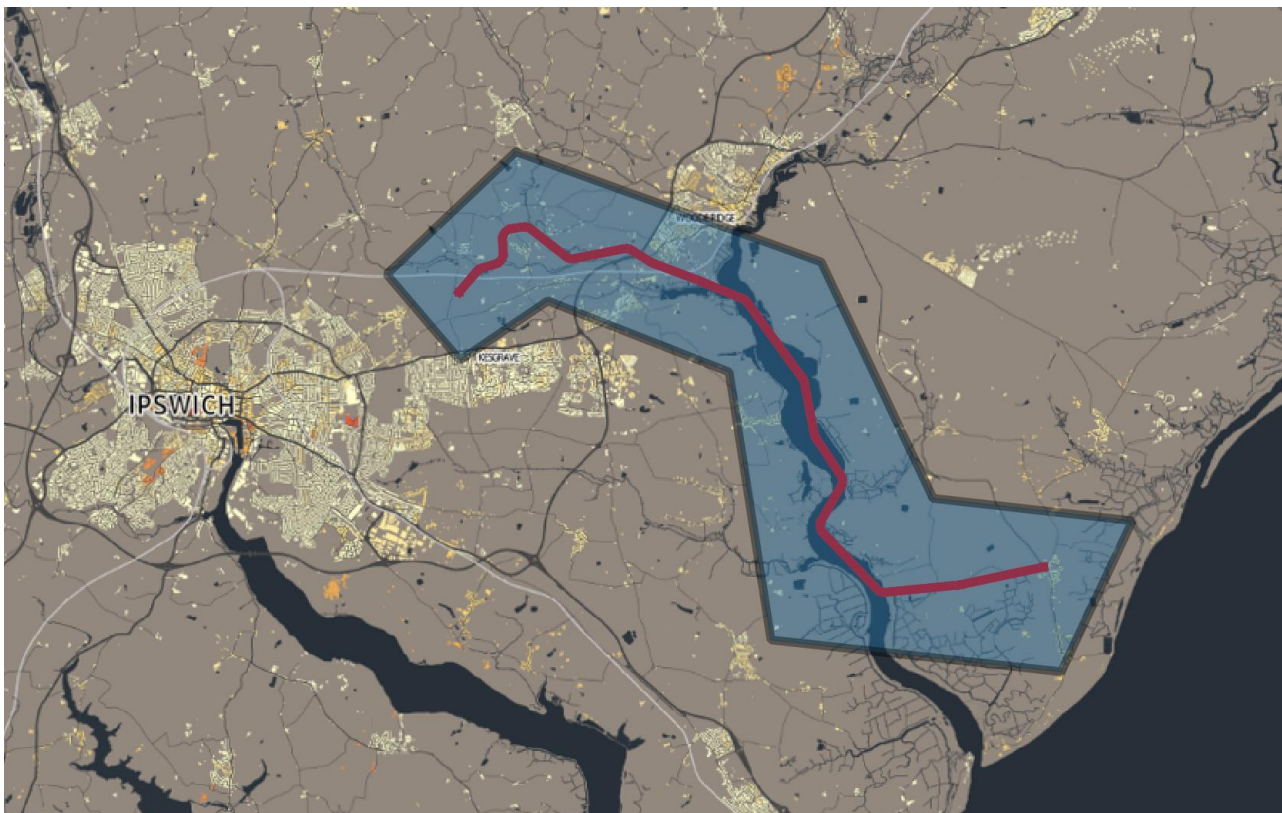


Figure 5: Overview of population density

¹ 86dB and 59dB if a 10dB noise penalty is added to account for the tonal nature of drones.

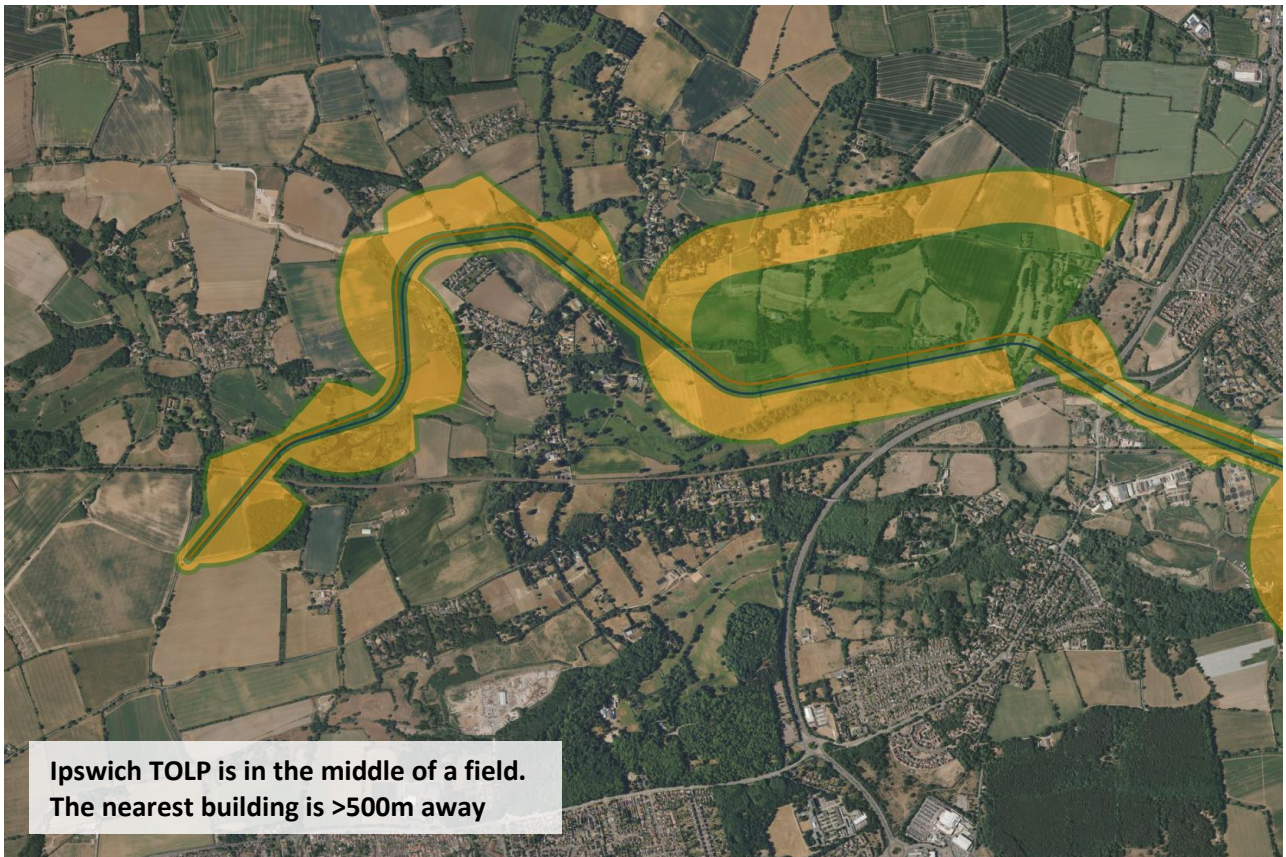


Figure 6: Arrival and departure route at Ipswich TOLP

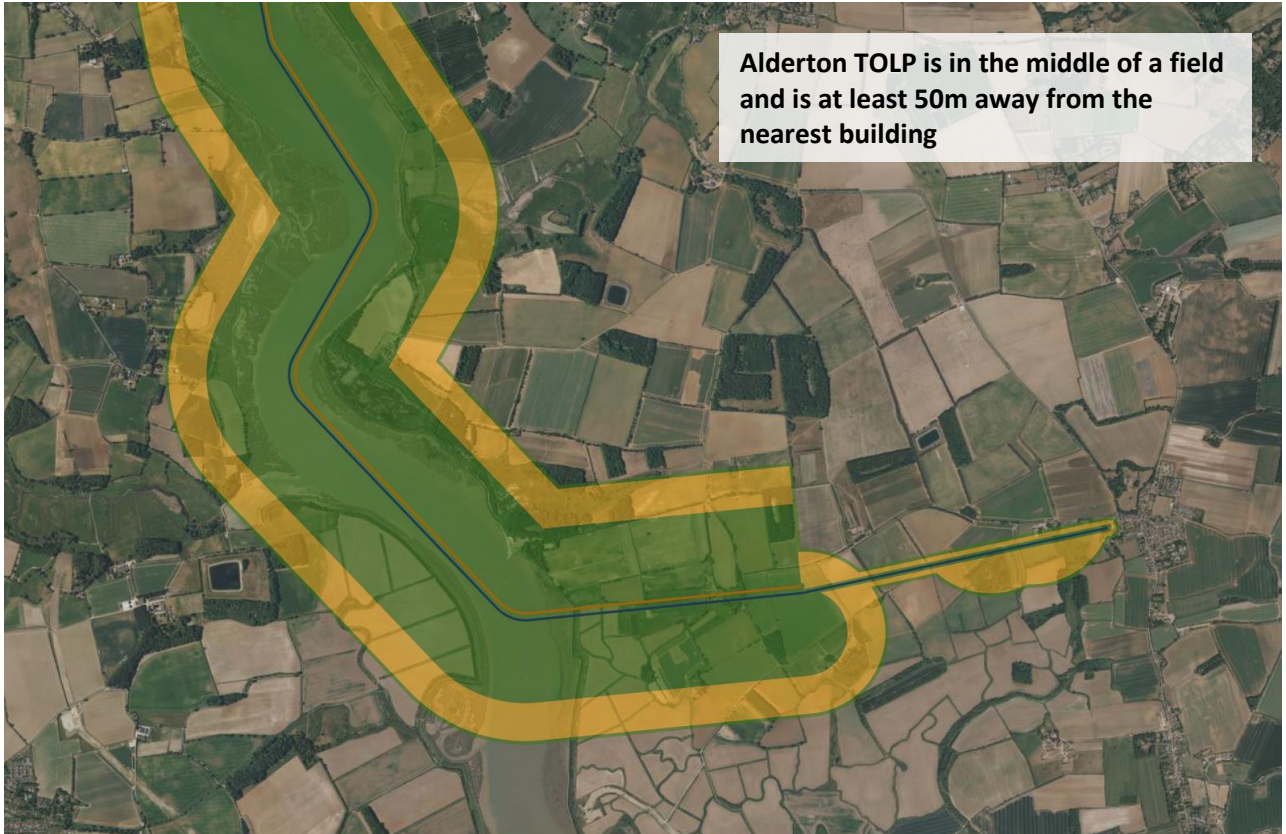


Figure 7: Arrival and departure route at Alderton TOLP

6 Stakeholders

6.1 Civil Aviation Authority

The CAA is being engaged at every stage of the ACP.

6.2 Aviation Stakeholders and Interested Parties

Below is a list of aviation stakeholders and relevant parties engaged:

Name	Organisation Type	Responded in Engagement 1	Formal Outreach (01/02/2023)	Reminder (18/2/2023)	Responded in Engagement 2
Aircraft Owners and Pilots Association (AOPA)	Representative	--	Y	Y	--
Airfield Operators Group (AOG)	Representative	--	Y	Y	--
Airport Operators Association (AOA)	Representative	--	Y	Y	--
Airspace Change Organising Group (ACOG)	Representative	--	Y	Y	--
Airspace4All	Representative	--	Y	Y	--
Army Gliding Club (Anglia)	Flying Club	--	Y	Y	--
Association of Remotely Piloted Aircraft Systems (ARPAS-UK)	Representative	Y	Y	Y	Y
Aviation Environment Federation (AEF)	Representative	--	Y	Y	--
Babcock International	HEMS	Y	Y	Y	--
British Balloon and Airship Club	Representative	--	Y	Y	--
British Business Aviation and General Aviation Association	Representative	--	Y	Y	--
British Gliding Association (BGA)	Representative	Y	Y	--	Y
British Hang Gliding and Paragliding Association (BHPA)	Representative	--	Y	Y	--

Name	Organisation Type	Responded in Engagement 1	Formal Outreach (01/02/2023)	Reminder (18/2/2023)	Responded in Engagement 2
British Helicopter Association (BHA)	Representative	Y	Y	Y	--
British Microlight Aircraft Association (BMAA)	Representative	Y	Y	Y	Y
British Microlight Aircraft Association / General Aviation Safety Council (GASCo)	Representative	--	Y	Y	--
British Model Flying Association (BMFA)	Representative	--	Y	Y	--
British Skydiving	Representative	--	Y	Y	--
Coastguard	HEMS	--	Y	Y	--
Crowfield	Airport	--	Y	Y	--
East Anglian Air Ambulance (EAAA)	HEMS	<i>See Babcock International</i>			
Elmsett	Airport	--	Y	Y	--
Essex & Suffolk Gliding Club	Flying Club	--	Y	Y	--
Gama Aviation	HEMS	--	Y	Y	--
General Aviation Alliance (GAA)	Representative	--	Y	Y	--
Great Oakley	Airport	--	Y	Y	--
Helicopter Club of Great Britain (HCGB)	Representative	--	Y	Y	--
Heliair	Operator	--	Y	Y	--

Name	Organisation Type	Responded in Engagement 1	Formal Outreach (01/02/2023)	Reminder (18/2/2023)	Responded in Engagement 2
Helicentre	Operator	--	Y	Y	--
Light Aircraft Association (LAA)	Representative	--	Y	Y	--
Maritime and Coastguard Agency	Security and Emergency Services	--	Y	Y	--
Military Aviation Authority (MAA)	Representative	--	Y	Y	--
Ministry of Defence	Military	Y	Y	--	Y
MoD Wattisham	Airport (Military)	(Combined with MoD)	Y	--	Y
MoD Woodbridge	Airport (Military)	<i>See Ministry of Defence</i>			
Monewden	Airport	Y	Y	Y	--
National Grid	Operator	Y	Y	--	Y
National Police Air Service	Security and Emergency Services	--	Y	Y	Y
Norfolk Hang Gliding and Paragliding Club	Flying Club	--	--	--	Y
NATS	ANSP	Y	Y	--	Y
PDG Helicopters	Operator	--	Y	Y	--
Rattlesden Gliding Club	Flying Club	--	Y	Y	--
Sloane Helicopters	HEMS	--	Y	Y	--

Name	Organisation Type	Responded in Engagement 1	Formal Outreach (01/02/2023)	Reminder (18/2/2023)	Responded in Engagement 2
Specialist Aviation Services	HEMS	--	Y	Y	--
Suffolk Coastal Strut	Flying Club	--	--	--	Y
Suffolk Hang Gliding Club	Flying Club	--	--	--	Y
TGC	Flying Club	Y	Y	Y	--
Western Power	Operator	--	Y	Y	--
Individual Stakeholder 1	Individual	Y	Y	--	Y
Individual Stakeholder 2	Individual	Y	--	--	--
Individual Stakeholder 3	Individual	--	--	--	Y
Total responses received					13

7 Appendices – Evidence of Initial Engagement

Appendix 7A – Initial Email to Stakeholders (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 22 February 2022 19:15
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement
Attachments: ACP-2022-001 Skyports Stakeholder Engagement Material v1.0.pdf

Location: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Skyports, a UK-based drone delivery service provider, is contacting you with regards to airspace change proposal ACP-2022-001 to enable the operations of unmanned aircraft (UA) beyond visual line of sight (BVLOS). This operation aims to assist the East Suffolk and North Essex NHS Foundation Trust and ERS Medical to strengthen their medical logistic network by using unmanned aircraft system (UAS).

Skyports is seeking your views and feedback on these airspace designs in the form of a formal targeted aviation stakeholder engagement exercise required as part of Airspace Change Process (CAA CAP1616), which falls under the TDA policy statement.

We believe our designs allow us to safely execute our operations whilst minimising negative impacts on other airspace users.

The details of our proposed operations and airspace change designs can be found in the stakeholder engagement material attached in this email. Other documents related to our formal targeted aviation stakeholder engagement exercise for this change proposal can be found on the CAA Airspace Portal under [ACP-2022-001](#).

I would greatly appreciate it if you could please provide feedback by responding to this email [Redacted] **by 17:00 on Tuesday 17 May 2022.**

When providing your feedback, please make sure you are providing your views on the correct airspace change proposal.

Many thanks in advance and kind regards,

[Redacted]



[Redacted]

Appendix 7B – First Reminder Email (Initial Engagement)



From: Airspace Change
Sent: 20 April 2022 17:01
To: Airspace Change
Subject: [Reminder] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement
Attachments: ACP-2022-001 Skyports Stakeholder Engagement Material v1.0.pdf

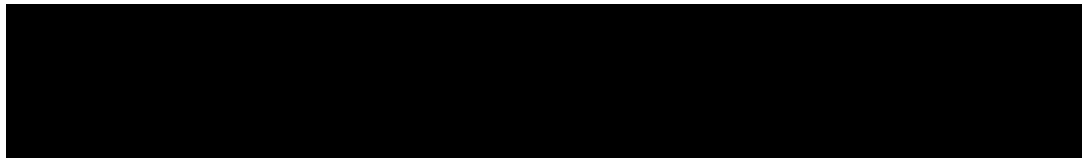
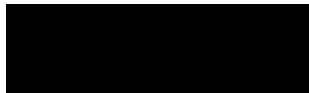
Skyports ACP-2022-001: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Further to my email below, this is a gentle reminder for stakeholders and interested parties to provide feedback on our airspace change proposal [ACP-2022-001](#) by **17:00 on Tuesday 17 May 2022**, if not done so already.

Any comments would be much appreciated.

Many thanks in advance and best regards,



Appendix 7C – Final Reminder Email (Initial Engagement)



From: Airspace Change
Sent: 10 May 2022 10:30
To: Airspace Change
Subject: [Final Reminder] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement
Attachments: ACP-2022-001 Skyports Stakeholder Engagement Material v1.0.pdf

Skyports ACP-2022-001: Ipswich and South East Suffolk

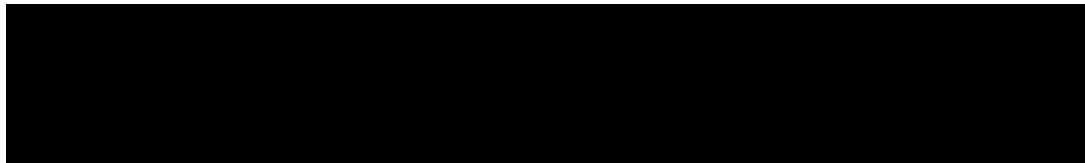
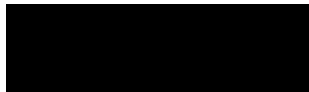
Dear Aviation Stakeholders,

Further to my previous emails below, this is a final reminder for stakeholders and interested parties to provide feedback and comments on our airspace change proposal [ACP-2022-001](#) by **17:00 on Tuesday 17th May 2022**, if not already done so. Your views are important to us, as it helps us assess and mitigate the impact of our proposal on the airspace in the region. Any feedback would be much appreciated.

To give you a better understanding of our proposal, we will be organising a virtual briefing session at 09:00 on 12 May 2022 for all interested stakeholders, where we will be presenting the details of our operations, and answering questions that you may have. Should you wish to participate, please reply to this email for a meeting invitation link. Otherwise, you are always welcome to send us your feedback via email before the end of the engagement period.

Many thanks and we look forward to hearing from you.

Best Regards,



Appendix 7D – Targeted stakeholders engagement on TOI (Initial Engagement)

[REDACTED]

From: Airspace Change
Sent: 20 April 2022 17:32
To: Airspace Change
Subject: Skyports Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – ConOps
Attachments: ACP-2022-001 ERS Ipswich - ConOps Lite v1.0.pdf

Skyports ACP-2022-001: Ipswich and South East Suffolk

Dear all,

I hope you have had a good Easter weekend. Following my previous email dated 17 Feb 2022 to seek your views and comments on Skyports' airspace change proposal (ACP) in Ipswich and South East Suffolk, we would now like to share with you a simplified ConOps for your reference.

We appreciate that our proposed Temporary Danger Area (TDA) may affect routine aircraft operations in the region. To minimise the impact on local operations, we are currently developing a Temporary Operating Instruction (TOI) to be agreed upon with local aircraft and airfield operators like yourselves. Once completed, it will be sent to you for your review. A high-level summary of the procedures is as follows, which were proven to be an effective means of deconfliction in our previous operations in Scotland:-

- Scheduled VFR traffic (e.g. commercial services, survey & inspection flights) will be able to access the active TDA with prior notice and in accordance with the procedures defined in the attached TOI.
- Emergency services operators/HEMS have primacy at all times (CAT A); Skyports will ground the UA as soon as reasonably practicable upon notification (grounding will be confirmed and communicated).
- Should the cloud base be <1500ft AGL, Skyports will cease operations.
- London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. More information will be provided in due course.

Please let me know your initial thoughts, comments, and factors/operational needs you would like us to take into consideration when developing the TOI. The first draft of TOI will be sent to you shortly. Should you require any further information, please do not hesitate to contact me. We are also happy to arrange a meeting/briefing with you if you find this useful.

Separately, if you have other comments regarding the safety and operational aspects of our ACP, please feel free to email us at [REDACTED] **on or before 17 May 2022.**

We look forward to hearing from you soon!

Best Regards,

[REDACTED]



Appendix 7E – Association of Remotely Piloted Aircraft Systems (ARPAS-UK) (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 19 May 2022 09:48
To: [Redacted]
Cc: [Redacted]
Subject: RE: Skyports ACP-2022-001: Ipswich and South East Suffolk

Hi [Redacted]

Thank you for your response and your support for our airspace change proposal ACP-2022-001.

Best Regards,

[Redacted]



[Redacted]

From: [Redacted]
Sent: 17 May 2022 11:33
To: Airspace Change [Redacted]
Cc: [Redacted]
Subject: Skyports ACP-2022-001: Ipswich and South East Suffolk

Dear [Redacted]

Thank you for sending us your ACP-2022-001 details.

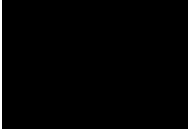
ARPAS UK fully supports Skyports' proposed ACP-2022-001: Ipswich and South East Suffolk, along with the associated TDA.

kind regards

[Redacted]



ARPAS-UK



Appendix 7F – Babcock International (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 20 May 2022 15:56
To: [Redacted]
Subject: RE: CAUTION: External email - RE: Babcock Onshore EAAA (UNCLASSIFIED)

Hi [Redacted]

Thank you for your reply. Please see our responses as follows:-

DAAIS

We are still in the discussion with NATS with regard to the implementation of DAAIS. Is there any information that you would expect as a minimum?

Communication and Live Feed

Please refer to the draft TOI regarding the communication procedures, which will be sent by my colleague imminently, if not already done so. The mobile number of our flight operations team will be promulgated via NOTAM and the notification email. We are also happy to provide the EEAST CCD dispatch with a live feed if required.

ADS-B

ADS-B will be on throughout the flight, however, please note that as far as this operation is concerned, As far as this operation is concerned, the ADS-B onboard the aircraft is solely for our remote pilots’ situational awareness and is not intended to be used as a means of tactical deconfliction.

Deconfliction

If we receive the TDA access request from HEMS before the TDA is activated, the TDA will remain inactive until the HEMS pilot has confirmed that they are clear of the TDA.

If we receive the TDA access request from HEMS after the TDA is activated, the TDA will not be deactivated; however, the remote pilots will confirm once the UA has been grounded, and the operation will not restart until the HEMS pilot has confirmed that they are clear of the TDA.

On a separate note, may I ask if you are aware of any other HEMS operators that routinely operate in the vicinity of our TDA? If so, can you please let us know their contact details, so that we can include them in the TOI as well?

Best Regards,

[Redacted Signature]



[Redacted Footer]

From: [REDACTED]
Sent: 16 May 2022 16:58
To: Airspace Change [REDACTED]
Subject: RE: CAUTION: External email - RE: Babcock Onshore EAAA (UNCLASSIFIED)

You don't often get email from [REDACTED] [Learn why this is important](#)
Classification: UNCLASSIFIED

Good afternoon [REDACTED]

Many thanks for sight of your airspace change proposal. We have the following comments:

- The UAS ensuring that it is operating <400ft AGL will build in good separation for Helimed transit through a TDA.
- With regard to a DAAIS, can you please confirm what information will be provided upon receipt of a DAAIS request e.g. relative position and intentions of the UAS pilot. London FIS will be providing this service and we have a minor concern about how much detail they will be able to provide to the HEMS pilots?
- Clarify and establish actions in the event of lost comms e.g. HEMS aircraft cleared to proceed provided the crew are satisfied it is safe to do so, then call the landline once on the ground? Could a phone number be provided for direct dial to the UAS pilot?
- Confirmation that the UAS will either be transponding or visible through ABS-B etc?
- If EEAST CCD (HEMS desk) are aware of potential tasking into the TDA can we have a procedure whereby the dispatchers contact Skyports directly by telephone to pre-warn them of HEMS activity? (Previous drone operators have established comms with EEAST CCD dispatch and a live feed was provided to them).
- Confirmation that a TDA will remain inactive until the HEMS pilot's have confirmed they are clear of the TDA.

Many thanks,

[REDACTED]

[REDACTED]

Babcock International Group

[REDACTED]

babcock[™]

Creating a safe and secure world, together

From: Airspace Change [REDACTED]
Sent: 09 May 2022 12:54
To: [REDACTED]
Subject: CAUTION: External email - RE: Babcock Onshore EAAA (UNCLASSIFIED)

Dear [REDACTED]

Thank you for your response to our airspace change proposal ACP-2022-001 and letting us know the potential conflict with your operations.

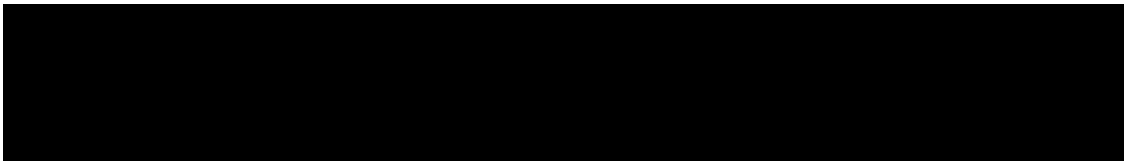
We appreciate that our proposed Temporary Danger Area (TDA) may affect routine aircraft operations in the region. Similar to our previous operations, we are currently developing a Temporary Operating Instruction (TOI) to be agreed upon with local aircraft operators like yourself. Once completed, it will be sent to you for your review. A high-level summary of the procedures is as follows:-

- Scheduled VFR traffic (e.g. commercial services, survey & inspection flights) will be able to access the active TDA with prior notice and in accordance with the procedures defined in the attached TOI.
- Emergency services operators/HEMS have primacy at all times (CAT A); Skyports will ground the UA as soon as reasonably practicable upon notification (grounding will be confirmed and communicated).
- Should the cloud base be <1500ft AGL, Skyports will cease operations.
- London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. More information will be provided in due course.

The simplified ConOps is attached for your reference. Please let me know your initial thoughts, comments, and factors/operational needs you would like us to take into consideration when developing the TOI. The first draft of TOI will be sent to you shortly. Should you require any further information, please do not hesitate to contact me.

Separately, if you have other comments regarding the safety and operational aspects of our ACP, please feel free to email us at [REDACTED] **on or before 17 May 2022.**

Best Regards,



From: [Redacted]
Sent: 01 March 2022 13:50
To: Airspace Change [Redacted]
Subject: Babcock Onshore EAAA (UNCLASSIFIED)

Classification: UNCLASSIFIED

Good afternoon,

Many thanks for sight of your proposed TDA. As the providers of the aviation support to the East Anglia Air Ambulance charity at their HEMS bases in Cambridge and Norwich we have a significant interest in your proposal.

Our aircraft regularly operate into and around Ipswich by day and night to ground level on HEMS tasks therefore we have concerns that this proposal, as is, would detrimentally effect our ability to safely respond to emergency incidents that require lifesaving critical care.

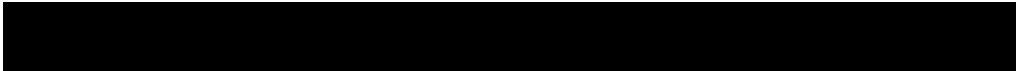
To be able to support this TDA we would need an assurance that a Category A flight would retain primacy, therefore, can I suggest that we establish a Letter of Agreement (LoA) between Babcock Onshore and Skyports which clearly stipulated how the TDA will be operated, communication protocols and how we will guarantee the de-confliction between a HEMS aircraft and a Skyport's UAS.

On the assumption that you will want to move forward with an LoA I have attached a draft one that we have used previously as a starting point.

BW,



Babcock International Group



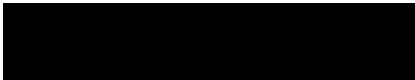
babcock[™]

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Appendix 7G – British Gliding Association (BGA) (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 13 May 2022 08:00
To: [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Dear [Redacted]

Thank you for your response to our airspace change proposal ACP-2022-001. We equally look forward to the future where manned and unmanned aircraft can coexist in the same airspace without segregation. However, to comply with the existing regulatory framework and requirements, we can only operate BVLOS UAS operations using TDA at the moment.

Best Regards,

[Redacted]



[Redacted]

From: [Redacted]
Sent: 11 March 2022 15:08
To: Airspace Change [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Thanks for your engagement.
The operation as described is unlikely to impact sailplane operations.
We encourage all BVLOS operators to press the Govt and CAA to identify a risk-based technology driven method of limiting the need for segregation between piloted and remotely piloted airborne systems. TDA's are unsustainable.

Kind regards
[Redacted]
BGA

Appendix 7H – British Helicopter Association (BHA) (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 13 May 2022 17:10
To: [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Dear [Redacted]

Thank you for your response to our airspace change proposal ACP-2022-001.

At the moment, many NHS medical practices still rely on the once-a-day van porter service to transport test samples to the laboratories and medical supplies to medical practices. With the solution we are offering, medicines can reach the patients, and pathology samples can reach the hospital laboratories much quicker without having to wait for the porter service thanks to the more frequent and faster delivery by UAS.

Eventually, we are also aiming for a centralised approach for our operations where our remote pilots will be operating the UAS from a single hub, and trained NHS and/or ERS staff will be responsible for loading and unloading the medical goods at the medical practices.

Best Regards,

[Redacted]



[Redacted]

From: [Redacted]
Sent: 24 February 2022 15:19
To: Airspace Change [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

[Redacted]

The BHA currently has no objections to this TDA.

We do note that some of your justification is slightly superfluous in that you mention that “.....often leads to

a degradation of sample quality due to lack of temperature control...". Yet you plan to transport them by a UAV that has no temperature-controlled environment. Furthermore, you mention "The use of electric UA to deliver and collect medical goods in Skyports' solution also reduces ground vehicle movements,". We are ignoring the fleet of cars the operators will use to get on site during any flying activity against the use of 1 NHS van.

Yours

[Redacted]
BHA

From: Airspace Change [Redacted]
Sent: 22 February 2022 19:15
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Location: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Skyports, a UK-based drone delivery service provider, is contacting you with regards to airspace change proposal ACP-2022-001 to enable the operations of unmanned aircraft (UA) beyond visual line of sight (BVLOS). This operation aims to assist the East Suffolk and North Essex NHS Foundation Trust and ERS Medical to strengthen their medical logistic network by using unmanned aircraft system (UAS).

Skyports is seeking your views and feedback on these airspace designs in the form of a formal targeted aviation stakeholder engagement exercise required as part of Airspace Change Process (CAA CAP1616), which falls under the TDA policy statement.

We believe our designs allow us to safely execute our operations whilst minimising negative impacts on other airspace users.

The details of our proposed operations and airspace change designs can be found in the stakeholder engagement material attached in this email. Other documents related to our formal targeted aviation stakeholder engagement exercise for this change proposal can be found on the CAA Airspace Portal under [ACP-2022-001](#).

I would greatly appreciate it if you could please provide feedback by responding to this email [Redacted] **by 17:00 on Tuesday 17 May 2022.**

When providing your feedback, please make sure you are providing your views on the correct airspace change proposal.

Many thanks in advance and kind regards,

[Redacted]



Appendix 71 – British Microlight Aircraft Association (BMAA) (Initial Engagement)

[REDACTED]

From: [REDACTED]
Sent: 20 May 2022 15:56
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: ACP-2022-001 Ipswich & Suffolk TDA response

Hi [REDACTED]

Thank you for your feedback on our airspace change proposal ACP-2022-001. Please see our responses below:-

The project (re #1, #2, #4, #8)

This project is jointly developed by the East Suffolk and North Essex NHS Foundation Trust and ERS Medical, which is the medical logistic partner of the NHS. The operations will provide the NHS and ERS with useful data to evaluate the effectiveness of using UAS as a means of medical delivery in the Ipswich and southeast Suffolk area. While there might be operations of similar nature in the past, different locations will have different operating environments and conditions. As the NHS has specified the healthcare facilities to be served, we are unable to operate in other areas or in any other existing segregated airspace, as we would not be able to replicate the unique environment and specific locational challenges this project will bring.

As far as this project is concerned, it was concluded in the CAA Assessment Meeting that our proposed BVLOS activity would need to be contained within segregated airspace, and the current CAA policy is that this should be in form of a Temporary Danger Area (TDA). In normal circumstances, such temporary airspace arrangement will only be applied for a period of no longer than 90 days, after which the airspace will revert to its original form. Therefore, we are only planning to operate no longer than 90 days at this stage. Any future operations will be subject to the outcome of the NHS's evaluation and the future regulatory developments in the UK, which are beyond the scope of this stakeholder engagement exercise.

The TDA design (re #3)

The TDAs mostly follow the flight routes which are carefully designed to minimise ground risks and air risks. However, based on feedback from stakeholders and the CAA, we will simplify the shape and design of the TDA complex by removing some waypoints midway and combining some TDA sections.

Provision of DACS (re #5)

London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. More information will be provided in due course.

ADS-B (re #6)

As far as this operation is concerned, the ADS-B onboard the aircraft is solely for our remote pilots' situational awareness and is not intended to be used as a means of tactical deconfliction.

Stakeholders (re #7)

Please refer to Appendix A of the stakeholder engagement material for the list of organisations we have contacted. Please note that the list is not exhaustive as we have received responses from self-identifying stakeholders and other interested parties during the stakeholder engagement process.

Best Regards,

[REDACTED]



[REDACTED]

From: [REDACTED]
Sent: 18 May 2022 12:11
To: Airspace Change [REDACTED]
Cc: [REDACTED]
Subject: ACP-2022-001 Ipswich & Suffolk TDA response

Dear [REDACTED]

I would like to make a response to your above ACP on behalf of the British Microlight Aircraft Association (BMAA), representing approximately 4000 flying members throughout Britain.

I'm sorry that I could not get to send this response to you by your deadline of yesterday afternoon. As mentioned, there are many ACP to monitor, study and try to respond to at present. I'm sure the CAA have the same resource problem.

Our response is:

1. Since this is about the seventh almost identical trial for NHS logistics that has been, or is currently, the subject of a requirement for a TDA can you please advise what your trial will demonstrate that the others have or will not? In other words, why does the NHS need yet another identical trial to decide whether this is a viable logistics platform for the future?
2. If your TDA is approved by the CAA, once it has completed how do you propose to continue to provide services to the NHS (or other clients) in non-segregated airspace in future?
3. Why do you require such a complex route network to demonstrate your logistics? Why can you not demonstrate the potential in a simple route A to B structure?
4. Why can you not demonstrate the logistics to the NHS in an existing segregated airspace area; why does it have to be in this area that cannot be demonstrated elsewhere?
5. Why can you not provide a Danger Area Crossing Service (DACs)?
6. What is your proposal for future use of ADS-B transponder technology since 1090Mhz frequency cannot cope with a large increase to enable small / light aviation (manned and unmanned) use?
7. Please confirm which local airfields, flying clubs/schools you have engaged with on this ACP?
8. Overall, the BMAA cannot support this ACP because of its exclusive use demands on Class G airspace, which we feel should be undertaken within existing Danger / Restricted Areas (there are specific drone trial airspace areas) and its duplication of existing and completed trials, demonstrating inefficient use of airspace and regulatory resources.

Regards

[REDACTED]
BMAA Airspace Team lead

Emails: [REDACTED]

Appendix 7J – Individual Stakeholder 1 (Anonymous) (Initial Engagement)

[REDACTED]

From: Airspace Change
Sent: 20 May 2022 15:56
To: [REDACTED]
Subject: RE: Response to ACP-2022-001

Dear [REDACTED],

Thank you for your feedback on our airspace change proposal ACP-2022-001. As per your request, your feedback will be anonymised; all personal information in the stakeholder responses will also be redacted before uploading to the CAA Airspace Portal.

Please see our responses as follows:-

Engagement

To comply with the regulatory requirements of airspace change under the CAA TDA/DA policy statement, we have conducted a full 12-week stakeholder engagement process between 22 Feb 2022 and 17 May 2022 for aviation stakeholders and interested parties to review and comment on our airspace change proposal. The stakeholder engagement material, which details our proposed operations and the TDA design, was sent to the stakeholders and uploaded to the CAA Airspace Change Portal under [ACP-2022-001](#) on the same day for public review. The stakeholders were later offered an online briefing session in which we would explain our operations in greater detail, and answer any questions regarding our proposal. As listed in Appendix A of the stakeholder engagement material, we have contacted and engaged with a wide range of national representatives, aircraft operators, airfield operators, clubs and associations for this ACP. These stakeholders were either identified by us to be relevant, organisations on the NATMAC list, and/or suggested by the CAA. The list was reviewed by the CAA prior to the start of the engagement process. We have also received feedback from other self-identifying stakeholders or interested parties like yourself.

The project

This project is jointly developed by the East Suffolk and North Essex NHS Foundation Trust and ERS Medical, which is the medical logistic partner of the NHS. The operations will provide the NHS and ERS with useful data to evaluate the effectiveness of using UAS as a means of medical delivery in the Ipswich and southeast Suffolk area. While there might be operations of similar nature in the past, different locations will have different operating environments, conditions and unique locational challenges. The healthcare facilities to be served are specified by the NHS.

Segregated Airspace

As far as this operation is concerned, it was concluded in the CAA Assessment Meeting that our proposed BVLOS activity would need to be contained within segregated airspace, and the current CAA policy is that this should be in form of a Temporary Danger Area (TDA).

Overflying of public footpaths and communities

The flight routes are carefully designed to minimise ground risks and air risks. Skyports will comply with relevant ANO regulations and CAA requirements with regard to separation from persons and structures not under our control.

Duration of TDA activation

90 days is the duration required by the NHS and ERS to obtain sufficient data for their evaluation. However, based on other stakeholders' feedback and changes to operational requirements, we are looking into reducing the scale of the operations. We will adjust the duration of TDA activation period accordingly should we eventually scale down the operations.

Economic Burden

Please note that TDA activation will be promulgated via NOTAM. Can you please elaborate on this point, for example, do you foresee any operational conflict that causes a negative economic impact during the proposed activation period, and would like us to take it into consideration when planning our operations?

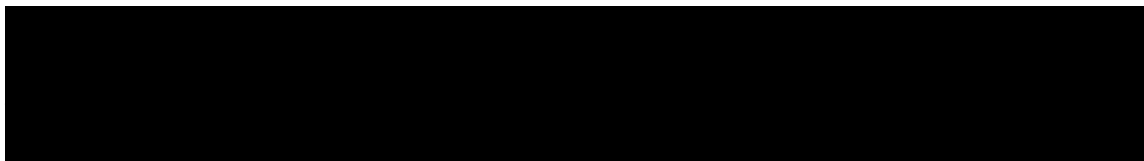
Overflying AONB

As stipulated in CAP1616, the main concern when overflying AONB is the impact upon tranquillity. Previous noise measurement conducted by the CAA has shown that noise emitted by the UA is undetectable from ground when it is in cruise mode. As our UA will be flying at an operating height of 360ft AGL in normal circumstances, we do not envisage any adverse impact on tranquillity when overflying the said AONB.

DAAIS

London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. More information will be provided in due course.

Best Regards,



From: [Redacted]
Sent: 17 May 2022 14:45
To: [Redacted]
Subject: Response to ACP-2022-001

You don't often get email from [Redacted]. [Learn why this is important](#)

Please find attached response to this proposal.

Regards
[Redacted]

To:

Skyports Ltd

Airspace Change

Re: Stakeholder Engagement – ACP-2022-001

Please treat this response as anonymous.

I oppose the proposed change.

The stakeholder engagement process has failed. Although apparently started in February 2022 the first I heard about was 12th May 2022. I would have expected to have heard about this much earlier from at least one of the four listed aviation stakeholders or airfields that I engage with. Additional time and better publicity are needed to gain the best quality responses.

Skyports Ltd has already conducted trials of medical delivery in rural areas by drone. There is no explanation of what additional information would be obtained by conducting this trial.

Segregated airspace is not a sustainable method for collision avoidance with other airspace users. Drones need to use sense and avoid technology so that the normal rules of the air can be adhered to. More effort should be put into these technologies rather than repeating trials.

The proposed airspace design will cover many kilometres of public footpaths and some communities.

The proposed duration of the TDA complex (almost 3 months) is very long. A shorter period could provide sufficient data.

There does not seem to be any consideration of the economic burden on other airspace users ie the cost of checking for TDA activation and re-planning or cancelling impacted activities.

The Deben Estuary is designated under various national and local schemes as a Site of Special Scientific Interest; Special Protection Area; under the Ramsar International Convention on Wetlands and as part of the Suffolk Coasts and Heaths Area of Outstanding Natural Beauty (AONB). The River Orwell has similar protections.

If approved a DAAIS must be made available on locally used radio frequencies in particular Wattisham Approach.

[REDACTED]

Individual Response.

Contact Details

Email: [REDACTED]

Address: [REDACTED]

Appendix 7K – Individual Stakeholder 2 (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 20 May 2022 15:56
To: [Redacted]
Subject: RE: ACP-2022-001

Hi [Redacted]

Thank you for your reply.

To comply with the regulatory requirements of airspace change under the CAA TDA/DA policy statement, we have already conducted a full 12-week stakeholder engagement process between 22 Feb 2022 and 17 May 2022 for aviation stakeholders and interested parties to review and provide feedback on the safety and operational aspects of our airspace change proposal.

While we appreciate your opinion to integrate UAS into the Class G airspace, under the current regulatory framework, it was concluded in the CAA Assessment Meeting that our proposed UAS BVLOS activity would need to be contained within segregated airspace, and as far as this project is concerned, the current CAA policy is that this should be in form of a Temporary Danger Area (TDA). That being said, we also look forward to working closely with the CAA on any future regulatory developments.

Best Regards,

[Redacted]



[Redacted]

From: [Redacted]
Sent: 15 May 2022 13:57
To: Airspace Change [Redacted]
Cc: [Redacted]
Subject: RE: ACP-2022-001

[Redacted]

Hello [Redacted]

I think you'll find that [REDACTED] will remember me from your Oban application. I am a General Aviation pilot with an interest in maintaining access to class G airspace. The creation of new airspace restricts that access and fosters the dissolution of class G airspace which is available to all airspace users. I welcome Remote Piloted Vehicles into this airspace.

To help you, I've outlined key consultation points in Appendix A. I think you'll find that it's in everyone's interest to start a two-way conversation early. After all, you will make a large investment in resource before arriving at the consultation phase. If you haven't engaged stakeholders early, then you run a risk that stakeholders are 'not content', which would frustrate all of your hard work.

The creation of more airspace removes access to class G airspace from other Airspace users. I have set out in Appendix B an evidenced based argument for the integration of Remotely Piloted Vehicles. There are other alternatives which I'd like to discuss, and without clear evidence to the contrary, then we must use them. There may be other options yet to be discovered, and I look forward to the CAA's engagement.

A safety case at the very earliest point would be very helpful. Please submit this email to the airspace portal to provide evidence of my engagement and please will you confirm that I will be listed as a stakeholder.

[REDACTED] and the Airspace Policy Group are copied.

Best regards
[REDACTED]

Appendix A

In CAP1616 (2) Appendix C the CAA says

1. Are there any seldom heard groups impacted?
2. engagement will be required throughout the process by sponsors.
3. ...The CAA's own stakeholder engagement, undertaken during the stages of the process that it leads
4. The core principle underpinning the CAA's assessment of whether a change sponsor is engaging stakeholders effectively will be evidence that the change sponsor is engaging in a two-way conversation.
5. How will they be engaged? What are their needs/requirements? Are there any seldom heard groups impacted? How will material be targeted for different groups and situations identified?
6. Throughout the process, the change sponsor owns the requirement for stakeholder engagement.
7. The change sponsor must be clear to stakeholders about how proposed airspace changes evolve through the stages of the process and how their feedback has informed these evolutions.
8. the CAA will seek evidence stakeholders are content that their views have been captured and taken into account by the change sponsor.

Appendix B the case for integration

"More airfields, less controlled airspace"

"best place in the world for General aviation"

"Clearly we need to *integrate* the drones"

Grant Shapps Secretary of State for Transport (1)

Case 1

Segregated airspace is no panacea for safety (2). There are no barriers to entry or exit and airspace creates a false sense of security.

Case 2

Real world example. Light aircraft flight Perranporth to Biggin Hill in IMC. Bournemouth hands over to Southampton for a RADAR control service (RCS). 7 miles to run, tracking VOR SAM and an incoming Commercial flight transmits its initial call. The service to the light aircraft is terminated and the pilot (me) is instructed to turn onto a northerly heading and leave controlled airspace 'own navigation'. Ignoring any other aspect, the light aircraft pilot is in the same situation as an RPAS with a command link failure.

However, the light aircraft pilot has no control over the situation, and is in a worse situation than a RPAS in class G airspace. The light aircraft was being controlled remotely, the remote pilot (ATC) unexpectedly cut the control link and the on-board pilot is left with few navigation options. (Not a great number of beacons to the North of Southampton).

Flight by a competent RPAS pilot in VMC outside of controlled airspace is in a better proposition than a RCS given to a light aircraft by a commercial operator.

Case 3

"The CAA has a policy of keeping the volume of controlled airspace to the minimum necessary to meet the needs of UK airspace users and to comply with its international obligations.'(3). No airspace user *needs* another danger area, TMZ, RMZ or any other zone for RPAS to operate safely, when there is an alternative solution available.

Case 4

Once established, segregated airspace is almost impossible to remove. In recent memory Southend had no airspace at all. It acquired a few fights from Easyjet and a huge chunk of class G airspace in the SouthEast disappeared. The Airport has never been really busy and Commercial flights stopped in August 2020 (4). Even if Southend introduces new commercial flights is airspace isn't justifie. In comparison Exeter Airport manages on similar volumes without any controlled airspace at all, and still services commercial flights. In contrast Southend burns up airspace that could be available to all!

Case 5

CAP722 reminds us "It is important to emphasise that segregation effectively denies airspace to otherwise legitimate users" (5). TDAs, DAs, TMZ, RMZ are all tools of segregation. Unless there is an imperative, we should all seek a long term non segregated solution. I see no imperative in this application.

Case 6

Integrated BVLOS is a fact in US, Canada, India, South Africa (6), Rwanda Feb 2020(7), Singapore Apr 2020 (8), Switzerland Feb 2017 (9), Ukraine (200 targets) Jan 2022(10)

Case 7

UK Armed forces RPAS operating in the US will not have the experience of operating in integrated airspace. Whilst this might be mitigated by pre- training overseas, it is cost effective and safer to train in the UK in class G airspace. The tax payer's money can be spent more efficiently.

Case 8

How will we treat our allies when they visit the UK on joint exercises? The US Armed forces will think we're bonkers when we tell them RPAS are operating in 'integrated' airspace only to reveal that any RPAS BVLOS needs a danger area or TMZ etc.

Case 9

CAP1861 provides 3 strategies for achieving RPAS integration.

A letter from Sir Stephen Hillier (11)

"TDAs are neither mandatory, nor the first option, to operate BVLOS"

supports my view and draws my attention to this CAP. This application makes no assessment of CAP1861 strategies or alternative segregated structures and provides no conclusive reasoned argument for establishing a DA.

Case 10

As long ago as 5th August 2019 the first FAA-approved 'Beyond-Visual-Line-of-Sight' drone flight was completed (12). The UK is in the dark ages and so will lose the RPAS race, if it hasn't already done so. Bold, enabling action is needed to embrace and facilitate true BVLOS in non segregated airspace.

Case 11

1. Observation, not segregation, is used today to evaluate pilots and their machines abilities by the CAA.
2. Observation is used today, both in the air and on the ground, to evaluate a flying system's fitness to fly by the LAA and microlight association.
3. In 75 years the LAA has never required a TDA, or any segregated airspace to evaluate a new type of aircraft. Its always been assessment by observation In n class G airspace. I can find no significant incidents.
4. The CAA doesn't require the establishment of segregated airspace (- nor should it be required to do so) for practicing aerobatics and aerobatics teams.

Case 12

Cooperation, collaboration, integration

The FAA has shown a 'can do' attitude to integrating drone operation in all airspace (13),(14),(15), (16),(17). Commercial Drones may operate freely and safely in Class G airspace without being segregated but the operator takes responsibility for avoiding all threats. The same Drone can operate safely in

controlled airspace with the agreement of its ATC.

This initiative has seen the FAA

1. Facilitate debate,
2. Form the legislation
3. Allow the people it serves to shape the future

Why can't that happen in the UK?

Case 13

Flying that starts segregated ends up segregated

Case 14

Segregation=MOR=Pilot punishment (18)

1. <https://www.flyer.co.uk/transport-secretary-grants-shapps-talks-to-flyer/>
2. <https://www.flyer.co.uk/aaib-report-slams-caa-and-airspeeder-after-demo-drone-crash/>
3. <https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Airspace-Change/>
4. <https://www.independent.co.uk/travel/news-and-advice/southend-airport-easyjet-ryanair-flights-b1900190.html>
5. <https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=415>
6. <https://www.irisonboard.com/how-to-get-a-bvlos-waiver/>
7. <https://auterion.com/enabling-bvlos-missions-for-the-african-drone-forum/>
8. <https://www.epshipping.com.sg/first-commercial-beyond-visual-line-of-sight-drone-delivery-bvlos-in-singapore/>
9. <https://www.commercialuavnews.com/energy/first-bvlos-license-switzerland>
10. <https://www.uasvision.com/2022/01/06/ukraine-flight-tests-drone-based-awacs>
11. Letter from Sir Stephen Hillier 1 March 2021
12. <https://dronedj.com/2019/08/05/faa-approved-beyond-visual-line-of-sight-drone-flight/>
13. <https://www.aviationtoday.com/2021/01/22/faa-approves-bvlos-drone-operations-without-visual-observers>
14. <https://www.geekwire.com/2020/faa-issues-safety-rules-smooth-way-amazon-drone-deliveries>
15. <https://www.commercialuavnews.com/infrastructure/beyond-visual-line-sight-operations-next-target-faa-regulation>
16. <https://skyward.io/part-107-basics-commercial-drone-regulations-in-the-u-s/>
17. https://www.faa.gov/uas/commercial_operators/
18. <https://airspacesafety.com/statistics/>
19. <https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=9294>

On 13 May 2022, 08:01 +0100, Airspace Change [REDACTED] wrote:

Dear [REDACTED]

Thank you for your response to our airspace change proposal ACP-2022-001.

Can you please elaborate on your position on the safety and operational aspects of our airspace change proposal ACP-2022-001, and let me know if you are responding on behalf of an organisation or as an individual stakeholder, please?

Best Regards,

[REDACTED]

[Redacted]



[Redacted]

From: [Redacted]
Sent: 05 March 2022 16:55
To: Airspace Change [Redacted]
Cc: [Redacted]
Subject: ACP-2022-001

You don't often get email from [Redacted] [Learn why this is important](#)

Hello, again [Redacted]

Please can you add me to your list of stakeholders.

I think you know what my position is, and I look forward to meeting you in 1 airspace.

[Redacted]

Appendix 7L – Ministry of Defence (Initial Engagement)

[REDACTED]

From: Airspace Change
Sent: 20 May 2022 16:01
To: [REDACTED]
Subject: RE: [Reminder] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Hi [REDACTED]

Thank you very much for the consolidated comments and feedback on our airspace change proposal ACP-2022-001. I note that the concerns and conflict mainly come from Wattisham Flying Station. Please see our responses as follows.

Potential conflict between military and UAS operations

To minimise our impact on local operations, and in case emergency access to the TDA by other aircraft operators is required, we have developed a Temporary Operating Instruction (TOI) to be agreed upon with other local aircraft operators. The draft TOI will be sent to you by my colleague shortly, if not already done so. A high-level summary of the procedures is as follows, which were proven to be an effective means of deconfliction in our previous operations in Scotland:-

- VFR traffic (e.g. commercial services, survey & inspection flights, military operations etc.) will be able to access the active TDA with prior notice and in accordance with the procedures defined in the soon-to-come TOI. In other words, if you have any operations planned within our proposed TDA, you may notify us in advance, and we will accommodate as far as practicable.
- Emergency services operators/HEMS have primacy at all times (CAT A); Skyports will ground the UA as soon as reasonably practicable upon notification (grounding will be confirmed and communicated).
- Should the cloud base be <1500ft AGL, Skyports will cease operations.
- London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. More information will be provided in due course.

Noting the routine military operations between Framlingham and Woodbridge, it is feasible for us to remove the Framlingham branch to reduce the impact of our operations.

Communication

In addition to the NOTAM, we will be notifying the stakeholders and operators under the TOI of the activation times of TDAs via email. The mobile number of our flight operations team will be promulgated in the NOTAM and the notification email. Should there be any additional requirements from Wattisham on the communication mechanism, we are happy to have a separate discussion with Wattisham to ensure the operations are coordinated in a safe and efficient manner.

Weather Limitations

As mentioned above, Skyports will not operate the UAS when the cloud base falls below 1500ft AGL. Other operating limitations, such as windspeed and precipitation, can be found in Section 4.6 of the stakeholder engagement material. If for whatever reason, such as weather or technical difficulties, we end our operations and hence deactivate the NOTAM early, we will also notify these stakeholders and operators via email.

RAF Lakenheath, RAF Mildenhall and 78Sqn

We note that our TDA will have minimal impact on their operations. That being said, if there is anything we can do to ensure safe operations for all parties and facilitate deconfliction, please let me know. Please provide us with appropriate contact details if so.

Best Regards,



From: [Redacted]
Sent: 12 May 2022 10:00
To: [Redacted]
Subject: RE: [Reminder] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

You don't often get email from [Redacted] [Learn why this is important](#)

Good morning,

I am writing to you to provide the MOD response to ACP-2022-001.

RAF Lakenheath and RAF Mildenhall have stated that the proposed TDA will have minimal impact to their flying operations and they are able to operate around the area when activated by NOTAM.

78Sqn – who provide area radar services - generally do not operate as low as the TDA but may do so occasionally. Their equipment does not allow them to tactically plot TDAs, which means the airspace will not be displayed on their screens, therefore, it will be incumbent on aircrew to identify the restriction when pre-briefing i.e. checking NOTAMs for their operating area.

Wattisham Flying Station extensively uses the Dedicated User Area (LFA10) to conduct low-level military flying, either single or multi-ship operations. These operations are not restricted to Apache and the area provides low-flying opportunities for other military rotary wing platforms. The area in question is used routinely for low-flying <400'agl, similarly ac will be operating >1500' conducting IF training in Class G especially from Framlingham down to the Woodbridge area. Woodbridge and the surrounding area including Bentwaters is used extensively by rotary wing aircraft, including for deployed aviation exercises. Bookings are managed by Wattisham Ops with an air traffic service being provided by Wattisham Approach. Similarly, fixed wing ops are also conducted low-level into and around the area, making use of the runway at Woodbridge and the new TALO areas that have been constructed to facilitate training, this activity is also booked in via Wattisham Ops. On this basis, when active the TDA may restrict military flying in the area and has the potential to negatively impact MOD output. Whilst MOD does not object to the TDA proposal, it is suggested that the operator forges ties with Wattisham Ops to aid communication and coordination of airspace usage by all parties, which will help to ensure safe and efficient operations.

Wattisham's key concern is regarding the MET criteria that will be applied for UAS activity. During good weather military aircraft heading to Woodbridge will be able to fly over the UAS transit routes, but during bad weather when military aircraft maybe squeezed lower this could potentially leave very few options for transits to Woodbridge. The MOD would seek to understand the operating criteria to inform their flight planning in and around the area.

Thank you for engagement on this TDA proposal and MOD wishes to keep communications channels open, so that the concerns above can be discussed and addressed.

Best regards,

[Redacted]

[Redacted] Defence Airspace and Air Traffic Management [Redacted]

From: Airspace Change [Redacted]
Sent: 20 April 2022 17:01
To: Airspace Change [Redacted]
Subject: [Reminder] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Skyports ACP-2022-001: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Further to my email below, this is a gentle reminder for stakeholders and interested parties to provide feedback on our airspace change proposal [ACP-2022-001](#) by **17:00 on Tuesday 17 May 2022**, if not done so already.

Any comments would be much appreciated.

Many thanks in advance and best regards,

[Redacted]



[Redacted]

From: Airspace Change
Sent: 22 February 2022 19:15
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Location: Ipswich and South East Suffolk


Dear Aviation Stakeholders,

Skyports, a UK-based drone delivery service provider, is contacting you with regards to airspace change proposal ACP-2022-001 to enable the operations of unmanned aircraft (UA) beyond visual line of sight (BVLOS). This operation aims to assist the East Suffolk and North Essex NHS Foundation Trust and ERS Medical to strengthen their medical logistic network by using unmanned aircraft system (UAS).

Skyports is seeking your views and feedback on these airspace designs in the form of a formal targeted aviation stakeholder engagement exercise required as part of Airspace Change Process (CAA CAP1616), which falls under the TDA policy statement.

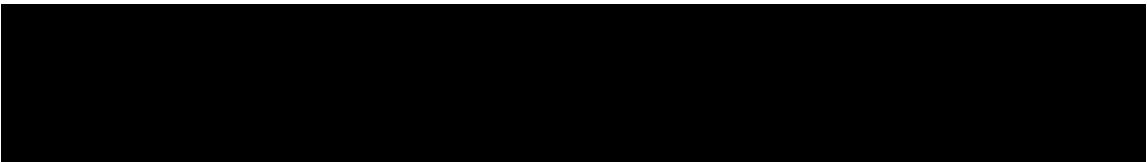
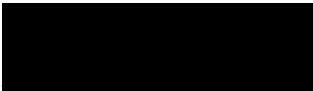
We believe our designs allow us to safely execute our operations whilst minimising negative impacts on other airspace users.

The details of our proposed operations and airspace change designs can be found in the stakeholder engagement material attached in this email. Other documents related to our formal targeted aviation stakeholder engagement exercise for this change proposal can be found on the CAA Airspace Portal under [ACP-2022-001](#).

I would greatly appreciate it if you could please provide feedback by responding to this email  by 17:00 on Tuesday 17 May 2022.

When providing your feedback, please make sure you are providing your views on the correct airspace change proposal.

Many thanks in advance and kind regards,



Appendix 7M – Monewden Airfield (Initial Engagement)

[REDACTED]

From: Airspace Change
Sent: 13 May 2022 08:00
To: [REDACTED]
Subject: RE: Monewden Airfield
Attachments: ACP-2022-001 ERS Ipswich - ConOps Lite v1.0.pdf

Dear [REDACTED]

Thank you for your response to our airspace change proposal ACP-2022-001. The purpose of our operations is to provide ERS Medical, the medical logistics partner of East Suffolk and North Essex NHS Foundation Trust, with medical delivery services by unmanned aircraft which supplement their existing logistic network. This trial operation will also allow ERS Medical to evaluate the feasibility of wider commercial drone delivery services for their medical supply chain. You may wish to refer to our engagement material for further details.

We would be grateful if you could please elaborate on your position on the safety and operational aspects of our airspace change proposal. For example, if you envisage any potential conflicts between your airfield's operations and our operations, or you have any other safety concerns, please let us know, as it helps us to assess and mitigate the risk and impact of our operations on other local airspace users.

To minimise our impact on local operations, we are currently developing a Temporary Operating Instruction (TOI) to be agreed upon with local aircraft and airfield operators like yourself. Once completed, it will be sent to you for your review. A high-level summary of the procedures is as follows, which were proven to be an effective means of deconfliction in our previous operations in Scotland:-

- VFR traffic (e.g. commercial services, survey & inspection flights) will be able to access the active TDA with prior notice and in accordance with the procedures defined in the soon-to-come TOI.
- Our UA will be grounded when other VFR traffic is operating within the TDA during the agreed period.
- Emergency services operators/HEMS have primacy at all times (CAT A); Skyports will ground the UA as soon as reasonably practicable upon notification (grounding will be confirmed and communicated).
- Should the cloud base be <1500ft AGL, Skyports will cease operations.
- London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. More information will be provided in due course.

The simplified ConOps is attached for your reference. Please let me know your initial thoughts, comments, and factors/operational needs you would like us to take into consideration when developing the TOI. The first draft of TOI will be sent to you shortly. Should you require any further information, please do not hesitate to contact me. We are also happy to arrange a meeting/briefing with you if you find this useful.

Best Regards,

[REDACTED]

-----Original Message-----

From: [REDACTED]

Sent: 04 May 2022 20:16

To: Airspace Change [REDACTED]

Subject: Monewden Airfield

[You don't often get email from [REDACTED] Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification.>]

What a complete load of B.S

What are you going to do for the NHS apart from take money from a bunch of investors that don't know any better.

As far as sharing airspace I will keep a lookout for you coming through the windscreen!

[REDACTED]

Sent from my iPhone

Sent from my iPhone

Appendix 7N – National Grid (Initial Engagement)

[REDACTED]

From: [REDACTED]
Sent: 20 May 2022 17:15
To: [REDACTED]
Subject: RE: [EXTERNAL] Skyports National Grid TOI - ACP 2022-001

You don't often get email from [REDACTED] [Learn why this is important](#)

Thanks [REDACTED]

The TOI & NOTAM contains enough information for us to co-ordinate in the event of a fault patrol, so no further concerns at this stage.

Please can you send a kml file of the revised TDAs A&B?

[REDACTED]

From: Airspace Change [REDACTED]
Sent: 20 May 2022 15:56
To: [REDACTED]
Subject: RE: [EXTERNAL] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe. If you suspect this email is malicious, please use the 'Report Phish' button.

Hi [REDACTED]

Thank you for your reply. Please see our responses as follows:-

Communication

- Understood that short-notice access to the TDA may be required to conduct emergency operations. We will take that into account and include procedures to facilitate these operations in the TOI. The draft TOI will be sent to you by my colleague shortly, if not already done so.
- The mobile number of the flight operations team will be promulgated on the NOTAM and the notification email.
- London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. We can look into using VHF and London Information's frequency for communication, but this has to be confirmed with London FIS and Ofcom.

ADS-B

- As far as this operation is concerned, the ADS-B onboard the aircraft is solely for our remote pilots' situational awareness and is not intended to be used as a means of tactical deconfliction.

Sample NOTAM

- Please see the attached sample for your reference.

TDA intersecting the National Grid lines

- The width of TDA B where it crosses the NG lines is 1900mm, constrained (i.e. no RTB or orbiting manoeuvres in that section).

VMC Compliance

- Thank you for spotting that. It's a typo – the minimum visibility should be 1500m at take-off/landing points only.

Best Regards,



From: [Redacted]
Sent: 20 May 2022 13:03
To: [Redacted]
Cc: [Redacted]
Subject: [EXTERNAL] Skyports National Grid TOI - ACP 2022-001

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe. If you suspect this email is malicious, please use the 'Report Phish' button.

Good afternoon [Redacted]

My colleague [Redacted] and I are working together on this ACP and he will shortly respond to your specific questions.

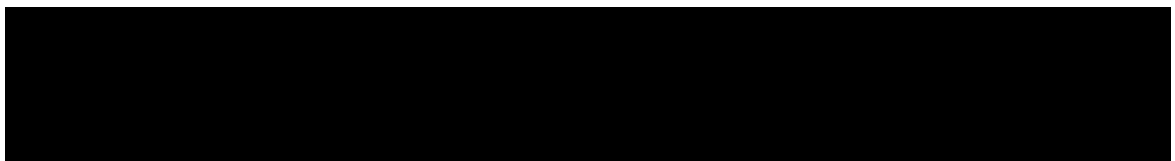
Please find attached the proposed draft TOI which I hope addresses most, if not all of your concerns. If you have any suggestions or amendments I would appreciate it if you can get them back to me by Friday 27th May. I am also happy to have a call next week if preferred to discuss.

You will also note that we have significantly reduced our route network based on stakeholder and operational feedback and will now only be operating from Ipswich to Alderton/Samundham within reduced specific dates and times, to better utilise the proposed TDA.

Multiple flights are scheduled to take place as per below:

- **15/08/22 to 16/09/22** (5 weeks): **Ipswich to Saxmundham**. 5 consecutive hours between **1030 and 15:30** (local) daily unless otherwise specified (not including weekends).
- **19/09/22 to 21/10/22** (5 weeks): **Ipswich to Alderton**. 5 consecutive hours between **0930 and 1430** (not including weekend).

Kind regards,



[Redacted]

From: Airspace Change
Sent: 20 May 2022 15:56
To: [Redacted]
Subject: RE: [EXTERNAL] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement
Attachments: Sample NOTAM from previous operations.png

Hi [Redacted]

Thank you for your reply. Please see our responses as follows:-

Communication

- Understood that short-notice access to the TDA may be required to conduct emergency operations. We will take that into account and include procedures to facilitate these operations in the TOI. The draft TOI will be sent to you by my colleague shortly, if not already done so.
- The mobile number of the flight operations team will be promulgated on the NOTAM and the notification email.
- London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. We can look into using VHF and London Information’s frequency for communication, but this has to be confirmed with London FIS and Ofcom.

ADS-B

- As far as this operation is concerned, the ADS-B onboard the aircraft is solely for our remote pilots’ situational awareness and is not intended to be used as a means of tactical deconfliction.

Sample NOTAM

- Please see the attached sample for your reference.

TDA intersecting the National Grid lines

- The width of TDA B where it crosses the NG lines is 1900mm, constrained (i.e. no RTB or orbiting manoeuvres in that section).

VMC Compliance

- Thank you for spotting that. It’s a typo – the minimum visibility should be 1500m at take-off/landing points only.

Best Regards,

[Redacted Signature]



[Redacted Footer]

[Redacted]

From: [Redacted]
Sent: 16 May 2022 10:45
To: Airspace Change [Redacted]
Subject: RE: [EXTERNAL] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

You don't often get email from [Redacted] [Learn why this is important](#)

Hi [Redacted]

24hrs notice could be disruptive to our routine patrols so good to hear a TOI will provide some flexibility; stakeholders being emailed should provide additional visibility.

We need a method of deconflicting on the day if we need to perform an emergency patrol to resolve a system outage quickly, so the TOI (as well as the NOTAM) needs to address this with a permanently staffed contact number (with alternate management numbers if possible), otherwise a DACS will be required to co-ordinate so our patrol can go ahead if the situation warrants. Can the drone pilots make use of a VHF radio frequency in case we need to re-task an aircraft into the TDA during flight and we can confirm whether a flight in a particular TDA might conflict? Could London Information's frequency be used, transmitting on 124.6MHz, for example, to confirm which TDA is active and notify the routing to an agency that can provide information to other airspace users? This would require the operator and equipment to be licenced with Ofcom.

NG aircraft are equipped with TCAS1 in order to detect ADS-B Out but not all NG aircraft have ADS-B Out. How does the drone detect transponder-equipped aircraft that do not have ADS-B Out in order to recognise a conflict with an aircraft that may have strayed into the TDA?

Please can sample wording of the NOTAM/TDA notification be provided?

Can I confirm that the width of TDA B where it crosses the NG lines? Is the TDA width at that point based on the unconstrained sector contingency volume?

Just looking at the tech spec of the Kookaburra, I'm not sure it can claim VMC compliance at min visibility of 500m?

[Redacted]

[nationalgrid](#)

[Redacted]

Please consider the environment before printing this email.

From: Airspace Change [Redacted]
Sent: 13 May 2022 22:46
To: [Redacted]
Subject: RE: [EXTERNAL] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe. If you suspect this email is malicious, please use the 'Report Phish' button.

Dear [Redacted]

Thank you for your response to our airspace change proposal ACP-2022-001 and for letting us know about the potential conflict with your operations.

About TDA access and deconfliction

As our operations are highly dependent on weather, it will be difficult for us to plan our flights more than 24 hours in advance. To minimise our impact on local operations, and in case emergency access to the TDA by other aircraft operators is required, we are currently developing a Temporary Operating Instruction (TOI) to be agreed upon with local aircraft operators like yourself. Once completed, it will be sent to you for your review. A high-level summary of the procedures is as follows, which were proven to be an effective means of deconfliction in our previous operations in Scotland:-

- VFR traffic (e.g. commercial services, survey & inspection flights) will be able to access the active TDA with prior notice and in accordance with the procedures defined in the soon-to-come TOI. In other words, if you have any operations planned within our proposed TDA, you may notify us in advance, and we will accommodate as far as practicable.
- Our UA will be grounded when other VFR traffic is operating within the TDA during the agreed period.
- Emergency services operators/HEMS have primacy at all times (CAT A); Skyports will ground the UA as soon as reasonably practicable upon notification (grounding will be confirmed and communicated).
- Should the cloud base be <1500ft AGL, Skyports will cease operations.
- London FIS have agreed to provide DAAIS and potentially DACS for our proposed TDA. We are currently in discussion with NATS regarding the implementation details. More information will be provided in due course.

The simplified ConOps is attached for your reference. Please let me know your initial thoughts, comments, and factors/operational needs you would like us to take into consideration when developing the TOI. The first draft of TOI will be sent to you shortly. Should you require any further information, please do not hesitate to contact me. We are also happy to arrange a meeting/briefing with you if you find this useful.

About early deactivation of NOTAM and communication

In addition to the NOTAM, we will be notifying the stakeholders and operators under the TOI of the activation times of TDAs via email. If for whatever reason, such as weather or technical difficulties, we end our operations and hence deactivate the NOTAM early, we will also notify these stakeholders and operators via email. The mobile number of our flight operations team will be promulgated in the NOTAM and the notification email. You may wish to call our flight operations team to check the status of TDA and the availability of airspace. Please note that we only intend to activate the TDAs for a block of 5 consecutive hours between 09:30 and 15:30 during weekdays.

KML file

Please see the file attached.

Definitions of terms

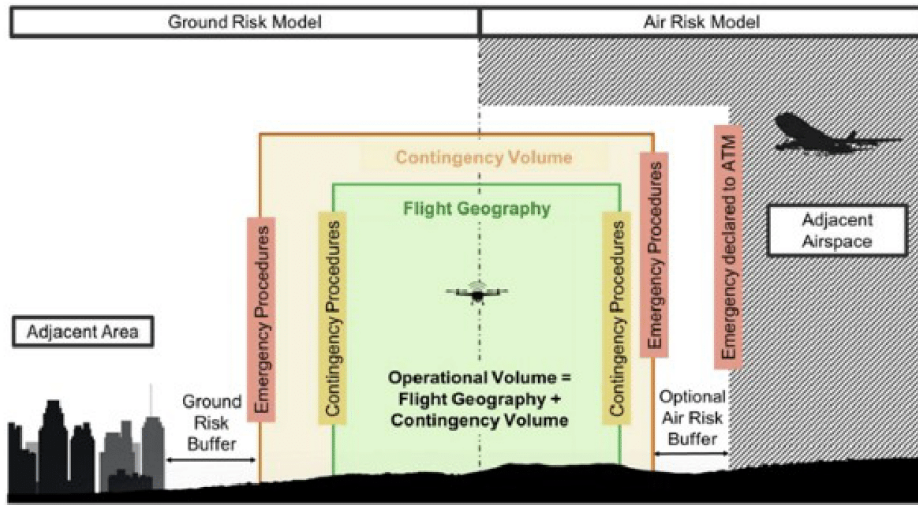
Constrained Leg – Flight segment where the UA cannot execute an orbit, RTH or contingency landing.

Unconstrained Leg – Flight segment with a larger containment volume and dedicated circuit tracks where the remote pilot may execute contingency landing, orbits and RTH.

Flight Geography – The corridor which contains the intended flight path with a horizontal error buffer on either side of the track, and a vertical error buffer above and below the track.

Contingency Risk Buffers (or Contingency Volume) – The zone which serves as a buffer outside the flight geography and is used for contingency manoeuvres (orbit, RTH, contingency landing). By design, no emergency landing trajectory would result in the UA exiting the contingency volume.

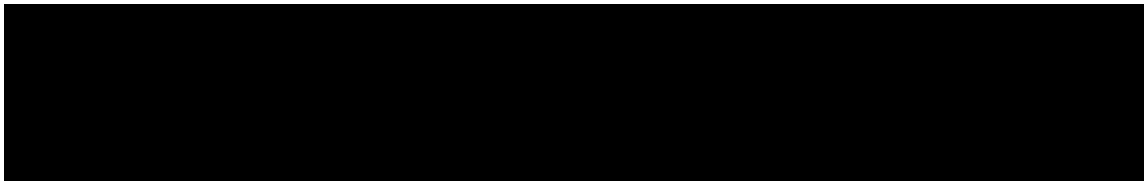
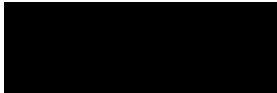
Ground Risk Buffers – The minimum separation between the Contingency Volume and any ground risks (e.g. buildings/structures not under our control) for additional safety assurance.



For details of the operating volume, please refer to Section 4.6 of the stakeholder engagement material.

I hope the above information answers your questions. If you have any other questions, concerns or comments about the safety and operational aspects of our proposal, please do not hesitate to contact me.

Best Regards,



From: [Redacted]
Sent: 23 February 2022 09:41
To: [Redacted]
Subject: RE: [EXTERNAL] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Hi [Redacted]

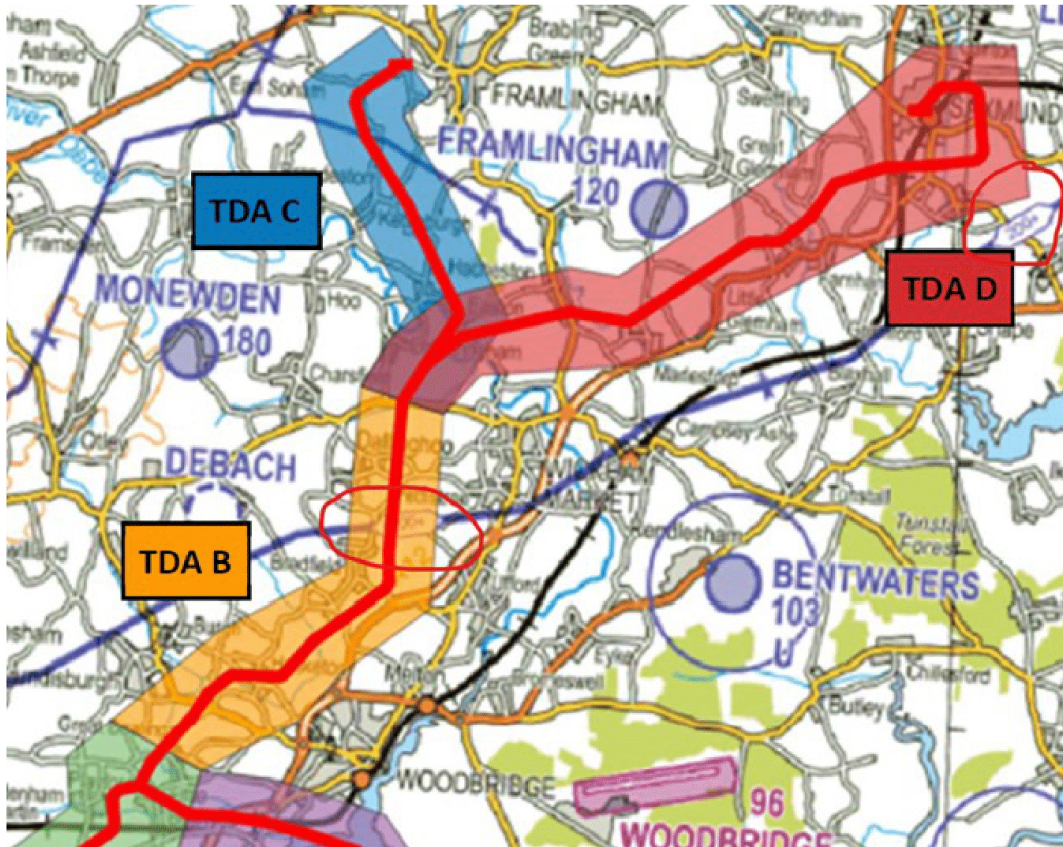
I have constructive suggestions to remedy potential conflict with low-level helicopter powerline surveys.

Our helicopter powerline surveys would conflict within TDA B near Wickham Market and possibly at the extremity of TDA D as shown below. Our helicopters normally hover just above the pylons gathering imagery. The TDA NOTAM

would prevent NG helicopters entering the TDA but we would require more than 24hrs notice of TDA activation so we don't position a helicopter to the area for work only to find the TDA is active the following day (and be unsighted on TDA activation times for the rest of the week in order for us to plan work around TDA activation). I believe 96hrs notice would be a more reasonable notice period and enable us to plan Monday's work on a Friday, for example. Occasionally we are called out to perform emergency patrols to establish the cause of an outage so would need to be able to contact the TDA authority to negotiate access within a few hours. I note the ADS-B in/out capability, our aircraft are TCAS 1 equipped so would potentially be able to interrupt our survey to move clear of a passing drone, and resume once the risk of conflict was over. Also, what will be the mechanism for de-activating the TDA early? Given the inherent lag in the NOTAM system, will there be an information/mobile number to call/message to confirm that the TDAs have been de-activated early so we can potentially restart work? It may be useful to have a hyperlink in the NOTAM to the anticipated TDA activation times.

Please may I have the kml file of the TDAs and ask what the minimum separation distance will be from persons, vehicles & structures?

Could you also provide the definitions of Un/Constrained Legs, Flight Geography, Contingency & Ground Risk Buffers in Appendix D?



[Redacted]
nationalgrid
[Redacted]

Please consider the environment before printing this email.

Appendix 70 – NATS (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 21 March 2022 16:19
To: [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Hi [Redacted]

Thank you for your response. We will let you know if we need any further inputs or assistance from NATS.

Best Regards,

[Redacted]



[Redacted]

From: [Redacted]
Sent: 21 March 2022 14:32
To: [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

You don't often get email from [Redacted] [Learn why this is important](#)

Dear [Redacted]

Many Thanks for sight of your ACP engagement material. NATS has reviewed it and has no comments to make.

Should you require any further input, please contact me directly at the email address below.

Kind Regards

[Redacted]



[Redacted]

[REDACTED]

www.nats.co.uk



NATS Public

From: Airspace Change [REDACTED]
Sent: 22 February 2022 19:15
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Formal Targeted Aviation Stakeholder Engagement

Your attachments have been security checked by Mimecast Attachment Protection. Files where no threat or malware was detected are attached.

Location: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Skyports, a UK-based drone delivery service provider, is contacting you with regards to airspace change proposal ACP-2022-001 to enable the operations of unmanned aircraft (UA) beyond visual line of sight (BVLOS). This operation aims to assist the East Suffolk and North Essex NHS Foundation Trust and ERS Medical to strengthen their medical logistic network by using unmanned aircraft system (UAS).

Skyports is seeking your views and feedback on these airspace designs in the form of a formal targeted aviation stakeholder engagement exercise required as part of Airspace Change Process (CAA CAP1616), which falls under the TDA policy statement.

We believe our designs allow us to safely execute our operations whilst minimising negative impacts on other airspace users.

The details of our proposed operations and airspace change designs can be found in the stakeholder engagement material attached in this email. Other documents related to our formal targeted aviation stakeholder engagement exercise for this change proposal can be found on the CAA Airspace Portal under [ACP-2022-001](#).

I would greatly appreciate it if you could please provide feedback by responding to this email [REDACTED] **by 17:00 on Tuesday 17 May 2022.**

When providing your feedback, please make sure you are providing your views on the correct airspace change proposal.

Many thanks in advance and kind regards,

[REDACTED]

Appendix 7P – TGC (Initial Engagement)

[Redacted]

From: Airspace Change
Sent: 20 May 2022 15:56
To: [Redacted]
Subject: RE: Airspace change ACP-2022-001 UAS BVLOS

Hi [Redacted]

Thank you for your reply.

The application/approval process and requirements for airspace change are set out in CAP1616 for us, as the change sponsor, to adhere to. As we have not operated in this part of the country before, we have followed the CAP1616 requirement and launched a full, 12-week stakeholder engagement exercise without scaling it. The timeline, including the duration of the engagement process, was approved by the CAA; and as mentioned in my previous email, the stakeholder list was also reviewed by the CAA. Of course that does not stop us from engaging with more stakeholders, interested parties or concerned individuals, and in some cases, the conversation can go beyond the engagement period or even throughout the airspace change process if necessary. However, we as the change sponsor do have to rely on national/regional representatives, organisations or even individual stakeholders to spread the information, as it is not practical nor proportionate for us to identify and contact all affected pilots/individual for a temporary airspace change that lasts no longer than 90 days. Subsequent to your initial feedback, we have flagged the issue of ineffective internal communication within these representative organisations to the CAA in a bid to raise more awareness for these national/regional bodies, especially those on the NATMAC list, on the importance of publicising and referring airspace change proposals to relevant members.

We do appreciate your feedback and suggestions, but please understand that we are not in a position to comment on the airspace change policy and its requirements as stipulated in CAP1616, as it falls outside the scope of this engagement exercise. If you have any questions or feedback on the process, you may wish to raise them to the CAA direct as they are responsible for reviewing the effectiveness of the process in a wider context.

Thank you for your understanding.

Best Regards,

[Redacted signature]



[Redacted signature block]

From: [Redacted]
Sent: 19 May 2022 11:09

To: Airspace Change [REDACTED]

Subject: Re: Airspace change ACP-2022-001 UAS BVLOS

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Whilst I thank-you for your email, the problem is that you have launched a 12 week stakeholder engagement process with apparently little idea of the structure of private light aircraft usage in the UK, resulting in some interested parties still not being aware of it. You are dealing with individuals, small groups of interested parties, low level clubs and amateur organisations, some with no regular base for communication, and/or that meet monthly if at all, so as is often the case with these applications, 12 weeks is simply not long enough. I had understood that the Suffolk Strut, of which I am a member, became aware of it very shortly before I contacted you and again, it has no specific base. A similar airspace change proposal to this, again for drone operations in the general vicinity, had to be re-started when it become clear to the CAA that too many interested parties simply knew nothing about it.

I am a good example (and there are many more I can think of) - I have a private airfield in Essex with 2 residents, and the area of Suffolk you refer to is just a few minutes flying time away, and is a very common area to operate in. The airfields you mention are not members of the Suffolk Strut as you suggest, they simply 'may have' pilots that are members of the strut - 'may have' is NOT a reliable enough communication mechanism for such a short time frame containing critical safety related factors. The only organisation many of us with Permit aircraft are part of, is the LAA, whose monthly magazine we receive. However, with printing hysteresis, the fact it is national as opposed to regional, 12 weeks is simply not long enough to ensure you have given visibility to the right people to ensure information can be disseminated out via a local strut which is a very small, amateur run private club, many with spasmodic communication facilities.

Even ignoring the above, it is aircraft owners that use the area regularly that need to be contacted, and not just some of the larger airfields that are based there - surely the CAA registration database is the best starting point for this? Additionally, there are several training organisations that are based just a few minutes flying time from the area of interest that regularly operate in the area, that's not yet qualified PUT, doing PFL's, nav ex's, stall spin practice, etc - have you contacted those organisations because omitting them does not seem reasonable? I note you have contacted Great Oakley, but no mention of Clacton - an active training base? There is also quite a contingent of vintage aircraft around the area, many without any form of transponder or detection systems, and few will be members of AOPA or any of the other organisations you mention - sorry, from my perspective this process is just not adequate.

Regards,

[REDACTED]

[REDACTED]

[REDACTED] TGC

This e-mail and any files transmitted with it are confidential and may be protected by legal privilege. If you are not the intended recipient, please notify the sender and delete the e-mail from your system. This e-mail has been scanned for viruses but as the internet is inherently insecure, we cannot accept any liability for the integrity of this message or its attachments. E-mails sent and received by us are monitored to ensure compliance with the company's information security policy.

On 13 May 2022, at 14:12, Airspace Change [REDACTED] wrote:

Dear [REDACTED]

Thank you for your initial feedback on our airspace change proposal ACP-2022-001 in Ipswich and South East Suffolk.

To comply with the regulatory requirements of airspace change under the CAA TDA/DA policy statement, we launched a full 12-week stakeholder engagement process on 22 Feb 2022 for aviation stakeholders and interested parties to review and comment on our airspace change proposal. The stakeholder engagement material, which details our proposed operations and the TDA design, was sent to the stakeholders and uploaded to the CAA Airspace Change Portal under [ACP-2022-001](#) on the same day. For your easy reference, I have attached the stakeholder engagement material to this email.

In addition, two subsequent reminder emails were issued on 20 Apr (1 month before the end of the engagement process) and 10 May (1 week before the end of the engagement process) to encourage feedback from stakeholders. The LAA was included in the email list throughout the process as they are members of the National Air Traffic Management Advisory Committee (NATMAC), a list which the CAA provided as potentially interested stakeholders in airspace changes.

We are aware of airfields along our flight routes, and we did identify and contact those that are closest to our proposed TDA and hence most likely to be impacted. These airfields, amongst others, include Crowfield, Elmsett, Great Oakley and Monewden, which I understand are members of the Suffolk Coastal Strut. It is unfortunate that you have only just received our proposal from the LAA/Suffolk Coastal Strut. We did receive a response from [REDACTED] of Monewden Airfield in March, who is also the Safety Officer of the Suffolk Coastal Strut we understand. I have also sent these airfields additional information about our operations and the proposed deconfliction solution in April. We are yet to receive a response from the LAA.

In order for me to update the email list for future correspondence, can you please let me know (i) which organisation you are responding on behalf of, (ii) what type of organisation it is, and (iii) where is it based? Also, please advise if you have any immediate concerns with regard to the safety and operational aspects of our proposal, e.g. potential operational conflicts, so that we can review and address them as quickly as possible.

For the list of stakeholders we have contacted, please refer to Appendix A of the attached stakeholder engagement material. The stakeholders on the list were either identified by us to be relevant, organisations on the NATMAC list, and/or suggested by the CAA. The list was reviewed by the CAA prior to the start of the engagement process. Please note that the list is not exhaustive as we have received responses from other self-identifying stakeholders as well.

To help you better understand our proposal, we are happy to organise an online briefing session for you and your associated local pilots next Monday (16 May) where we can present the details of our operations, and answer questions that you may have. Please let me know if you are interested. However, as we have already allowed 12 weeks for relevant aviation stakeholders and interested parties to review and comment on our proposal, due to time and operational constraints, it would be much appreciated if you could provide your feedback/comments by 17 May 2022, if any.

Thank you for your understanding, and we look forward to hearing from you soon.

Best Regards,

[REDACTED]

<image001.png>

[<image002.png>](#) [<image003.png>](#) [<image004.png>](#) [<image005.png>](#)



From: [Redacted]
Sent: 12 May 2022 20:55
To: Airspace Change [Redacted]
Cc: [Redacted]
Subject: Airspace change ACP-2022-001 UAS BVLOS

You don't often get email from [Redacted] [Learn why this is important](#)

Firstly and in short.

For the avoidance of doubt, I strongly object to receiving such a critically important document via the Suffolk Coastal Strut aviation group, with less than a week left to respond - it is completely unacceptable and IS NOT an equitable consultation process.

Of all the local pilots I know, none of them seem to be aware of your proposals which demonstrates that you have abjectly failed in your duty to adequately publicise your intentions. Five days is also NOT enough time to generate an informed and educated response. I therefore ask you to halt the consultation process by a minimum of two months, AFTER you have adequately informed affected pilots and aviation groups.

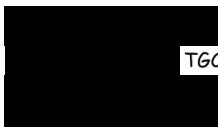
There are a significant number of airfields in the area, most of which can be identified easily via the normal aviation documentation and online resources - can you confirm which airfields and/or flying groups you have contacted, and additionally, can you confirm when you contacted the LAA?

My initial objection voiced, I will now review the information received more fully and respond.

Yours sincerely,

[Redacted signature]

<image006.png>



This e-mail and any files transmitted with it are confidential and may be protected by legal privilege. If you are not the intended recipient, please notify the sender and delete the e-mail from your system. This e-mail has been scanned for viruses but as the internet is inherently insecure, we cannot accept any liability for the integrity of this message or its attachments. E-mails sent and received by us are monitored to ensure compliance with the company's information security policy.

<ACP-2022-001 Skyports Stakeholder Engagement Material v1.0.pdf>

8 Appendices – Evidence of Additional Engagement

Appendix 8A – Initial Email to Stakeholders (Additional Engagement)

[Redacted]

From: Airspace Change
Sent: 01 February 2023 21:45
To: Airspace Change
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement
Attachments: ACP-2022-001 Skyports Stakeholder Engagement Material v2.0.pdf

Location: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Skyports, a UK-based drone delivery service provider, is contacting you in regard to airspace change proposal ACP-2022-001 to enable the operations of unmanned aircraft (UA) beyond visual line of sight (BVLOS). Following the stakeholder engagement exercise we conducted between 22 February 2022 and 17 May 2022, some changes have been made to the airspace design and concept of operations to comply with regulatory requirements. In summary, the main changes are as follows:

- The commencement date of implementation has been postponed to 10 April 2023. The operations will be conducted for 5 hours per day, during weekdays only, for up to 10 weeks in total (subject to regulatory approval);
- We have scaled down the proposed operations and reduced the number of routes to 1 route within 1 TDA only (Ipswich – Alderton).

The details of the latest proposal can be found in the stakeholder engagement material attached to this email. Other relevant documents of this airspace change proposal can be found on the CAA Airspace Portal under [ACP-2022-001](#).

We are now inviting you to share your views on the updated proposal. If you have any comments on the latest proposal, I would greatly appreciate it if you could please provide your feedback by responding to this email **[Redacted] by 17:00 on Tuesday 21 February 2023.**

When providing your feedback, please make sure you are providing your views on the correct airspace change proposal.

Many thanks in advance and kind regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)

 Skyports



[Redacted]

Appendix 8B – Reminder Email to Stakeholders (Additional Engagement)

[Redacted]

From: Airspace Change
Sent: 18 February 2023 00:10
To: Airspace Change
Subject: [Reminder] Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

Airspace Change Location: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Further to my email below, this is a gentle reminder for all stakeholders and interested parties that the stakeholder engagement exercise of our Airspace Change Proposal ACP-2022-001 will conclude soon. If you would like to provide feedback on our proposal, please do so by replying to this email by **17:00 on Tuesday 21 February 2023**. Your views are important to us, as they help us assess and minimise the impact of our proposal. Any comments would be very much appreciated.

Thank you and we look forward to hearing from you soon.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: Airspace Change
Sent: Wednesday, February 1, 2023 9:45 PM
To: Airspace Change [Redacted]
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

Location: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Skyports, a UK-based drone delivery service provider, is contacting you in regard to airspace change proposal ACP-2022-001 to enable the operations of unmanned aircraft (UA) beyond visual line of sight (BVLOS). Following the stakeholder engagement exercise we conducted between 22 February 2022 and 17 May 2022, some changes have been made to the airspace design and concept of operations to comply with regulatory requirements. In summary, the main changes are as follows:

- The commencement date of implementation has been postponed to 10 April 2023. The operations will be conducted for 5 hours per day, during weekdays only, for up to 10 weeks in total (subject to regulatory approval);
- We have scaled down the proposed operations and reduced the number of routes to 1 route within 1 TDA only (Ipswich – Alderton).

The details of the latest proposal can be found in the stakeholder engagement material attached to this email. Other relevant documents of this airspace change proposal can be found on the CAA Airspace Portal under [ACP-2022-001](#).

We are now inviting you to share your views on the updated proposal. If you have any comments on the latest proposal, I would greatly appreciate it if you could please provide your feedback by responding to this email **by 17:00 on Tuesday 21 February 2023**.

When providing your feedback, please make sure you are providing your views on the correct airspace change proposal.

Many thanks in advance and kind regards,

[Redacted signature]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted contact information]

Appendix 8C – Targeted stakeholders engagement on TOI (Additional Engagement)

[REDACTED]

From: Airspace Change
Sent: 22 February 2023 02:12
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – TOI
Attachments: Skyports - TOI for ACP-2022-001 Ipswich & South East Suffolk v2.0.pdf

Skyports ACP-2022-001: Ipswich and South East Suffolk

Dear all,

Following my previous email dated 1 Feb 2023 to seek your views and comments on our airspace change proposal (ACP) in Ipswich and South East Suffolk, we would like to know if you anticipate any conflict between our proposed UAS operations (Ipswich – Alderton) and your/your company's flying activities.

We appreciate that our proposed Temporary Danger Area (TDA) may affect routine aircraft operations in the region. To minimise the impact on local operations, we have developed Temporary Operating Instructions (TOI) to be agreed with local aircraft and airfield operators like yourselves, which were proven to be an effective means of deconfliction in our previous operations. The draft version of the TOI is attached for your review. A high-level summary of the procedures is as follows,

- The TDA will be activated by NOTAM; the timings of activation will be promulgated by NOTAM at least 24 hours in advance. If for whatever reason, e.g. adverse weather conditions or technical difficulties we cease our operations early, we will deactivate the TDA and notify relevant stakeholders and aircraft operators as quickly as possible.
- Scheduled VFR traffic (e.g. commercial services, survey & inspection flights) will be able to access the active TDA with prior notice and in accordance with the procedures defined in the attached TOI.
- Emergency services/HEMS operations have primacy at all times; Skyports will ground the UA as soon as reasonably practicable upon notification (grounding will be confirmed and communicated).
- Should the cloud base be <1500ft AGL, Skyports will cease operations.
- London FIS have previously agreed to provide a DAAIS for our proposed TDA (awaiting confirmation from NATS for the new implementation period).

Please let us know if our proposed UAS BVLOS operations and TDA is likely to affect your operations and if you have any comments on the TOI. Should you require any further information, please do not hesitate to contact me.

Thank you and I look forward to hearing from you soon.

Best Regards,

[REDACTED]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)

 Skyports



[REDACTED]

Appendix 8D – Association of Remotely Piloted Aircraft Systems (ARPAS-UK) (Additional Engagement)

[Redacted]

From: Airspace Change
Sent: 23 February 2023 10:33
To: [Redacted]
Subject: RE: ACP-2022-001 Ipswich and South East Suffolk

Hi [Redacted]

Thank you for your feedback on our airspace change proposal and your continuous support of our UAS operations.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: [Redacted]
Sent: Thursday, February 23, 2023 8:14 AM
To: Airspace Change [Redacted]
Subject: ACP-2022-001 Ipswich and South East Suffolk

You don't often get email from [Redacted] [Learn why this is important](#)

Good morning,

Apologies for being a day late with our response. On behalf of ARPAS UK, we fully support you newly updated TDA application as set out in ACP-2022-001.

kind regards

[Redacted]

[Redacted]

Appendix 8E – British Gliding Association (BGA) (Additional Engagement)

[Redacted]

From: Airspace Change
Sent: 18 February 2023 01:29
To: [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

Hi [Redacted]

Thank you for your response to our airspace change proposal ACP-2022-001. We are glad to hear that our proposal will not adversely impact your gliding activities. If you and/or your members have any questions about our operations in the future, please do not hesitate to contact us.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: [Redacted]
Sent: Tuesday, February 7, 2023 1:18 PM
To: Airspace Change [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

You don't often get email from [Redacted] [Learn why this is important](#)

Hi
The BGA is content that this TDA will not adversely impact gliding operations.
Kind regards
[Redacted]
BGA

From: Airspace Change [Redacted]
Sent: 01 February 2023 21:45
To: Airspace Change [Redacted]
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

Location: Ipswich and South East Suffolk

Dear Aviation Stakeholders,

Appendix 8F – British Microlight Aircraft Association (BMAA) (Additional Engagement)

[REDACTED]

From: [REDACTED]
Sent: 22 February 2023 15:09
To: [REDACTED]
Cc: [REDACTED]
Subject: [REDACTED]

Thanks [REDACTED]
I have received your message.

Regards
[REDACTED]

From: [REDACTED]
Sent: 22 February 2023 16:05
To: [REDACTED]
Cc: [REDACTED]
Subject: [REDACTED]

Hi [REDACTED]

As mentioned below, I'm sending you the same email again using my personal account in case you cannot receive my email. Most grateful if you could acknowledge receipt.

Many thanks,
[REDACTED]

From: Airspace Change
Sent: Wednesday, February 22, 2023 3:01 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: [REDACTED]

Hi [REDACTED]

Thank you for your feedback and for raising this issue with us. As required by the CAA due to the delay in implementation, we launched a 3-week additional engagement on 1 Feb 2023 mainly to see if stakeholders have any concerns on the new implementation period, or any further comments on the ACP in general. The initial outreach email was issued on 1 Feb 2023. A reminder email was sent to stakeholders who did not respond on 18 Feb 2023. I can confirm that yourself [REDACTED] and the BMAA Airspace email [REDACTED] were included in the stakeholder email list, as they have always been. See the attached screenshots for your reference.

We noted that you/BMAA have experienced issues with receiving emails from us. However I have checked our system and the emails were sent successfully; we have not heard other stakeholders raising similar issues either. May I ask you to please check your junk/spam/promotion folder to see if you can find my emails dated 1 and 18 Feb 2023, or if you have accidentally blocked all emails from us?

Due to time constraints in submission it would be very much appreciated if you could provide your responses as soon as possible. To facilitate your review, please see below a high-level summary and the changes:

- The latest proposal is a scaled down version of the original ACP-2022-001. The number of routes has been reduced from 4 down to 1 and there will only be 1 TDA instead of a complex of TDAs. We will now be operating between Ipswich and Alderton only.
- The implementation period, subject to regulatory approval, is now 10 April 2023 – 16 Jun 2023 (10 weeks, weekdays only).
- The TDA will be activated for up to 5 hours per day. Exact timings will be promulgated by NOTAM at least 24 hours in advance.
- The shape of the TDA for Ipswich-Alderton has tweaked slightly in response to stakeholder comments. The final design to be submitted to the CAA will see the UA flight route flying above River Deben for a long time. See attached excerpt of the final proposal that we are drafting and will be submitted to the CAA shortly.
- A DAAIS will be provided by London FIS for this TDA.

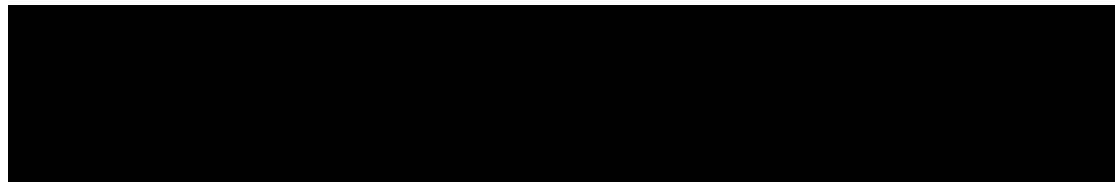
I will be sending you this email again using another account in case you're unable to receive this email. I'd be most grateful if you could confirm receipt.

Please let me know if you have any other questions or require any further information. I do apologise for the inconvenience caused.

Best Regards,



[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



From: [Redacted]

Sent: Monday, February 20, 2023 10:24 PM

To: Airspace Change [Redacted]

Cc: [Redacted]

Subject: [Redacted]

Dear [Redacted]

As a member of the British Microlight Aircraft Association (BMAA) Airspace Team I would like to respond to your below message at ACP-2022-001.

I received this information via my membership of the below BBGA because I have not received this message directly of the BMAA's NATMAC listing, which is both myself and [Redacted] are on.

Firstly, can you kindly check that you have sent this below message directly to both myself and [Redacted] as required by the NATMAC contacts?

Secondly, I note that in your below message you are asking for a response by 21 February. Consider the BBGA have only received the below message from you today, 20 February (and the BBGA are usually prompt with passing these on) and I have not had this notice from you directly I am very surprised that you asking for a response in such a short notice.

I would request that you provide ourselves, on behalf of the BMAA, such a response for feedback on this notice on this ACP within 30 days of notification, which would seem to be a much more realistic timeline.

Regards

[Redacted]
BMAA Airspace Team

Sent from my iPad

Begin forwarded message:

From: [Redacted]
Date: 20 February 2023 at 11:46:19 GMT
To: [Redacted]
Subject: [Redacted]



Dear [Redacted]

Further to my email below, this is a gentle reminder for all stakeholders and interested parties that the stakeholder engagement exercise of our Airspace Change Proposal ACP-2022-001 will conclude soon. If you would like to provide feedback on our proposal, please do so by replying to this email by 17:00 on Tuesday 21 February 2023. Your views are important to us, as they help us assess and minimise the impact of our proposal. Any comments would be very much appreciated.

Thank you and we look forward to hearing from you soon.

Best Regards,

[Redacted]

Appendix 8G – Ministry of Defence (Additional Engagement)

[REDACTED]

From: Airspace Change
Sent: 22 February 2023 02:12
To: [REDACTED]
Subject: RE: 20220301-Suffolk_TDA
Attachments: Skyports - TOI for ACP-2022-001 Ipswich & South East Suffolk v2.0.docx

Hi [REDACTED]

No problem at all, I will make our flight operations team aware of this requirement.

With regard to the procedures, similar to last time we have drafted a TOI for this operation. The content/procedures are largely the same as the last version, although the flight route, TDA design and operation dates/times have been updated to reflect the latest proposal. I have also incorporated the "call before and after each flight" requirement into the TOI (Sections 5.3 and 7.2). The word version is attached for your review, please let me know if you/your colleagues have any comments and feel free to edit using tracked changes.

Thank you and I look forward to further updates from you soon.

Best Regards,

[REDACTED]
[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



From: [REDACTED]
Sent: Monday, February 20, 2023 1:22 PM
To: Airspace Change [REDACTED]
Subject: RE: 20220301-Suffolk_TDA

[REDACTED]

Wattisham are hoping to build a good relationship right from the start, and therefore think it prudent to call for each flight initially for both take-off and landing. Going forward once a 'battle rhythm' is established we should be able to reduce the phone calls to the periods that we will be flying only, but this will require close liaison.

They don't expect the Senior Operator to necessarily come back with any other observations, this is merely 'belt & braces' to keep him informed of developments. He is back in Wednesday and Mark will speak with him then to get the final confirmation, once received I'll get that sent over to you ASAP.

Best regards,

[Redacted]

[Redacted] Defence Airspace and Air Traffic Management [Redacted]

From: Airspace Change [Redacted]
Sent: 20 February 2023 10:32
To: [Redacted]
Subject: RE: 20220301-Suffolk_TDA

Good Morning [Redacted]

Thank you for your swift response. We're happy to give Wattisham Air Traffic and Wattisham Ops a call before the start of operations. Just to clarify though, would you(/they) like a call before each take-off and after each landing, or will a call before the first take-off and after the last landing of the day be sufficient (FYI we're expecting around 5 return flights/10 sectors per day)? If for whatever reason, e.g. adverse weather conditions or technical difficulties etc. we end our operations early, we will definitely give them a call as well.

As for the response from the Wattisham Senior Operator, do you anticipate any comments from them that might significantly affect our ACP, especially the TDA design? Due to the tight deadline for submission, it would be much appreciated if you could let me know their comments as soon as possible, so that we can revise the proposal and/or redesign the TDA and submit the final proposal to the CAA in time for the AIC submission deadline this Friday (24/2). However, if it is likely to be some minor comments, suggestions, or confirmation on the details of the communication and notification procedures, then we are more than happy to keep the engagement going beyond the engagement period.

Once again thank you very much for coordinating the responses and comments for our ACP.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: [Redacted]
Sent: Monday, February 20, 2023 9:49 AM
To: Airspace Change [Redacted]
Subject: RE: 20220301-Suffolk_TDA

Good morning [REDACTED]

Thank you for the comprehensive responses to the questions that we posed. It is clear that Skyports have designed the TDA to have as little impact as possible on other airspace users.

Wattisham has fed back that although the TDA will be activated by NOTAM, they would also strongly request that a phone call be placed with Wattisham Air Traffic [REDACTED] and Wattisham Ops [REDACTED] to alert to the exact Take-off time and when the drone has landed at the intended destination. This will allow traffic information to be presented to Apache Crews and visiting ac either about to depart or in-flight. The crews will have situational awareness especially with the drone routing down the river with the proposed new routing. This will all aid mitigation to the Loss of Safe Separation between a low flying helicopter and the drone and display good airmanship. Would the phone calls be agreeable to Skyports?

I note that the deadline for feedback is COP tomorrow but the Wattisham Senior Operator is on leave until Wednesday – will you still be able to accept any additional comments he may have up until the end of the week?

Best regards,

[REDACTED]

[REDACTED] Defence Airspace and Air Traffic Management [REDACTED]

From: Airspace Change [REDACTED]
Sent: 18 February 2023 01:38
To: [REDACTED]
Subject: RE: 20220301-Suffolk_TDA

Dear [REDACTED]

First of all please accept my apology for the late reply. Regarding [REDACTED] questions, please see our responses (in blue) as follows:

- What protocols do the drones have for lost comms?
The UA that we will be flying has an advanced geofence system to ensure the aircraft remains within the preplanned flight containment volume (with both vertical and horizontal boundaries) which it is programmed not to breach. If the UA deviates from the predefined flight route and the flight computer, based on the UA's velocity vector and position, predicts that the aircraft may exit the containment, the aircraft will trigger an emergency landing automatically. In the unlikely event of a loss of comms, the UA will be able to maintain on the known path as it is the safest way to remain predictable. Based on the last known parameters of the aircraft (e.g. speed, heading, altitude etc.), the CU will be able to calculate and estimate the UA's position in "ghost mode", while the UA attempts to re-establish C2 or switch over to SatCom. We do have emergency procedures in place to cater for the flyaway scenario, and we can include Wattisham in the emergency contact list in case of a flyaway.
- What is the absolute ceiling of their operation – does this change with lost comms?
Our proposed TDA has an upper limit of 550ft AMSL. Our UA, under normal circumstances, will cruise at an altitude of 360ft AGL, which is well within the upper boundary as the terrain along the route is mostly flat. The ceiling will not change with lost comms and as explained above, the UA will be bounded by a containment volume.
- What is our appetite to be operating above the drones – or will we be segregated laterally with a presumed no overfly?

As mentioned above, the TDA is only up to 550ft AMSL high and we have already reserved some vertical buffer between the planned flight route and the upper limit of the TDA. The TDA will have no effect on the airspace above 550ft AMSL and there will be no restriction from us at all when the TDA is not activated.

- Also could the route be tweaked slightly, to something like this, it will make it easier for our crews to visualise where the drones will be operating, we do use the old disused airfield at Woodbridge quite extensively and this would help immensely...

We have tweaked the route slightly so that it follows River Deben for as long as possible. By rerouting a bit more towards the west, hopefully it will be more straightforward for pilots to visualise the TDA by using the river as a visual reference, and it provides traffic to/from Woodbridge with more space to manoeuvre and to climb over the TDA if necessary. Unfortunately we are unable to track direct from the Ipswich take-off/landing point to the river (i.e. fly south of the railway line, as per the top left arrow on your map) as we need to avoid overflying the populated areas there to lower the ground risk and to satisfy CAA's requirements. Please see below our latest design and let us know if it is acceptable. If you need the coordinates or the kml file, please let me know and we are more than happy to send them over.

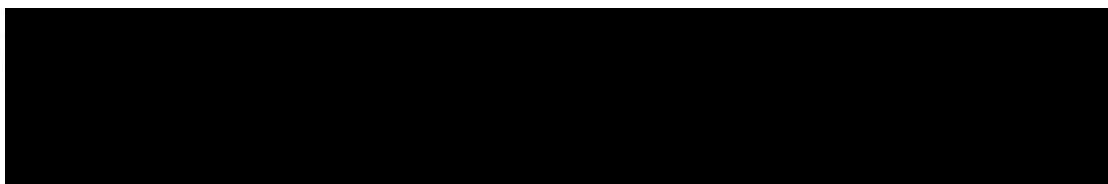


Thank you and I look forward to hearing from you soon.

Best Regards,



[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)





From: [Redacted]
Sent: Friday, February 10, 2023 9:38 AM
To: Airspace Change [Redacted]
Subject: RE: 20220301-Suffolk_TDA

Hi [Redacted]

Ref. my previous email, are you able to provide answers to the questions below, as that may shape the MOD response?

Best regards,

[Redacted]

[Redacted] Defence Airspace and Air Traffic Management [Redacted]

From: [Redacted]
Sent: 02 February 2023 15:56
To: [Redacted]
Subject: FW: 20220301-Suffolk_TDA

Hi [Redacted]

One of the operators has come back with a couple of questions in the email below, if you are able to answer them, please?

Best regards,

[Redacted]

[Redacted] Defence Airspace and Air Traffic Management [Redacted]

From: [Redacted]
Sent: 02 February 2023 15:44
To: [Redacted]
Subject: RE: 20220301-Suffolk_TDA

Hi [Redacted]

Just a quick couple of comments at this early stage...could you confirm the following please:

- What protocols do the drones have for lost comms?
- What is the absolute ceiling of their operation – does this change with lost comms?
- What is our appetite to be operating above the drones – or will we be segregated laterally with a presumed no overfly?

Also could the route be tweaked slightly, to something like this, it will make it easier for our crews to visualise where the drones will be operating, we do use the old disused airfield at Woodbridge quite extensively and this would help immensely...



FIGURE 3: TOP-DOWN VIEW OF THE TDA (WITH FLIGHT ROUTE)

Look forward to hearing back.

Kind regards,

[Redacted]

[Redacted] Wattisham Flying Station, [Redacted]

From: [Redacted]
Sent: 02 February 2023 10:55
To: [Redacted]
Subject: RE: 20220301-Suffolk_TDA

[Redacted]

Many thanks.

Best regards,

[Redacted]

[Redacted] Defence Airspace and Air Traffic Management [Redacted]

From: [Redacted]
Sent: 02 February 2023 10:31

To: [REDACTED]
Subject: RE: 20220301-Suffolk_TDA

Morning [REDACTED]

Thanks very much for the email, all noted...I've forwarded this to [REDACTED] for comment, I'm hoping to have these returned back by the 10 Feb which will then be forwarded to you...sooner if possible.

Kind regards,

[REDACTED]

[REDACTED] Wattisham Flying Station, [REDACTED]

From: [REDACTED]
Sent: 02 February 2023 09:38
To: [REDACTED]
Subject: RE: 20220301-Suffolk_TDA

Good morning [REDACTED]

You may recall our previous conversations regarding the proposed TDA in the Ipswich area – your original comments are below. Skyports have revised their proposal following discussions with the CAA and the following changes have been made:

- The commencement date of implementation has been postponed to 10 April 23. The operations will be conducted for 5 hours per day, during weekdays only, for up to 10 weeks in total (subject to regulatory approval);
- The TDA complex has been scaled down to 1 TDA only (Ipswich – Alderton).

The details of the latest proposal can be found in the stakeholder engagement material attached. If you have any comments regarding the changes, please send them to me by **COP 17 Feb 23**.

Best regards,

[REDACTED]

[REDACTED] Defence Airspace and Air Traffic Management [REDACTED]

From: [REDACTED]
Sent: 11 May 2022 11:47
To: [REDACTED]
Subject: RE: 20220301-Suffolk_TDA

[REDACTED]

Finally managed to get some feedback, observations below:

- Wattisham Flying Station extensively uses the Dedicated User Area (LFA10) to conduct low-level military flying, either single or multi-ship operations. These operations are not restricted to Apache, although the vast majority of sorties are homplated ac, the area also provides low flying opportunities for other JHC platforms. The area in question is used routinely for low-flying <400'agl, similarly ac will be operating >1500' conducting IF training in Class G especially from Framlingham down to the Woodbridge area.

From: [REDACTED]
Sent: 02 February 2023 16:46
To: Airspace Change
Subject: 20230202-Wattisham Flying Station Skyports TDA-O

Dear Sir, Madam,

We (Wattisham Flying Operations) have been asked to comment ref the proposed TDA for the autonomous BVLOS drone flights intended to take place between Ipswich-Alderton, we are currently collating comments which we will submit through the Defence Airspace and Air Traffic Management cell before the 21 Feb deadline.

That said, could I please request a slight 'tweak' to your proposed route, indicated by the black arrows on the diagram below...

Basically, revising the route to come down the river Deben more, as a rule we will not fly down the river as such but cross at right angles if we need to cross from one side to the other. The reason for the change is we use the disused airfield at Woodbridge extensively for Apache helicopter training, the area is also used by other helicopter platforms, namely Chinook although Puma and Wildcat will also look to operate there, by having the drone fly down the river it would provide an easy visualisation for low flying helicopter crews to orientate to the TDA. This would afford more deconfliction with our operations to/from and in the immediate vicinity of Woodbridge airfield.



FIGURE 3: TOP-DOWN VIEW OF THE TDA (WITH FLIGHT ROUTE)

Thank you very much for your consideration, I look forward to hearing back in due course.

Kind regards,

[REDACTED]

[REDACTED] Wattisham Flying Station, [REDACTED]

Appendix 8H – National Grid (Additional Engagement)

[Redacted]

From: Airspace Change
Sent: 18 February 2023 01:28
To: [Redacted]
Subject: RE: [EXTERNAL] Skyports National Grid TOI - ACP 2022-001

Hi [Redacted]

Thank you for your response to our airspace change proposal ACP-2022-001. We are glad to hear that our proposed operations will not conflict with your inspection activities. If you have any questions about our operations in the future, please do not hesitate to contact us.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: [Redacted]
Sent: Thursday, February 2, 2023 8:44 AM
To: Airspace Change [Redacted]
Subject: RE: [EXTERNAL] Skyports National Grid TOI - ACP 2022-001

Hi [Redacted]

Just seen the new TDA in v2 of the proposal, this will not conflict with the inspection of NG Transmission assets by helicopter.

[Redacted]

[nationalgrid](#)

[Redacted]

Please consider the environment before printing this email.

From: [Redacted]
Sent: 24 May 2022 21:14
To: Airspace Change [Redacted]
Subject: RE: [EXTERNAL] Skyports National Grid TOI - ACP 2022-001

Hi [Redacted]

Appendix 8I – National Police Air Service (Additional Engagement)

[Redacted]

From: [Redacted]
Sent: 24 February 2023 10:31
To: Airspace Change
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – TOI

You don't often get email from [Redacted] [Learn why this is important](#)

Dear [Redacted]

Thank you for your email and I can confirm that the proposal would have negligible/ nil effect on our operations.

Best regards

[Redacted Signature]

National Police Air Service/ Gwasanaeth Awyr Cenedlaethol yr Heddlu

[Redacted Contact Information]



From: Airspace Change [Redacted]
Sent: 22 February 2023 02:12
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – TOI

Skyports ACP-2022-001: Ipswich and South East Suffolk

Dear all,

Following my previous email dated 1 Feb 2023 to seek your views and comments on our airspace change proposal (ACP) in Ipswich and South East Suffolk, we would like to know if you anticipate any conflict between our proposed UAS operations (Ipswich – Alderton) and your/your company's flying activities.

We appreciate that our proposed Temporary Danger Area (TDA) may affect routine aircraft operations in the region. To minimise the impact on local operations, we have developed Temporary Operating Instructions (TOI) to be agreed with local aircraft and airfield operators like yourselves, which were proven to be an effective means of deconfliction in our previous operations. The draft version of the TOI is attached for your review. A high-level summary of the procedures is as follows,

- The TDA will be activated by NOTAM; the timings of activation will be promulgated by NOTAM at least 24 hours in advance. If for whatever reason, e.g. adverse weather conditions or technical difficulties we cease our operations early, we will deactivate the TDA and notify relevant stakeholders and aircraft operators as quickly as possible.
- Scheduled VFR traffic (e.g. commercial services, survey & inspection flights) will be able to access the active TDA with prior notice and in accordance with the procedures defined in the attached TOI.
- Emergency services/HEMS operations have primacy at all times; Skyports will ground the UA as soon as reasonably practicable upon notification (grounding will be confirmed and communicated).
- Should the cloud base be <1500ft AGL, Skyports will cease operations.
- London FIS have previously agreed to provide a DAAIS for our proposed TDA (awaiting confirmation from NATS for the new implementation period).

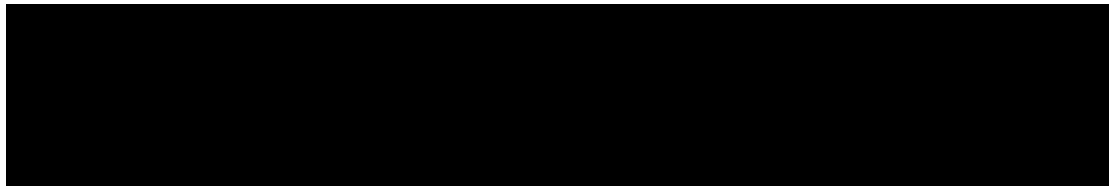
Please let us know if our proposed UAS BVLOS operations and TDA is likely to affect your operations and if you have any comments on the TOI. Should you require any further information, please do not hesitate to contact me.

Thank you and I look forward to hearing from you soon.

Best Regards,



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Appendix 8J – NATS (Additional Engagement)

[Redacted]

From: [Redacted]
Sent: 22 February 2023 11:53
To: [Redacted]
Subject: RE: Skyports NATS London FIS TOI: ACP 2022-001

Hi [Redacted]

Thank you very much for your prompt response. Noted the name change and will update the TOI accordingly.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: [Redacted]
Sent: Wednesday, February 22, 2023 11:22 AM
To: [Redacted]
Subject: RE: Skyports NATS London FIS TOI: ACP 2022-001

Hi [Redacted]

I'm good thank you and I hope you are well also.

As before, as long as the activity is correctly NOTAMED then London FIS will be happy. The contact points remain the same apart from a name change to the Duty W.A.S. now being called Service Delivery Manager.

All the best.

[Redacted]

NATS Internal

From: [Redacted]
Sent: 22 February 2023 02:11
To: [Redacted]
Subject: [EXTERNAL] RE: Skyports NATS London FIS TOI: ACP 2022-001

Mimecast Attachment Protection was unable to create safe copies of your attachments.

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear [REDACTED]

I hope you've been keeping well. It has been a long time since my last email to you regarding our Airspace Change Proposal ACP-2022-001 – to establish a TDA in Ipswich and Southeast Suffolk for our UAS BVLOS operations. Apologies for not providing you with any updates sooner, unfortunately, due to the delay in the regulatory process, we have not been able to launch our operation as originally planned. In our latest proposal, we have scaled down our proposed operation to just one route between Ipswich and Alderton, which the CAA is finally happy to approve provisionally.

As you may be aware, we've just concluded the additional stakeholder engagement as required by the CAA due to the delay in ACP implementation, and we're now preparing the final proposal to the CAA. May I just confirm if London FIS is still happy to provide a DAAIS for our TDA, please? And if so, are the following still the contact points of London FIS?

- London FIS Primary Contact: FIS E – 124.6
- London FIS Secondary Contact: Duty W.A.S. [REDACTED]

The word version of the updated TOI is attached for your review, please feel free to edit using tracked changes. The content is largely the same as the previous one, although the route details, TDA design and operation dates and times have been changed to reflect the latest proposal. The TDA will be activated by NOTAM, and the UAS operation will only be conducted during NOTAM activation period only.

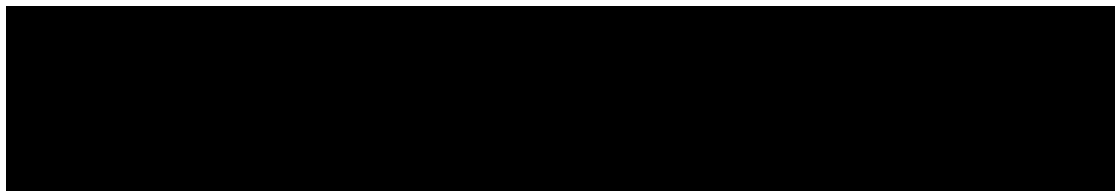
If you have any comments or require any further information, please do not hesitate to contact me.

Once again thank you very much for your help.

Best Regards,



[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



From: [REDACTED]
Sent: Monday, July 25, 2022 9:39 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Skyports NATS London FIS TOI: ACP 2022-001

[Redacted]

From: Airspace Change
Sent: 22 February 2023 06:17
To: [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

Hi [Redacted]

Thanks for confirming and for your comment on the stakeholder engagement material. We have indeed contacted London FIS separately with the updated draft TOI for their review. We await their confirmation that London FIS is still happy to provide a DAAIS for our TDA, and their agreement with the procedures detailed in the TOI.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: [Redacted]
Sent: Thursday, February 9, 2023 3:10 PM
To: Airspace Change [Redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

Dear [Redacted]

Thank you for providing NATS the opportunity to comment on your proposal.

I can confirm that there is no impact on our operation and we note your intention to liaise with London FIS again.

Regarding 4.7 - We think it should read: *Skyports has previously discussed with NATS and London Flight Information Service (FIS) has agreed to provide a DAAIS to cover the area of operations, which enables aircraft en-route to be able to contact **London Flight Information Service** Skyports and to be reminded of any active TDA in the area. Skyports will confirm with London FIS again regarding the provision of DAAIS.*

Rgds
[Redacted]

Appendix 8K – Norfolk Hang Gliding and Paragliding Club (Additional Engagement)

[Redacted]

From: [Redacted]
Sent: 28 February 2023 12:47
To: Airspace Change
Cc: [Redacted]
Subject: Re: ACP-2022-001

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Dear [Redacted]

Thank you for your reply.

This helps us understand capabilities of the proposed UA. As I am sure you can appreciate no pilot would wish to enter a TDA other than in an emergency situation. A piloted aircraft can make an attempt at avoidance at this point in time if necessary.

Regards

[Redacted]

NHPC Airspace and Sites

On Thu, Feb 23, 2023 at 1:30 AM Airspace Change [Redacted] wrote:

Dear [Redacted]

Thank you for your feedback on our airspace change proposal ACP-2022-001. Please note that the ADS-B onboard our UA is used as a tactical means of air risk mitigation; it is only being used to increase RP's situational awareness. As the UA to be used for this operation is not equipped with detect-and-avoid capabilities, we will be operating wholly within segregated airspace in form of a TDA as per the existing regulatory framework and CAA policy.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)





From: [Redacted]
Sent: Monday, February 20, 2023 11:14 AM
To: Airspace Change [Redacted]
Cc: Norfolk Hang Gliding and Paragliding Club Committee [Redacted]
Subject: ACP-2022-001

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Dear Sir/Madam

On behalf of Norfolk Hang Gliding and Paragliding Club I would like to raise or concerns with reference to ACP-2022-001.

The proposal is within popular cross country flying routes. Typically EC devices are used within the gliding community, mainly FLARM systems not ADS-B systems.

As we are all aware, electronic systems do not always deliver. See and be seen has always served well.

To this end I hope you appreciate our concerns.

We would happy to provide a tandem paraglider flight to understand things from our perspective.

Regards

[Redacted]

[Redacted]

NHPC Sites and Airspace

Appendix 8L – Suffolk Coastal Strut (Additional Engagement)

[REDACTED]

From: Airspace Change
Sent: 23 February 2023 01:30
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace - LAA Suffolk Coastal Strut Response

Dear [REDACTED]

Thank you for your feedback on our airspace change proposal ACP-2022-001. As you are aware we have significantly scaled down our proposed operations to comply with CAA requirements. The purpose of this additional stakeholder engagement is to ensure stakeholders are aware of the latest proposal and the new implementation period, which has been delayed due to the regulatory process. The scope and focus of engagement remain the safety and operational aspect of the proposed airspace change. The safety of the UAS operations will be assessed by the CAA separately.

With regard to your comments, please see our responses as follows:

- Your comment on TDA is noted. However, under the current regulatory framework, it was concluded by the CAA during the airspace change process that the proposed UAS BVLOS operations will need to be contained within segregated airspace, and according to the current CAA policy, this should be in form of a TDA. We equally look forward to working closely with the CAA on future regulatory developments that enable an integrated/non-segregated approach.
- The UAS operation is supported by a robust operating safety case (OSC). We have provided the CAA with evidence and supporting documents such as the safety features and technical details of the UA, ConOps and route design, operating procedures, contingency and emergency procedures and risk assessment etc. The OSC has been reviewed and provisionally approved by the CAA. The UA itself is bound by vertical and horizontal containments with ground risk buffer in place to allow sufficient separation from built-up/populated areas. The route and the take-off/landing points, as well as the entire flight volume, including the flight geography (i.e. the airspace where the UA will fly in), contingency volume and ground risk buffer, are wholly contained within the TDA.
- The crossing of major roads and railway lines was highlighted by the CAA in their assessment of our ConOps. The UA will cross the A12 at an angle greater than 45 degrees which minimises the time the UA overflies the A12. Besides, the UA will be cruising at an altitude of 360ft AGL under normal circumstances, and the section crossing the A12 is a “constrained leg” within which the UA will not be able to orbit or RTH. With other mitigations and procedures in place, the CAA is satisfied that the ground risk of this route is reduced to ALARP. We have also obtained provisional approval from the CAA with regard to the carriage of dangerous goods, and we will comply with the relevant regulations, technical instructions and packing instructions. Mitigations and procedures are also in place to cater for occurrences involving dangerous goods.
- As part of the previous submission, Skyports has conducted an analysis of the noise and environmental impact proportionate to the scale of our proposed operations and the CAA was satisfied that the UAS operation has minimal environmental impact.
- As per the CAA’s advice, we have engaged with relevant stakeholders on the NATMAC list (contacts provided by the CAA) which includes a wide range of national bodies and representatives. While we endeavour to identify as many local airspace users as possible, we do have to rely on these national bodies and representatives to circulate the proposals and engagement materials amongst their members and local branches. We thank you for your suggestion to engage with Skyward Flight Training Ltd and we will reach out to them separately. If you have their contact details, it would be much appreciated if you

could share them with me. In addition, if there are other stakeholders or local airspace users that you think may be interested or may be affected by the proposed airspace change, please let us know and we are happy to conduct continuous engagement as per CAP1616. Alternatively, they can always refer to the AIC and NOTAM for details of the TDA including activation timings, contact us by email [redacted] or call our duty flight operations team (phone number to be promulgated by NOTAM) to understand the details of our operations, coordinate, deconflict, and/or discuss any requests they may have. Please note that a DAAIS will be provided by London FIS as well.

Best Regards,

[redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[redacted]

From: [redacted]
Sent: Tuesday, February 21, 2023 3:31 PM
To: Airspace Change [redacted]
Cc: [redacted]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace - LAA Suffolk Coastal Strut Response

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Dear Sirs

Please see attached our response to the above ACP.

Many thanks

Regards

[redacted]

LAA Suffolk Coastal Strut

[redacted]

From: Airspace Change [redacted]
Sent: 01 February 2023 21:45
To: Airspace Change [redacted]
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace – Additional Stakeholder Engagement

Location: Ipswich and South East Suffolk

ACP-2022-001 - UAS BVLOS in Segregated Airspace – Ipswich and South East Suffolk
Response from LAA – Suffolk Coastal Strut
February 2023

Dear Sirs

On behalf of the LAA – Suffolk Coastal Strut thank you for the opportunity to review/feedback on your latest version of ‘Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace’.

We note there has now been a significant reduction/de-scaling of the proposed airspace change from the original multiple routes now reduced to 1 route within 1 TDA only (Ipswich – Alderton).

The ACP has been circulated to our members and discussed by our committee.

We note that there have been improvements since the ACP was first issued last year, however we **oppose** this ACP, with the following comments:-

- As a matter of principle, we would object to the ongoing use of TDAs as an obstruction, exclude other airspace users and would rather see a demonstrable and reliable shared/integrated airspace approach (‘see and avoid’).
- There is limited data within this proposal that clearly shows the record of reliability (e.g. MTBF² information) and actual recorded flight profiling of the current UAV system against the horizontal and vertical route parameters planned.
- It would have been good to have historical data included for the proposed system, the reporting and investigation of any incidents, MOR's, endangerment etc. i.e. transparency around performance, risk and safety. It is therefore difficult to assess the likelihood that the planned parameters might be breached and endanger other airspace users/members of the public and the impact if this does happen.
- The route launch point is not identified, there is often paramotor activity in the proposed TDA area – the river Deben appears to attract them! They can launch, with landowners’ permission, from suitable local fields and may conflict with the proposal’s flight route - I am not aware exactly where these might be, how have these folk been engaged with?
- No diversion/emergency landing, other than RTH is referenced, what contingency plans are there to land if there are malfunction(s) that prevent RTH? What incident plans are in place should there be an unexpected event?
- It is noted that a significant GA training organisation, Skyward Flight Training Ltd, at Rougham Airfield, Bury St Edmunds do not appear to have been engaged as a stakeholder? We are aware that they use the Deben River area for training.
- Also noted that RAF Honington is also absent from the stakeholder list. This is now a glider training location for Cadets.

² Mean Time Between Failure

I ([REDACTED]) also offer personal feedback as a R/C modeller, member of the BMFA, with nearly 50 years' experience and as a member of the local community over which part of the TDA is proposed (Martlesham).

- I know of at least 2 sites where R/C model flying takes place, on an occasional basis, within the proposed TDA. As I am sure you are aware with your contact with the BMFA, under Article 16 authorisation members are not bound by the 400ft rule as long as certain criteria are met (I have colleagues who have variometers on their gliders and will often hit 500ft plus agl, legal of course if they are in visual contact) – have you engaged with BMFA to communicate with their members in this locality for feedback – I have heard nothing?
- I would also like to raise the following point. In the ACP stakeholder list I see no reference to potentially impacted councils/parish councils/ River users etc. I quote from CAP1616, regarding stakeholders to be included - paragraph 19
“Communities affected by aviation noise or other environmental impacts, their representatives, councils and other elected representatives, bodies with an interest in aviation’s environmental impact”.
- I suggest that with an UAV carrying medical samples, designated as ‘Dangerous Goods’, engaging with communities along the route to explain the potential risks to those who would be concerned/affected by any deviation/failure is critical?
- The planned route crosses a major trunk road (A12) in Martlesham, have the relevant highways authorities been consulted? The potential for driver distraction and incident(s) would appear real and significantly dangerous, particularly when heading East on the road which, as the dual carriageway drops into the valley, provides a clear view of the sky.
- No noise impact assessment data has been offered for the drone activities, I have a drone and the noise can be significant, particularly on the take-off and landing phases?

Thank you

[REDACTED] Chairman - LAA Suffolk Coastal Strut

[REDACTED] Committee Member - LAA Suffolk Coastal Strut

Appendix 8M – Suffolk Hang Gliding Club (Additional Engagement)

[REDACTED]

From: Airspace Change
Sent: 23 February 2023 01:30
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace - Suffolk Hang Gliding Response

Dear [REDACTED]

Thank you for your feedback on our airspace change proposal ACP-2022-001 and for making us aware of your club's flying activities.

We appreciate that our ACP may affect other local airspace users like yourself, therefore, when designing the UA flight route and the TDA, we aimed to proportionately minimise the impact on other aircraft operations in the region while still meeting our own operational needs. Unfortunately under the current regulatory framework, UAS BVLOS operations of this kind are required to be conducted in segregated airspace, and according to CAA policy it should be in form of a TDA. The statement in the engagement material you highlighted actually reads "to integrate with other aviation stakeholders, UAS operators must ensure that their aircraft can demonstrate an equivalent level of compliance with the rules and procedures that apply to manned aircraft." As the CAA has not issued the guidance or requirements for UAS certification yet, and they are not in a position to recognise any standards, there is currently no means for UAS operators like us to demonstrate compliance, and therefore we cannot integrate with other aviation stakeholders at the moment. This is why segregated airspace is required. By definition, TDAs will not be established and activated permanently, in fact, we will not be utilising the maximum duration of 12 weeks for TDAs as an attempt to minimise impact. I hope you understand the constraints we have; and same as many aviation stakeholders, both manned and unmanned, we equally look forward to the future regulatory developments that enable UAS to be integrated with other airspace users in a non-segregated environment.

As you may be aware, we actually conducted a fully 12-week stakeholder engagement exercise about a year ago, during which we contacted relevant stakeholders, including national bodies and representatives on the NATMAC list provided by the CAA. As you highlighted, BHPA was included in the email list for both stakeholder engagement exercises. While we endeavour to reach out to as many local stakeholders as possible, we do have to rely on these national bodies and representatives to circulate these proposals to their members and local branches.

To comply with CAA requirements, we drastically scaled down our proposed operations from the original 4 routes to just 1 route between Ipswich and Alderton. As you accurately identified, the flight route was designed to overfly open areas as we are required to avoid populated areas to minimise ground risks. The operating height of 400ft AGL is to ensure sufficient clearance from any ground obstacles with vertical buffer from the ceiling of the TDA. As mentioned above, we believe we have struck a balance in meeting the operational requirements of the NHS and proportionately minimising the impact on other airspace users with the latest proposal.

Regarding your comment about the "written approval" stated in the stakeholder engagement material, it actually refers to the TOI that was agreed between Skyports and the emergency services (HEMS) operators, military aircraft operators and commercial air services operators in the region, as they (especially emergency services operators) will have primacy over our UAS operations. We are happy to establish something similar with your club if needed - essentially, it involves procedures for prior notification and communication on the day. Alternatively, the timings of TDA activation will always be promulgated by NOTAM at least 24 hours in advance, and you are always welcome to call our duty flight operations crew to understand our flight programme of the day or the status of the UA activity (e.g. airborne or grounded) etc. In addition, a DAAS will be provided by London FIS. Please note that we will only operate during weekdays only, and if for whatever reason, such as weather conditions exceeding our UA's operating limits or technical difficulties we decide to not operate, or cease

operations early, we will deactivate the TDA as quickly as possible. The number of our duty flight operations crew will be promulgated by NOTAM.

Please note that according to the CAA SARG Policy Statement dated 21 July 2020 on the Establishment of Permanent and Temporary Danger Areas (<http://publicapps.caa.co.uk/docs/33/Policy%20Statement%20Permanently%20Established%20Danger%20Areas%20and%20Temporary%20Danger%20Areas.pdf>), only those activities for which the DA/TDA has been specifically approved by the Civil Aviation Authority (CAA) are to be conducted within the DA/TDA. This is exactly why we need to establish a TDA, as UAS BVLOS operations are required to be segregated from other airspace users, under the current CAA policy.

If you have any other questions or comments, feel free to contact us again. We will be conducting continuous engagement even after the engagement period to address any issues that may arise during the implementation phase.

Thank you once again for your comments.

Best Regards,

[Redacted signature]

[Redacted signature]

-----Original Message-----

From: [Redacted]
Sent: Monday, February 20, 2023 1:55 PM
To: Airspace Change [Redacted]
Cc: [Redacted]
Subject: Airspace Change ACP-2022-001 UAS BVLOS in Segregated Airspace - Suffolk Hang Gliding Response

[You don't often get email from [Redacted] Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

Dear Sir/Madam,

We are a hang gliding club that operates from Mendlesham airfield. Our airstrip is annotated on the CAA VFR chart in the northeast corner of the RAF Wattisham MATZ stub. Although we take off from this location we fly all around the Suffolk area. When we fly we aim to glide the furthest distance and try to stay in the air for as long as possible. We tend to fly in the prevailing wind direction so if the wind is north-westerly (which is sometimes the best conditions for hang gliding) we would fly right over the airspace you are proposing to establish. However, if we don't find another thermal we may be forced to land and if we are trying to cross your Temporary Danger Area it could mean we might have to land inside the area! Therefore, we are writing in response to your Airspace Change Proposal because we believe it takes up a substantial part of our possible operating area.

We note in your Stakeholder Engagement (ACP-2022-001) that you state "Skyports have already engaged relevant aviation stakeholders and secured their written approval during the previous round of stakeholder engagement". However, we have not been contacted. In fact the proposal has only been brought to our attention in the last few

weeks. Within Appendix A, the BHPA is listed as a stakeholder. Our club and members belong to this association and if our association has given written approval we would like to be forwarded a copy of this letter so we can discuss the matter with them.

We realise that a Danger Area (DA) is an area of airspace within which activities dangerous to the flight of aircraft may be taking place. We understand also that your TDA will not have a byelaw, so legally we will be able to fly within its area. However, the decision for one of our pilots to do so could be questioned if there was an incident involving one of your UAVs. The main problem we have is that although we would try in all cases to avoid being that low in your proposed danger area, if we lose our source of lift we may not have a choice but to land. Your flight path has been designed so that your UAVs fly over open area, this is the type of area we would be looking to navigate towards for potential safe landing areas. Also of concern is your operating height, which is where a hang glider pilot is focusing on setting up for a safe approach and landing to a field. Therefore, it would be imperative that your UAVs can, as your document puts it "demonstrate equivalent level of compliance with the rules and procedures that apply to manned aircraft" which for us is the see and avoid rule. Given both a glider and a landing aircraft have priority over a powered UAV we would like assurance with regards to how this rule can be complied with?

As requested we have listed a number of constructive suggestions below.

1. This airspace will have a negative effect on our club because we would be forced to try to avoid the Danger Area when the wind is from the NW. Therefore, we would like more time and more effective consultation on the proposed TDA so that we can work together to reduce these negative effects.
2. We believe your aircraft should be painted a more conspicuous colour for example orange or yellow. A white object of 17kg flying at 55kts would be very difficult to see and could cause considerable damage to a hang glider and an exposed pilot. Unfortunately a hang glider would offer little protection in a mid-air collision with one of your machines and the outcome would likely be fatal.
3. There is another club similar to ours that operates further to the northwest, called the Norfolk Hang Gliding and Paragliding Club. They have been included in this email distribution because, although not as directly affected as our club, we believe it could have an impact on them too. The TDA will affect both of our clubs in the same weather and wind direction because they will be directly upwind of our airstrip and your proposed airspace.

We strongly believe that the future and most effective approach to the use of airspace is the 'flexible use' concept that is often promoted by the CAA. In reality though, members of the BHPA often find that they are overlooked and excluded from the conversation and then eventually the airspace. This ACP feels like another example where we haven't been engaged effectively. It is quite disheartening because once again it will probably be another example where airspace is just being forced upon our pilot community, essentially removing a large operating area that we have been free to use in the past.

We should stress that there are cases where we have worked well with airspace stakeholders, for example RAF Wattisham. We speak with them on days we are flying near their MATZ stub. If we can establish a similar effective, flexible solution that has minimal impact on the safe use of airspace we may be willing to change our position with regards to this airspace.

However, unless we can establish an effective way to deconflict on the days we wish to fly then unfortunately we cannot support this proposal. The thing that makes aviation and particularly gliding enjoyable is the freedoms that it offers. Now with each year that passes our freedoms are being eroded as more restrictive airspace continues to be established across the UK.

Yours Faithfully,


Suffolk Hang Gliding

Appendix 8N – Individual Stakeholder 1 (Additional Engagement)

[Redacted]

From: Airspace Change
Sent: 22 February 2023 12:59
To: [Redacted]
Subject: RE: Comments on ACP-2022-001 V2.0

Dear [Redacted]

Thank you very much for submitting your feedback on our airspace change proposal ACP-2022-001 again. Your request to remain anonymous is noted and your personal information will be redacted before the evidence of engagement is uploaded to the CAA Airspace Portal.

As previously explained, this project is a business trial jointly developed by the East Suffolk and North Essex NHS Foundation Trust and ERS Medical to evaluate the merits of UAS as a means of medical delivery. While Skyports may have conducted medical delivery operations in other parts of the country before, the operating environment, conditions and locational challenges will be different. As you may be aware, we have drastically scaled down the operations from four routes in the original proposal to just one in the latest proposal. Therefore we do need the full 10 weeks to operate a meaningful service to the NHS, and test various scenarios that were originally planned in other locations, as per the requirements from the NHS and ERS Medical.

With regard to your comment on flight planning, as part of the ConOps development, the route was carefully designed to minimise ground risks and air risks, which was reviewed and provisionally approved by the CAA. In our last round of ACP submission, the CAA has also expressed no concern regarding the noise level and environmental impact of our proposed operations. As for the use of TDA/segregated airspace, unfortunately this is still the way to comply with the existing regulatory requirements. We equally look forward to future changes in policy that allow UAS BVLOS operations to be conducted in non-segregated airspace.

Similar to our last proposal, we did reach out to NATS and Wattisham to seek their comments and discuss any procedures required for deconfliction. I can confirm that a DAAIS will be provided by London FIS and separate procedures and communication process have been established with Wattisham to minimise impact on their routine activities near the TDA.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)

 Skyports



[Redacted]

From: [REDACTED]
Sent: Friday, February 3, 2023 2:38 PM
To: Airspace Change [REDACTED]
Subject: Comments on ACP-2022-001 V2.0

You don't often get email from [REDACTED] [Learn why this is important](#)

Please find my comments in the attached document.

To:

Skyports Ltd

Airspace Change

Re: Stakeholder Engagement – ACP-2022-001 (version 2.0)

Please treat this response as anonymous.

I oppose the proposed change.

Skyports Ltd has already conducted trials of medical delivery in rural areas by drone. There is no explanation of what additional information would be obtained by conducting this trial.

Segregated airspace is not a sustainable method for collision avoidance with other airspace users. Drones need to use sense and avoid technology so that the normal rules of the air can be adhered to. More effort should be put into these technologies rather than repeating trials.

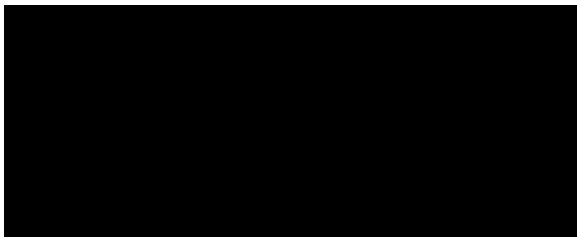
The proposed airspace design will cover many kilometres of public footpaths and some communities.

The proposed duration of the TDA (10 weeks) is very long. A shorter period could provide sufficient data.

There does not seem to be any consideration of the economic burden on other airspace users ie the cost of checking for TDA activation and re-planning or cancelling impacted activities.

The Deben Estuary is designated under various national and local schemes as a Site of Special Scientific Interest; Special Protection Area; under the Ramsar International Convention on Wetlands and as part of the Suffolk Coasts and Heaths Area of Outstanding Natural Beauty (AONB).

If approved a DAAIS must be made available on locally used radio frequencies in particular Wattisham Approach (London Info alone is insufficient).



Appendix 80 – individual Stakeholder 3 (Additional Engagement)

[Redacted]

From: Airspace Change
Sent: 22 February 2023 15:48
To: [Redacted]
Subject: RE: Engagement Response : Drone airspace Danger area proposal near Ipswich April 2023

Dear [Redacted]

Thank you for your feedback on our airspace change proposal ACP-2022-001. Rest assured that all stakeholder responses will be submitted to the CAA as evidence of engagement, as per the requirements under CAP1616.

With regard to your comments, 400ft AGL is the maximum altitude that our UA will fly at. In normal circumstances, our UA will cruise at an altitude of 360ft AGL. This is to allow sufficient clearance over any ground obstacles along the route with vertical buffer from the ceiling of the TDA. The upper limit of the TDA is calculated from the highest point of terrain along the route. The ConOps, including the flight route which was designed to minimise impact on other airspace users and local flying activities, has been reviewed and provisionally approved by the CAA. Please also note that we will only be operating our UA during the notified hours, and we will not operate during weekends.

If you have any other questions or require any further information, please feel free to contact us again.

Best Regards,

[Redacted]

[Drone Services](#) | [AAM Infrastructure](#) | [London Heliport](#)



[Redacted]

From: [Redacted]
Sent: Friday, February 17, 2023 2:34 PM
To: Airspace Change [Redacted]
Subject: Engagement Response : Drone airspace Danger area proposal near Ipswich April 2023

You don't often get email from [Redacted] [Learn why this is important](#)

To [Redacted]

Name : [Redacted]

Contact : [Redacted]

I oppose the the proposal for the following reasons

You are denying me use of airspace I currently use and am allowed to freely use with no explanation or justification as to why you need to fly your drones up to an altitude of 400 feet

200 feet us more than sufficient to accommodate your devices

If you cannot contain your remote aircraft in a volume up to 200 feet height then it's flight accuracy is not good enough for BVLOS operations

I do wish this engagement response to be sent to the CAA

██████████