

ACP-2021-038 – Skyfarer NHS drone delivery trials Coventry

Summary of Stakeholder Engagement and Final Proposal Version 1 – Dated: 02/07/2021

Acronyms and Abbreviations

ACP	Airspace Change Proposal
AIAA	Area of Intense Air Activity
AMSL	Above Mean Sea Level
ANSP	Air Navigation Service Provider
BVLOS	Beyond Visual Line of Sight
DAA	Detect And Avoid
ESO	Emergency Service Operators
HEMS	Helicopter Emergency Medical Services
LOA	Letter of Agreement
LL	Lower Limit
NM	Nautical Mile
SAR	Search and Rescue
SFC	Surface of the earth
SOP	Standard Operating Procedure
TDA	Temporary Danger Area
TOI	Temporary Operating Instruction
UAS	Unmanned Aerial System
UL	Upper Limit

Reference Documents

Document Title	Source	Edition/Version	Date of Issue
The Air Navigation Order 2016 and Regulations	CAP 393		13/03/2019
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	CAP 1616	Third edition	01/02/2020
Unmanned Aircraft System Operations in UK Airspace – Guidance	CAP 722	Eighth edition	05/11/2020
Unmanned Aircraft Systems UAS Airspace Restrictions Guidance and Policy	CAP 722C	First edition	December 2020
CAA Policy for the Establishment of Permanent and Temporary Danger Areas	CAA DA/TDA Policy 20200721	NA	21/07/2020



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1. Introduction

Skyfarer Ltd are the sponsors of this proposal (ACP-2021-038) for three Temporary Danger Areas in the Coventry area. This document provides: a summary of Skyfarer's targeted aviation stakeholder engagement; subsequent updates to the proposed TDAs in response to stakeholder input; and the final TDA proposals.

2. Methodology

2.1 List of Stakeholders

Initially, 95 stakeholders were identified and contacted. Appendix B shows: the stakeholder list; the means of contact; and the reason for contacting that party. They included: nearby licenced airports; unlicenced airfields within 25nm; ANSPs in the area; aviation industry operators in the area; the MOD and relevant NATMAC members (including those representing sport and GA aviation industry groups amongst others).

During the engagement period, 17 additional stakeholders were identified, some of which contacted Skyfarer directly. The list of additional stakeholders, and reason for their engagement is shown in Appendix C.

2.2 Engagement Material and Communications

Engagement material was prepared and emailed to each stakeholder. This was either via a direct email address or the contact form provided on the stakeholder's website. The body of the email (as shown in Appendix A1) provided a summary of the reason the stakeholder was being contacted, plus an attached pdf document which provided detailed information relevant to the ACP including: The need for the TDA; an option for the TDA designs; impact on flight paths below 7000'; dates and hours of activation; airspace management; safety considerations; and the engagement process. A copy of the attachment sent to stakeholders is shown in Appendix A2.

The initial engagement email was sent out to stakeholders (identified in Appendix B) on 20/5/2021 which was the start of the formal engagement period. Two exceptions to this were the engagement with Birmingham Airport (where engagement commenced on 12/04/2021) and Coventry Airport (where engagement commenced on 31/03/2021).

During the course of the stakeholder engagement, additional stakeholders were identified, either via their making contact directly with Skyfarer or via discussions between Skyfarer and other parties (including the CAA). The majority of these were contacted by email on 08/06/2021. The email sent on 08/06/2021 is shown in Appendix D; the attachment to that email, was identical to what had been sent in the initial engagement email (i.e. as shown in Appendix A2).

A supplementary email was also sent to stakeholders on 16/06/2021 in order to remind them that the engagement period would be ending in two weeks and encouraging them to ask any questions or make their comments. A copy of that email is shown in Appendix E.

Skyfarer established a dedicated email address in order to send/receive related communications and all emails to/from stakeholders were retained on Skyfarer's secure server.

Where stakeholders asked questions or raised concerns, these were responded to. All emails received and responses sent are shown in Appendix F.

Engagement was also conducted via the CAA's ACP Portal at https://airspacechange.caa.co.uk/PublicProposalArea?pID=369 and the following documents were uploaded for public access:



- Statement of Need uploaded 10/05/2021
- Stakeholder Engagement Document uploaded 20/05/2021
- Assessment Meeting Agenda uploaded 04/06/2021
- Assessment Meeting Presentation uploaded 16/06/2021
- Minutes of Assessment Meeting uploaded 22/06/2021

Engagement was also conducted prior to and/or during the formal engagement period via online meetings with: Birmingham Airport, East Midlands Airport, Coventry Airport and Sloane Helicopters.

2.3 Engagement Period

Skyfarer adopted a 6-week engagement period. This was based on the ACP being for a temporary change, involving a relatively small area of airspace i.e. that it was not an airspace trial or permanent change application.

3. Summary of Feedback

3.1 Summary of Feedback During the Stakeholder Engagement Period and Skyfarer Responses

Of the 112 stakeholders contacted, Skyfarer received feedback from 23 stakeholders. A summary of the feedback and the Skyfarer response is shown in Table 1 below, with the full detail of feedback received presented in Appendix F.

Stakeholder	Summary of Feedback	Skyfarer Response
Birmingham Airport	 Requested additional information from Skyfarer for the purposes of Risk Assessment. No objection to the TDA option proposed in the engagement documentation. Discussed the need for a Letter of Agreement (LOA) to formalise the communications which would take place between Skyfarer and Birmingham Airport during normal and emergency operations. 	 If the ACP is approved, prior to activation of the TDAs, an LOA would be finalised between Skyfarer and Birmingham Airport according to feedback. See action 5 in Table 2.
East Midlands Airport	 No objection to the TDA option proposed in the engagement documentation. Discussed the provision of DAAIS by East Midlands. 	 If approved, prior to activation of the TDAs, a LOA for the provision of DAAIS services would be finalised. See action 8 in Table 2.
Coventry Airport	Prior to the commencement of the formal engagement period, Coventry Airport commented that they considered Coventry would not be a viable location for the proposed TDA based on a perception that activation of the TDA would: a) require Coventry to close during the TDA activation period and b) that no operations would be possible for manned aircraft on the published route from Draycott water VRP, and the circuit and final approach for runway 23.	 Skyfarer is not aware of any reason why operations at Coventry Airport would need to cease during TDA activation. With the proposed option having an Upper Limit of 900'AMSL (now revised to 800' AMSL), Skyfarer is not aware of any reason why manned aircraft operations would need to cease along the published route from Draycott water VRP, and the circuit and final approach for runway 23 (since GA traffic operating on these routes at normal operating altitudes would overfly the TDA). Numerous attempts were made to continue engagement with Coventry Airport during the



	No additional feedback from Coventry Airport was received during the formal engagement period.	formal engagement period however these were not responded to. Skyfarer also requested information regarding the contact details of potential stakeholders based at Coventry Airport however no response was received.
Rothwell Airfield	 Expressed general concerns regarding: The safety of BVLOS operations. Loss of airspace access for GA due to "air space grabs by the licensed airports" and the reduction of airspace access caused by the proposed TDA option. The TDA UL being "the height that a lot of small helicopters, gyroplanes and microlights fly at_ – below normal fixed wing traffic". The need for DAA equipment on UAVs. 	 Skyfarer is seeking to limit the impact on other airspace users by proposing a TDA that would be: a) as small, laterally and vertically, as possible, b) modular so as to only segregate the minimum area necessary for a specific route, c) limiting the activation period to as short a time as possible i.e. just one hour, and d) limiting the period over which the project is conducted to just 60 days (instead of the 90 days for which most TDA applications are usually made). Skyfarer has reduced the proposed TDA dimensions both horizontally and vertically as far as possible. See actions 1,2 & 3 in Table 2. Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2.
Twycross Airfield	 Expressed support. Commented that he would expect to be operating at altitudes above 900' ASL in the areas identified. 	
BGA	Expressed concern regarding the vertical dimensions of the TDAs and that "when 'buffers' are added to any restricted airspace that they are proportionate and necessary" and that they intended to challenge the TDA dimensions.	 Skyfarer applies vertical and horizonal safety buffers between the intended flight path and the TDA boundary in accordance with CAA CAP 722. Skyfarer has reduced the proposed TDA ULs as far as possible. See action 3 in Table 2.
Stoney Lane Airfield	 Commented that the option proposed "should have no direct impact on operations at Stoney Lane airfield". Expressed a general objection to operation of UAS without Detect and Avoid capability. 	 The UAV will be fitted with a CAA approved ADS-B out in order to improve it's electronic conspicuity. There are no CAA approved DAA solutions available at present, hence the need for a TDA.
Sloane Helicopters	 Commented that they may not have sufficient time to respond prior to the end of the engagement period. Expressed concern regarding the impact that the TDAs would have on their HEMS operations. 	Responded and engaged via email and online meeting. Discussed potential options for ensuring short notice priority access for HEMS operations. See action 6 in Table 2. The discussions regarding standard operating



	Highlighted that the time from receiving a	procedures for Sloane Helicopter HEMS
	call to becoming airborne could be within 2 minutes, and that they could be in Rugby within 5-6 minutes. These considerations would mean that they cannot give prior notice and that they may need immediate access to the TDAs.	 access to the TDAs is ongoing. Skyfarer has reduced the proposed TDA dimensions both horizontally and vertically as far as possible. See actions 1,2 & 3 in Table 2 Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2.
National Grid	Commented that the proposal does not cross any NGET powerlines and therefore did not intend to make any further comments.	
Bristow Helicopters	 Commented that the impact on their operations was assessed as minimal; the hospitals in question do not support their aircraft types and the geographical area is relatively small. However, some SAR operations could require access to the TDAs. Commented on the need for establishing a process for SAR operations prioritisation. 	Skyfarer will ensure co-ordination with ESOs to ensure rapid suspension of UAV activity and priority access, see action 6 in Table 2.
Babcock	Commented on the need for establishing a process for HEMS operations prioritisation.	Skyfarer will ensure co-ordination with ESOs to ensure rapid suspension of UAV activity and priority access, see action 6 in Table 2.
Helicentre Aviation	Commented that the TDAs would conflict with several gas pipeline routes that they fly for the National Grid (using R44 helicopters operating at 500′ – 600′ AGL (sometimes as low as 300′ AGL).	Skyfarer will ensure co-ordination with Helicentre Aviation to ensure suspension of UAV activity and priority access, see action 7 in Table 2.
NPAS	Commented that the proposed TDA options are unlikely to have a major impact on their operations providing that DAAIS contact details are provided in the associated NOTAMs.	Skyfarer will ensure that DAAIS contact details are provided in the associated NOTAMs.
Baxterley Aerodrome	 Commented that the area on TDAs are unlikely to impact any operations at thier aerodrome. And expressed support. 	
Leicestershire Microlight Aircraft Club	 Objected to the trials and associated TDAs. Commented that in their option the area is very busy with GA traffic; that "whilst travelling north / south through the Midlands, much GA traffic routes to the West of Draycote Water to avoid Birmingham airspace. The area is also very busy with traffic between the Draycote and Southam VRPs routing to join circuit at Coventry Airport." Commented that TDAs' 900' UL would be 	 Skyfarer has reduced the proposed TDA dimensions both horizontally and vertically as far as possible. See actions 1,2 & 3 in Table 2. Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2. Skyfarer will only conduct UAV operations
	below most GA traffic.	that have been approved by the CAA.



	Expressed concern that a loss of control of	There are no CAA approved DAA solutions
	the UAV would result in entry into GA	available at present.
	 traffic areas that are in close proximity. Commented that DAA should be carried 	
	for this type of activity.	
Midland Air	Objected to the TDA option proposed.	Skyfarer is seeking to limit the impact on
Training Ltd	Cited the proximity of Coventry's "busy	other airspace users by proposing a TDA that
	ATZ" and it's restriction for operations to	would be:
	be below 1500' due to Birmingham	a) as small, laterally and vertically, as
	controlled airspace and the recommendation to remain at least 200'	possible, b) modular so as to only segregate the
	below that altitude to help avoid any	minimum area necessary for a specific route,
	airspace infringements (i.e. 1300').	c) limiting the activation period to as short a
	Regarded the proposal as "yet another	time as possible i.e. just one hour, and
	restriction that will impact on the	d) limiting the period over which the project
	continuing operation and safety of GA	is conducted to just 60 days (instead of the 90
	aircraft both outbound and inbound to CVT."	days for which most TDA applications are usually made).
	CV1.	Skyfarer has reduced the proposed TDA
		dimensions both horizontally and vertically as
		far as possible. See actions 1,2 & 3 in Table 2.
		The route from Draycote Water VRP to
		Coventry Airport crosses TDA 1. Operating
		along this route, terrain encountered shortly
		after Draycote Water (and in the TDA area), extends to approximately 360' AMSL. Given
		the updated TDA UL of 800' AMSL, an aircraft
		would need to be operating below 440' AGL
		in order to be affected by the TDA - this is
		below normal GA altitudes.
		TDA 3 is to the north of the Draycote Water
		VRP – Coventry Airport route but might be crossed by north/south traffic. Terrain in this
		area extends to 370' AMSL. Given the
		updated TDA UL of 800' AMSL, an aircraft
		would need to be operating below 430' AGL
		in order to be affected by the TDA - this is
		largely below normal GA altitudes.
		 Skyfarer has made changes to the proposed operating criteria in order to take cloud base
		effects on VFR traffic into consideration and
		avoid the circumstances where weather
		conditions necessitate manned aircraft
		operations at low level. See Action 4 in Table
		2.
		Skyfarer attempted to engage further with Midland Air Training in order to better.
		Midland Air Training in order to better understand any particular problem areas,
		however the operator was unwilling to
		engage further.
The	Commented that TDA 3's western end	Skyfarer has significantly reduced the
Honourable	appeared larger than essential for the	dimensions of TDA 3 in accordance with this
Company of	operation and suggested a reduction in	feedback, see action 2 in Table 2.
Air Pilots	size.	East Midlands as DAAIS provider is an
	Sought assurance that the DAAIS provider	experienced ANSP in the local area and
	will have enough capacity to handle	



	requests for information at a rate that reflects current GA activity levels in the	subject to normal CAA oversight for the provision of the DAAIS service.
RHDA	area.	
ВНРА	 Considered that at least three BHPA operations may potentially be affected by the TDA option proposed (and forwarded an email to those operations). Expressed concern regarding catastrophic consequences of a UAV collision with a hang glider or paraglider pilot. Commented that their members are unlikely to carry a transponder. Expressed a general concern regarding the amount of ACPs and TDAs "making large parts of the open FIR un-flyable if activated." Suggested that the trial is completed by 1000 each day or at night. 	 The BHPA made the members mentioned in their email aware of the ACP details. None of the BHPA members concerned submitted comments on the ACP or via the BHPA. Carriage of transponders by manned aircraft is not a requirement specified in Skyfarer's operating safety case based application to the CAA for Operational Approval. Skyfarer considers that limiting TDA activation periods to before 10:00 or at night would place a disproportionate restriction on the trials given the ACPs efforts to limit potential disruption to other airspace users by: a) being as small, laterally and vertically, as possible, b) being modular so as to only segregate the minimum area necessary for a specific route, c) limiting the activation period to as short a time as possible i.e. just one hour, and d) limiting the period over which the project is conducted to just 60 days (instead of the 90 days for which most TDA applications are usually made). Sykfarer has made changes to the proposed TDA option in order to further minimise the dimensions of the TDAs both laterally and vertically (see Actions 1, 2 & 3 in Table 2). Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2.
MOD	Confirmed (on behalf of all MOD stakeholders identified in the engagement document) that the MOD has no objection to the proposed TDA.	
Peter Hall Farm Airstrip	Provided a Letter of Agreement is established that allows for prioritisation of their manned aircraft movements, confirmed that there were no objections to the TDA option proposed.	Skyfarer will ensure co-ordination with Peter Hall Farm to ensure suspension of UAV activity and priority access, see action 9 in Table 2.
Individual response: Kevin Walton	Expressed general concerns regarding airspace usage that excludes other users.	 Skyfarer's TDA proposal seeks to limit potential disruption to other airspace users by: a) being as small, laterally and vertically, as possible, b) being modular so as to only segregate the minimum area necessary for a specific route,



		 c) limiting the activation period to as short a time as possible i.e. just one hour, and d) limiting the period over which the project is conducted to just 60 days (instead of the 90 days for which most TDA applications are usually made). Sykfarer has made changes to the proposed TDA option in order to further minimise the dimensions of the TDAs both laterally and vertically (see Actions 1, 2 & 3 in Table 2). Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and
		avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2.
Individual response: Sean Walters	Commented that "This area is subject to intense General Aviation Activity and is used by air traffic passing to the East of Birmingham travelling North/South" Expressed general concern regarding UAS operations.	 Skyfarer's TDA proposal seeks to limit potential disruption to other airspace users by: a) being as small, laterally and vertically, as possible, b) being modular so as to only segregate the minimum area necessary for a specific route, c) limiting the activation period to as short a time as possible i.e. just one hour, and d) limiting the period over which the project is conducted to just 60 days (instead of the 90 days for which most TDA applications are usually made). Sykfarer has made changes to the proposed TDA option in order to further minimise the dimensions of the TDAs both laterally and vertically (see Actions 1, 2 & 3 in Table 2). Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2. The route from Draycote Water VRP to Coventry Airport crosses TDA 1. Operating along this route, terrain encountered shortly after Draycote Water (and in the TDA area), extends to approximately 360' AMSL. Given the updated TDA UL of 800' AMSL, an aircraft would need to be operating below 440' AGL in order to be affected by the TDA - this is below normal GA altitudes. TDA 3 is to the north of the Draycote Water VRP – Coventry Airport route but might be crossed by north/south traffic. Terrain in this area extends to 370' AMSL. Given the updated TDA UL of 800' AMSL, an aircraft would need to be operating below 430' AGL



		 in order to be affected by the TDA - this is largely below normal GA altitudes. Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2.
Individual response: H Cook	General comment that NHS trails should be co-ordinated to reduce the amount of trials.	The way that the NHS manages UAS trials is beyond the scope of the TDA application and not something under the control of Skyfarer.
	Considered the 'Statement of Need' description was not specific enough.	Skyfarer considers that the SoN description was adequate for the temporary ACP.
	Considered the volume of airspace used to be disproportionately large and questioned the use of three TDAs.	 The use of three TDAs is intended to minimise airspace usage by only segregating the minimum area necessary for a specific route (as described the engagement material). The dimensions of the TDAs include the CAA required safety buffers either side of and above the planned route.
	Considered the 900' UL was too high.	Sykfarer has made changes to the proposed TDA option in order to further minimise the dimensions of the TDAs both laterally and vertically (see Actions 1, 2 & 3 in Table 2).
	Considered that small/farm/private airstrips and flying schools had not been considered.	In addition to 10 airports/aerodromes in the region, Skyfarer engaged with 26 airfield operators and 11 flying training organisations.
	Considered that the area of TDA 2 overlayed by Birmingham Class D airspace, and the area east of Coventry, created 'choke' points.	 Sykfarer has made changes to the proposed TDA option in order to further minimise the dimensions of the TDAs both laterally and vertically (see Actions 1, 2 & 3 in Table 2). The overall area for TDA 2 is 9.28 km² and of that, 0.15 km² is the actual area of TDA overlayed by Birmingham Class D airspace. Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2. The route from Draycote Water VRP to Coventry Airport crosses TDA 1. Operating along this route, terrain encountered shortly after Draycote Water (and in the TDA area), extends to approximately 360' AMSL. Given the updated TDA UL of 800' AMSL, an aircraft would need to be operating below 440' AGL in order to be affected by the TDA - this is below normal GA altitudes.



		TDA 3 is to the north of the Draycote Water VRP – Coventry Airport route but might be crossed by north/south traffic. Terrain in this area extends to 370' AMSL. Given the updated TDA UL of 800' AMSL, an aircraft would need to be operating below 430' AGL in order to be affected by the TDA - this is largely below normal GA altitudes.
	Considered that the irregular shape of the TDAs increased the likelihood of infringements.	 A simpler TDA definition would require a larger volume of airspace. The TDAs will be promulgated via AIC which includes latitude/longitude co-ordinate definitions and a map of the areas.
	Considered that a DAAIS is essential.	The engagement material specified that a DAAIS would be used and the final proposal specifies the provider (East Midlands Airport).
	Considered that the ACP required 'consultation' as opposed to 'engagement'.	Skyfarer has been informed by the CAA that 'engagement' is the appropriate term for a temporary airspace chance proposal.
	 Considered that the CAA assessment meeting minutes were not published according to the necessary timeline Considered that the CAA assessment meeting minutes publication timeline did not afford sufficient time for their consideration. 	 Assessment meeting minutes were published on the ACP on the same day that they were agreed by the CAA. The assessment meeting minutes did not contain any information that was materially different to the engagement documentation published on 20 May 2021.
	Considered that the 6-week engagement timescale was insufficient.	 A rather detailed response was received from the stakeholder on 22 July 2021, well in advance of the end of the stakeholder engagement period, which seems to indicate that they did have sufficient time to consider the ACP. No other stakeholder commented that they were unable to complete their consideration within the 6-week period and Skyfarer considered that this was a reasonable timescale based on the temporary nature of the ACP.
Individual response: Rowan Smith	Considered that for TDA 1, with aircraft arriving at Coventry at the standard circuit joining altitude of 1200' the margin above the 'drone path' was 300' and that a staging location north of the route between Rugby and Coventry would be a more suitable option.	 It should be noted that there is no intention to operate UAVs at the UL of the TDA. There is a safety buffer built into the TDA dimensions, so the margin referred to is to the UL of the TDA, not the actual 'drone path'. Skyfarer has reduced the proposed TDA dimensions both horizontally and vertically as far as possible. See actions 1,2 & 3 in Table 2, this has increased the buffer between the UL of the TDA and the standard circuit join altitude to 400'. The route from Draycote Water VRP to Coventry Airport crosses TDA 1. Operating



		•	along this route, terrain encountered shortly after Draycote Water (and in the TDA area), extends to approximately 360' AMSL. Given the updated TDA UL of 800' AMSL, an aircraft would need to be operating below 440' AGL in order to be affected by the TDA - this is below normal GA altitudes. TDA 3 is to the north of the Draycote Water VRP – Coventry Airport route but might be crossed by north/south traffic. Terrain in this area extends to 370' AMSL. Given the updated TDA UL of 800' AMSL, an aircraft would need to be operating below 430' AGL in order to be affected by the TDA - this is
		•	largely below normal GA altitudes. Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2.
•	Considered that since Coventry Airport has flying training activities taking place with potentially inexperienced pilots, and the local procedure for pilots arriving at Coventry to be at 1200', the UL of the TDA posed an increased risk of collisions	•	As per comments in row above.
•	Considered that the activation plan of many and various periods poses an unnecessary risk	•	The one hour activation periods have been selected in order to minimise the potential impact on other airspace users. The activation information will be promulgated via NOTAM with at least 24 hours prior notice.
•	Considered that the TDAs would be better defined using visual landmarks since VFR training pilots will be navigating with reference to ground features.	•	Skyfarer looked at this however, unless the TDA was made substantially larger, there were insufficient prominent ground features to achieve this. Overflight of the TDA should always be available and Skyfarer has made changes to the proposed operating criteria in order to take cloud base effects on VFR traffic into consideration and avoid the circumstances where weather conditions necessitate manned aircraft operations at low level. See Action 4 in Table 2.
Table I. Common on of at	Made reference to CAA resources and the altitude restricted Low Level Corridor at Manchester akeholder feedback and Skyfarer responses	•	This issue is considered to be beyond the scope of Skyfarer's ACP.

Table 1: Summary of stakeholder feedback and Skyfarer responses



3.2 Actions Taken by Skyfarer in Response to Stakeholder Engagement

Skyfarer reviewed all comments received and looked at ways to address the concerns raised. Skyfarer also considered how to incorporate suggestions received in ways that were reasonable and proportionate. Therefore, Skyfarer has amended the original ACP option proposed to include the following:

Summary of comments or concerns raised	Actio	ons taken based on stakeholder input
by stakeholders	No.	
Minimising the amount of airspace being requested	1	Reduced the size of TDA 2: Amended the design of the proposed TDA 2 by reducing the horizontal dimensions.
	2.	Reduced the size of TDA 3: Amended the design of the proposed TDA 3 by reducing the horizontal dimensions. This was made possible by extending the operating route between Feldon and Rugby Hospital so as to bring the turning point closer to the intersection with the Coventry Hospital route.
The potential for 'squeezing' GA traffic between the UL of the TDA (900' AMSL) and the LL of Birmingham Class D airspace (2,000')	3.	Reduced the UL of all TDAs: As identified in the engagement material (section 3.3), manned aircraft on the route between Draycote Water VRP and Coventry airport may already be operating at their circuit heights (1260' AMSL and 967' AMSL (fixed wing and helicopter respectively)). In order to improve the amount of separation from the TDA UL, all proposed TDAs have had the UL reduced from 900' AMSL to 800' AMSL. This has been achieved by reducing the operating height of the UAVs to the minimum safe limit along those routes.
	4.	Introduced minimum meteorological conditions criteria: In order to ensure that adverse weather conditions do not require manned aircraft operating under VFR to reduce their operating altitude to/or below the TDA ULs, UAV activity would be restricted to meteorological conditions that meet the following criteria: - no more than 4 octas cloud below 1500' AMSL
Proximity of Birmingham CTA	5.	Co-ordination with Birmingham Airport Air Traffic: Engaged with Birmingham to draft a LOA (or TOI) that defines normal and emergency communications procedures. Procedures to be finalised prior to TDA activation.
Priority access for Emergency Service Operators (ESO) through the TDAs	6.	Co-ordination with ESOs to ensure rapid suspension of UAV activity and priority access: Engaged with Bristow (SAR operations), Sloane Helicopters (HEMS operations), Babcock (HEMS operations) and NPAS (police operations) to discuss drafting SOPs that will facilitate priority access for ESO at short notice. Procedures to be finalised prior to TDA activation.
Interruption to commercial pipeline operator's activities within the TDAs	7.	Co-ordination with Helicentre Aviation to ensure suspension of UAV activity and priority access: Engaged with operator to discuss drafting SOPs that that will facilitate priority access for pipeline inspections at short notice. Procedures to be finalised prior to TDA activation.
Concerns regarding flight training activities in proximity to the TDAs	8.	Provision of DAAIS by phone and VHF: Engaged with East Midlands Airport Air traffic to act as DAAIS provider.
Facilitating operations at a farm airstrip partially within TDA 2	9.	Co-ordination with Peter Hall Farm to ensure suspension of UAV activity and priority access: Engaged with operator to discuss drafting SOPs that will facilitate priority access for their operations. Procedures to be finalised prior to TDA activation.

Table 2: Summary of actions taken in response to stakeholder engagement



4. Proposed TDAs

Skyfarer's proposal is for three different TDAs in order to minimise the potential impact on other airspace users i.e. only TDAs necessary for the specific route to be used are activated. The TDAs are temporarily designated as TDA 1, TDA 2 and TDA 3.

4.1 Changes From the TDA Option Described in Stakeholder Engagement Material

- Based on feedback from stakeholders during the engagement process, the horizontal dimensions of TDA 2 and TDA 3 have been reduced in order to:
 - a) minimise the amount of airspace requested and,
 - b) remove the need to overfly TDA 3 on routes between Draycote Water VRP and Coventry Airport.
- Based on feedback from stakeholders during the engagement process, the vertical dimensions of all three TDAs have been reduced from an UL of 900' AMSL to an UL of 800' AMSL.
- A minor change (approximately 40 metres) to a small portion of the eastern section of TDA 3 has also been made to accommodate an update in the UAV flight path required during the trials.

Skyfarer considered that stakeholder re-engagement with regards to these changes was not necessary since:

- The significant changes are all in response to targeted stakeholder engagement and represent a
 reduction in the TDA volumes which does not represent any potentially negative impacts for
 stakeholders (i.e. all feedback with regard to TDA volumes was either neutral or called for a
 reduction in volume).
- The change to the eastern end of TDA 3 (of 40m) is so minor that it could not conceivably have any effect/impact on the stakeholders engaged.

Figure 1 provides an overview, with more detailed descriptions below.



Figure 1: Final submission left and original option right



There are three specific routes for the trails:

- Route A: Feldon to Coventry University Hospital.
- Route B: Feldon to Rugby Hospital.
- Route C: Coventry University Hospital to Rugby Hospital.

The specific TDAs required for each route are shown in Table 3.

Route	TDAs required
Route A	TDA 1 and TDA 2
Route B	TDA 1 and TDA 3
Route C	TDA 2 and TDA 3

Table 3: Routes and applicable TDAs



4.1 TDA 1

The lateral dimensions of TDA 1 would be starting at a point located at N52°19'08" W001°23'42", thence a straight line joining the points:

- N52°22'22" W001°21'59"
- N52°22'13" W001°21'10"
- N52°18'58" W001°22'59"
- N52°19'08" W001°23'42"
- See Figure 2

The vertical dimensions of TDA 1 would be:

- Lower Limit: SFC
- Upper Limit: 800ft AMSL (reduced from 900ft AMSL)

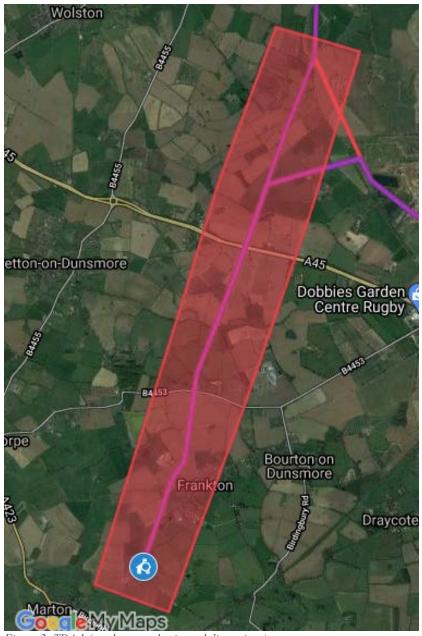


Figure 2: TDA 1 (no change to horizontal dimensions)



4.2 TDA 2

The lateral dimensions of TDA 2 would be starting at a point located at N52°25'20" W001°26'36" thence a straight line joining points:

- N52°25'29" W001°24'15"
- N52°24'55" W001°22'39"
- N52°23'34" W001°21'04"
- N52°22'13" W001°21'10"
- N52°22'22" W001°21'59"
- N52°23'31" W001°22'03"
- N52°24'32" W001°23'27"
- N52°25'02" W001°24'28"
- N52°24'52" W001°26'35"
- N52°25'20" W001°26'36"
- See Figure 3 for final proposal and Figure 4 for original option proposed

The vertical dimensions of TDA 2 would be:

- Lower Limit: SFC
- Upper Limit: 800ft AMSL (reduced from 900ft AMSL)



Figure 3: TDA 2 (final proposal)





Figure 4: TDA 2 (original option)

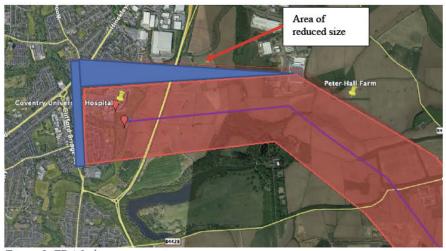


Figure 5: TDA 2 change comparison



4.3 TDA 3

The lateral dimensions of TDA 3 would be starting at a point located at N52°22'22" W001°21'59" thence a straight line joining points:

- N52°22'13" W001°21'10"
- N52°21'34" W001°20'43"
- N52°21'13" W001°19'39"
- N52°20'59" W001°18'34"
- N52°20'59" W001°17'22"
- N52°21'10" W001°16'11"
- 1192 2110 11001 1011
- N52°22'09" W001°15'32"
 N52°21'59" W001°14'46"
- N52°20'47" W001°15'25"
- N52°20'26" W001°17'12"
- 1132 2020 W001 17 12
- N52°20'35" W001°18'56"
- N52°20'47" W001°19'55"
- N52°21'03" W001°20'47"
- N52°21'16" W001°21'37"
 N52°22'22" W001°21'59"
- See Figure 5 for final proposal and Figure 6 for original option proposed

The vertical dimensions of TDA 3 would be:

- Lower Limit: SFC
- Upper Limit: 800ft AMSL (reduced from 900ft AMSL)

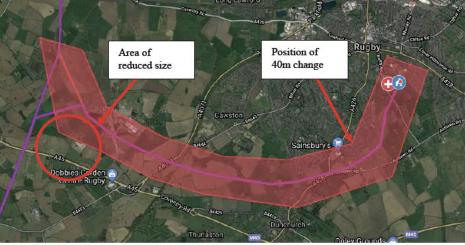


Figure 6: TDA 3 (final proposal)





Figure 7: TDA 3 (original option)



Figure 8: TDA 3 change comparison





Figure 9: Change to eastern portion of TDA 3

5. Impact on flight paths below 7000' and over inhabited areas

5.1 Airspace Notes:

- The proposed TDAs are wholly within Class G airspace.
- The southern portion of TDA 1 is overlayed by Birmingham CTA (Class D) airspace which has a lower limit of 3500' AMSL (i.e. 2700' separation).
- A small section of the western portion of TDA 2 is overlayed by Birmingham CTA (Class D) with a lower limit of 2000' AMSL (i.e. 1200' separation).
- See Figure 10.

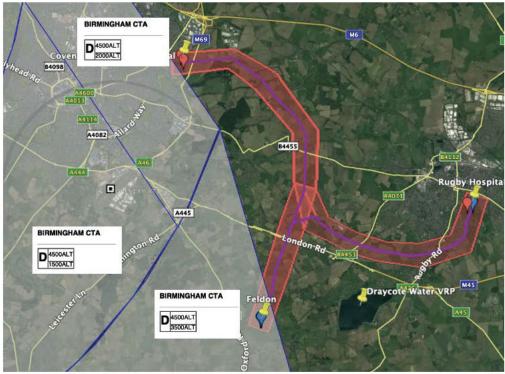


Figure 10: Relationship to Birmingham CTA



5.2 Coventry Airport (EGBE) Notes

- Coventry Airport and ATZ are in proximity to the proposed TDAs but not infringed by it (see Figure 11).
- Coventry Airport has an elevation of 267' AMSL and is overlayed by Birmingham CTA. (Class D) airspace which has a lower limit of 1500' AMSL.
- The Coventry ATZ covers a circle, 2.5nm radius with an upper limit of 2000' AAL.
- Circuits on Rwy 05/23 are normally conducted to the SE (see Figure 12).
- The fixed wing circuit height is 1260' AMSL.
- The helicopter circuit height is 967' AMSL.
- Three Visual Reference Points (VRP) are defined: Draycote Water (N52 19.57 W001 23.07). and Southam (N52 16.53 W001 23.07, and Nuneaton (N52 33.90 W001 26.88).



Figure 11: Relationship to Coventry ATZ





Figure 12: Coventry Airport circuit pattern and ATZ

5.3 Impact on the Route Between Draycote Water VRP and EGBE (and Surrounding Areas)

The route from Draycote Water VRP to Coventry Airport crosses TDA 1 (see Figure 13). Operating along this route, terrain encountered shortly after Draycote Water (and in the TDA 1), extends to approximately 360' AMSL. Given a TDA UL of 800' AMSL, an aircraft would need to be operating below 440' AGL in order to be affected by the TDA - this is below normal GA altitudes.

The normal altitude for GA traffic arriving into Coventry on this route is 1200' AMSL and this provides 400' buffer above the UL of TDA 1.



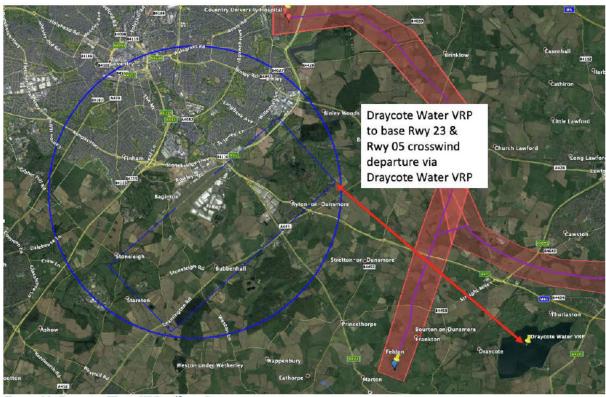


Figure 13: Draycote Water VRP to/from Coventry Airport

The route from Southam VRP to Coventry Airport is not affected by the proposed TDAs (see Figure 14)

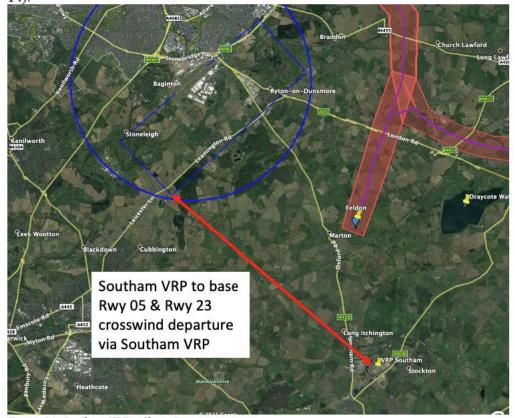


Figure 14: Southam VRP to/from Coventry Airport



TDA 3 is to the north of the Draycote Water VRP. It would be crossed by north/south traffic using that VRP. Terrain in this area extends to 370' AMSL. Given a TDA UL of 800' AMSL, an aircraft would need to be operating below 430' AGL in order to be affected by TDA 3 - this is below normal GA altitudes.

5.4 Impact on other routes and inhabited areas

There would be little or no impact on the volume of air traffic flying below 7000' and over inhabited areas. This is due to the following reasons:

- The TDA Upper Limits are 800' AMSL therefore it is only low-level traffic that would need to change flight paths and the majority of aircraft below 7000' can overfly the TDAs
- TDA activation would not preclude the operation of low-level emergency services operators since UAV operations would be suspended when required.
- The TDAs are predominantly over rural areas.

6. Dates and Hours of Activation

The proposed TDA would be available from 26th August 2021 for 60 days, ending on 25th October 2021.

The specific dates for activation are weather dependent and therefore cannot be specified here, however promulgation would be via NOTAM with at least 24 hours' notice.

The hours of activation are also weather dependent. They would be conducted in daylight hours only. Flights could take place both during the week and on weekends. Initially there would be approximately 3 flights per week eventually scaling up to a maximum of 14 flights per week.

The TDAs could be activated for up to 1 hour per time and up to a maximum of 100 times during the 60-day availability period.

7. Airspace Management

7.1 NOTAMs

The TDAs would be promulgated via AIC and activated as and when required via NOTAM (with a minimum of 24 hours' notice) issued by Skyfarer. The NOTAM would contain contact information for the DAAIS.

7.2 DAAIS

An Air Navigation Service Provider (ANSP), East Midlands Airport, would provide a Danger Area Activity Information Service (DAAIS) by phone and also on VHF radio 134.180 MHz. Information on the TDA will also be available from the TDA controlling authority (Skyfarer) by phone on 07877946928.

7.3 Standard Operating Procedures to Facilitate ESO Operations

Emergency services (and any other traffic with an urgent requirement to enter the TDA when active), would be given priority to do so, normally via communication between them and the DAAIS (who would then co-ordinate with the UAS pilot to suspend operations until the emergency services traffic was clear of the TDA).

Skyfarer has engaged with the following ESOs with regard to the preparation of SOPs for ESO access to the TDAs:

- Bristow



- Sloane Helicopters
- NPAS
- Babcock

Skyfarer would ensure that appropriate SOPs established prior to the activation of the TDAs (if they are approved).

7.4 Standard Operating Procedures to Facilitate Pipeline Inspections by Helicentre Aviation

Helicentre Aviation conduct pipeline inspections potentially affected by the proposed TDAs since some inspections require an operating height of 300' AGL. In order not to impact upon these operations, Skyfarer has engaged with Helicentre Aviation with regard to the preparation of SOPs for their access to the TDAs. Skyfarer would ensure that appropriate SOPs are established prior to the activation of the TDAs (if they are approved).

7.5 Standard Operating Procedures to Facilitate Movements To/From Peter Hall Farm Airstrip.

Peter Hall Farm airstrip is partially overlayed by TDA 2. In order not to impact upon these operations, Skyfarer has engaged with the airstrip operator with regard to the preparation of SOPs for their access to the TDA. Skyfarer would ensure that appropriate SOPs are established prior to the activation of TDA 2 (if it is approved).

7.6 Minimum Meteorological Criteria

In order to ensure manned aircraft operating under VFR are not compelled to operate at or below the TDA ULs, Skyfarer has proposed a minimum meteorological criterion for UAV flights to take place within a TDA:

- cloud base not below 1500' AMSL.
- cloud base and visibility would be derived from Birmingham METAR or TAF information and area forecasts.

8. Safety Considerations

All BVLOS operations conducted by Skyfarer are subject to assessment and approval by the CAA who, amongst other considerations, review Skyfarer's Operating Safety Case. The safety case includes provision for 'buffers' between the limits of the UAV's operating area and the edge of the TDA in order to ensure that the UAVs flight path is contained within the TDA under all circumstances and does not pose a risk to other airspace users.

Given the proximity of Birmingham CTA, the UAVs will be equipped with CAA approved ADS-B out in order to improve their electronic conspicuity. Additionally, Skyfarer will seek to establish an agreed process for flight notification and communication with Birmingham ATC by way of a Letter of Agreement.

8.1 Collection and Monitoring of Feedback while the TDAs are Active

It shall be the responsibility of Skyfarer, to gather all feedback received when the TDAs are in place. All stakeholders in this document have the contact details for Skyfarer from the Stakeholder Engagement document they received, and these contact details will be included in the AIC notifying the TDAs. They will also be included on the NOTAM. If stakeholders contact the DAAIS as opposed to Skyfarer, then the DAAIS shall communicate that information to Skyfarer. Once the operation is complete and the TDA period has ended, any feedback collected during the activation period shall be compiled into a report and forwarded to the CAA.



Appendix A: Stakeholder Engagement Material

A1: Text of email sent to all stakeholders on 20/05/2021

Good afternoon,

I am writing to you on behalf of a Skyfarer Ltd, a UK-based Unmanned Aircraft (UA) operator leading the UKRI sponsored project 84502 - 'enabling drone powered medical logistics in the UK'. The project aims to progress the operational capability of drone technology into a logistical use case specifically for medical delivery in association with the NHS. The potential benefits of conducting medical deliveries by drone include reductions in transport times, road congestion and CO2 emissions.

The planned trials require Beyond Visual Line of Sight (BVLOS) drone operations between routes that connect Coventry University Hospital, Rugby Hospital and a staging area ('Feldon') located near the village of Marton (approximately six nautical miles to the south of Coventry Hospital). The trials would take place over a two-month period commencing 26th August 2021 and ending late-October 2021.

Current regulations mandate that BVLOS operations must be conducted within 'Segregated Airspace' unless the drone is equipped with an approved detect and avoid (DAA) capability. Skyfarer drones are not equipped with DAA (nor is there currently a CAA approved solution available) therefore, Skyfarer wish to make an application for three Temporary Danger Areas (TDAs) for the purpose of providing an appropriate operating environment in order to conduct these trials.

Skyfarer has made a formal request to the Civil Aviation Authority for the TDAs and details can be found under ACP-2021-038 on the CAA Portal here.

As part of this change request Skyfarer are engaging with aviation stakeholders (airspace users, air navigation service providers and aerodromes) on the safety and operational viability of the proposed TDAs and to ensure minimum possible impact on other air users. For full details of the proposed option for the TDAs, please see the attached Stakeholder Engagement document. We value Stakeholder feedback and request that it be submitted in accordance with the attached document (by return email to the address TDA@skyfarer.co.uk).

The six week engagement period starts on 20th May ending on 1st July 2021 (the deadline for receiving comments and feedback).

We look forward to hearing from you.

Kind Regards,



A2: Attachment to the 20/05/2021 email



Phone 07976291275 Email DA@sky arer co uk Website www sky arer co uk

ACP-2021-038 – Skyfarer NHS drone delivery trials Coventry

Targeted Engagement with Aviation Stakeholders Version 1.0 – Dated: 19/05/2021

Acronyms and Abbreviations

AAL	Above Aerodrome Level	
ACP	Airspace Change Proposal	
AIAA	Area of Intense Air Activity	
AMSL	Above Mean Sea Level	
ANSP	Air Navigation Service Provider	
BVLOS	Beyond Visual Line Of Sight	
GA	General Aviation	
MET	Meteorological	
NM	Nautical Mile	
SFC	Surface of the earth	
TDA	Temporary Danger Area	
UAS	Unmanned Aerial System	
VRP	Visual Reference Point	

Reference Documents

Document Title	Source	Edition/Version	Date of Issue
The Air Navigation Order 2016	CAP 393		February 2021
and Regulations			
Airspace Change – Guidance on	CAP 1616	Third edition	01/03/2021
the regulatory process for			
changing the notified airspace			
design and planning and planned and permanent			
redistribution of air traffic, and			
on providing airspace			
information			
Unmanned Aircraft System	CAP 722	Eighth edition	05/11/2020
Operations in UK Airspace –			
Guidance			
	0.5 -000		10/10/2020
Unmanned Aircraft Systems	CAP 722C	First edition	10/12/2020
UAS Airspace Restrictions			
Guidance and Policy	/== .		0.1.10=10.000
CAA Policy for the	CAA DA/TDA	NA	21/07/2020
Establishment of Permanent	Policy		
and Temporary Danger Areas	20200721		





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1. Statement of Need

Skyfarer Ltd (the airspace change sponsor) are a UK-based Unmanned Aircraft (UA) operator leading the UKRI sponsored project 84502 - 'enabling drone powered medical logistics in the UK'. The project aims to progress the operational capability of drone technology into a logistical use case specifically for medical delivery in association with the NHS. The potential benefits of conducting medical deliveries by drone include reductions in transport times, road congestion and CO2 emissions.

The planned trials require Beyond Visual Line of Sight (BVLOS) drone operations between routes that connect Coventry University Hospital, Rugby Hospital and a staging area 'Feldon' located near the village of Marton (approximately six nautical miles to the south of Coventry Hospital). The trials would take place over a two-month period commencing 26th August 2021 and ending late-October 2021.

Current regulations mandate that BVLOS operations must be conducted within 'Segregated Airspace' unless the drone is equipped with an approved detect and avoid (DAA) capability. Skyfarer drones are not equipped with DAA (nor is there currently a CAA approved solution available) therefore, Skyfarer wish to make an application for a temporary danger area (TDA) for the purpose of providing an appropriate operating environment in order to conduct these trials.

2. Proposed Option for TDAs

Skyfarer's proposed option is for three different TDAs in order to ensure the volume of airspace requested is kept as small as possible in order to allow for the intended operations whist minimising the effect on other airspace users. The TDAs are temporarily designated as TDA 1, TDA 2 and TDA 3. Figure 1 provides an overview, with more detailed descriptions below.





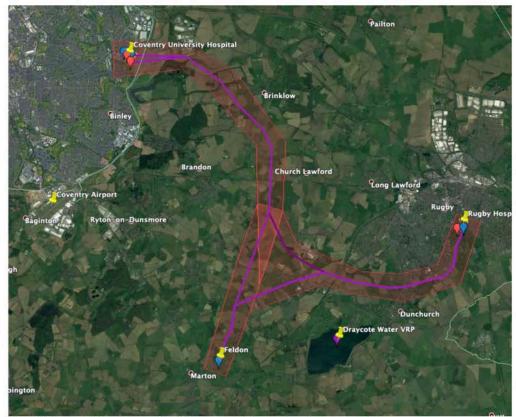


Figure 1: Proposed TDAs option overview (TDA areas shaded red, routes shown as purple lines)

There are three specific routes for the trails:

- Route A: Feldon to Coventry University Hospital.
- Route B: Feldon to Rugby Hospital.
- Route C: Coventry University Hospital to Rugby Hospital.

The specific TDAs required for each route are shown in Table 1.

Route	TDAs required	
Route A	TDA 1 and TDA 2	
Route B	TDA 1 and TDA 3	
Route C	TDA 2 and TDA 3	

Table 1: Routes and applicable TDAs

2.1 TDA 1

The lateral dimensions of TDA 1 would be starting at a point located at N52°19'08" W001°23'42", thence a straight line joining the points:

- N52°22'22" W001°21'59"
- N52°22'13" W001°21'10"
- N52°19'01" W001°21'10"
- N52°19'08" W001°23'42"
- See Figure 2

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The vertical dimensions of TDA 1 would be:

- Lower Limit: SFC
- Upper Limit: 900ft AMSL

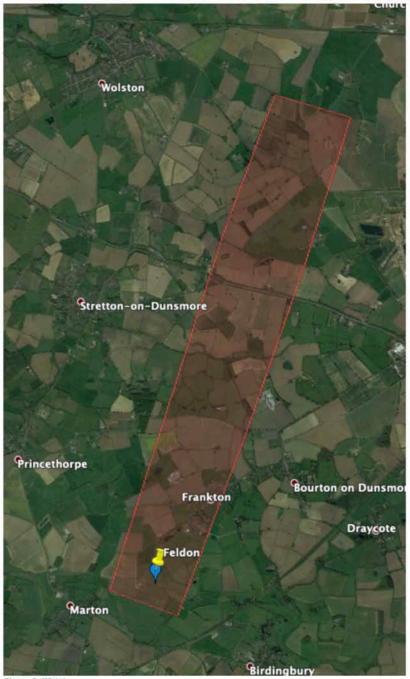


Figure 2: TDA 1

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2.2 TDA 2 (Figure 3)

The lateral dimensions of TDA 2 would be starting at a point located at N52°25'35" W001°26'43" thence a straight line joining points:

- N52°25'31" W001°24'10"
- N52°24'55" W001°22'39"
- N52°23'34" W001°21'04"
- N52°22'13" W001°21'10"
- N52°22'22" W001°21'59"
- N52°23'31" W001°22'03"
- N52°24'32" W001°23'27"
- N52°25'02" W001°24'28"
- N52°24'52" W001°26'41"
- N52°25'35" W001°26'43"
- See Figure 3

The vertical dimensions of TDA 2 would be:

- Lower Limit: SFC
- Upper Limit: 900ft AMSL







Figure 3: TDA 2

2.3 TDA 3 (Figure 3)

The lateral dimensions of TDA 3 would be starting at a point located at N52°22'22" W001°21'59" thence a straight line joining points:

- N52°22'13" W001°21'10"
- N52°21'34" W001°20'43"
- N52°21'01" W001°18'35"
- N52°20'59" W001°17'22"
- N52°21'09" W001°16'11"
- N52°22'09" W001°15'33"
- N52°21'59" W001°14'46"
 N52°20'47" W001°15'25"
- N52°20'26" W001°17'12"
- N52°20'35" W001°18'56"
- N52°20'47" W001°19'50"
- N52°20'15" W001°22'13"

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- N52°20'46" W001°21'55"
- N52°22'22" W001°21'59"
- See Figure 4

The vertical dimensions of TDA 3 would be:

- Lower Limit: SFC
- Upper Limit: 900ft AMSL

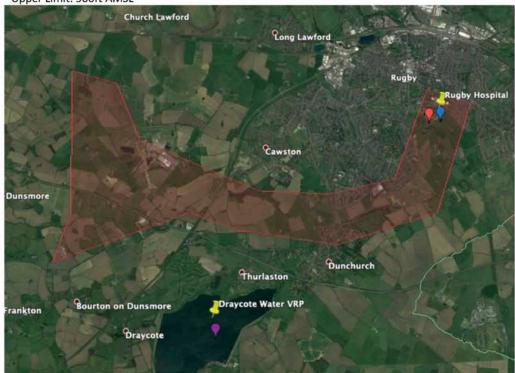


Figure 4: TDA 3

3. Impact on flight paths below 7000' and over inhabited areas

3.1 Airspace Notes:

- The proposed TDAs are wholly within Class G airspace.
- The southern portion of TDA 1 is overlayed by Birmingham CTA (Class D) airspace which has a lower limit of 3500' AMSL.
- A small section of the western portion of TDA 2 is overlayed by Birmingham CTA (Class D) with a lower limit of 2000' AMSL

3.2 Coventry Airport (EGBE) Notes

- Coventry airport and ATZ are in proximity to the proposed TDA option but not infringed by it
- Coventry Airport has an elevation of 267' AMSL and is overlayed by Birmingham CTA (Class D) airspace which has a lower limit of 1500' AMSL
- The Coventry ATZ covers a circle, 2.5nm radius with an upper limit of 2000' AAL
- Circuits on Rwy 05/23 are normally conducted to the SE

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- The fixed wing circuit height is 1260' AMSL
- The helicopter circuit height is 967' AMSL
- Three Visual Reference Points (VRP) are defined: Draycote Water (N52 19.57 W001 23.07) and Southam (N52 16.53 W001 23.07, and Nuneaton (N52 33.90 W001 26.88).

3.3 Impact on the route between Draycote Water VRP and EGBE

This route crosses TDA 1 and TDA 3 however, the proposed Upper Limit for these TDAs (900' AMSL) would allow for manned aircraft traffic operating on that route to overfly the TDA if operating at or above the EGBE circuit heights (1260' AMSL and 967' AMSL (fixed wing and helicopter respectively)). Therefore, there would be little or no impact on aircraft operating along this route.

3.4 Impact on other routes and inhabited areas

There would be little or no impact on the volume of air traffic flying below 7000' and over inhabited areas. This is due to the following reasons:

- The TDA Upper Limits are 900' AMSL therefore it is only low-level traffic that would need to change flight paths and the majority of aircraft below 7000' can overfly the TDAs
- TDA activation would not preclude the operation of low-level emergency services operators since UAV operations would be suspended when required.
- The TDAs are predominantly over rural areas.

4. Dates and Hours of Activation

The proposed TDA would be available from 26th August 2021 for 60 days, ending on 25th October 2021.

The specific dates for activation are weather dependent and therefore cannot be specified here, however promulgation would be via NOTAM with at least 24 hours' notice.

The hours of activation are also weather dependent. They would be conducted in daylight hours only. Flights could take place both during the week and on weekends. Initially there would be approximately 3 flights per week eventually scaling up to a maximum of 14 flights per week.

The TDAs could be activated for up to 1 hour per time and up to a maximum of 100 times during the 60-day availability period.

5. Airspace Management

The TDAs would be promulgated via AIC and activated as and when required via NOTAM (with a minimum of 24 hours' notice) in accordance with Section 4 above.

An Air Navigation Service Provider (ANSP) would provide a Danger Area Activity Information Service (DAAIS) on a VHF frequency. The details of the ANSP and frequency to be used will be established prior to the final submission to the CAA.

Information on the TDA will also be available from the TDA controlling authority (Skyfarer) by phone on 07877946928.

Emergency services and any other traffic with an urgent requirement to enter the TDA when active, would be given priority to do so via communication between them and the DAAIS (who would then

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co-ordinate with the UAS pilot to suspend operations until the emergency services traffic was clear of the TDA).

6. Safety Considerations

All BVLOS operations conducted by Skyfarer are subject to assessment and approval by the CAA who, amongst other considerations, review Skyfarer's Operating Safety Case. The safety case includes provision for 'buffers' between the limits of the UAV's operating area and the edge of the TDA in order to ensure that the UAVs flight path is contained within the TDA under all circumstances and does not pose a risk to other airspace users.

Given the proximity of Birmingham CTA, the UAVs will be equipped with CAA approved ADS-B out in order to improve their electronic conspicuity. Additionally, Skyfarer will seek to establish an agreed process for flight notification and communication with Birmingham ATC by way of a Temporary Operating Instruction (TOI).

7. Stakeholder Engagement

As part of this change request Skyfarer are engaging with aviation stakeholders (airspace users, air navigation service providers and aerodromes) on the safety and operational viability of the proposed TDAs and to ensure minimum possible impact on other air users. We value Stakeholder feedback and request that it be submitted in accordance with sections 7.2 and 7.3 below.

7.1 Stakeholder Identification

Skyfarer has sought to identify all aviation stakeholders that might be impacted positively or negatively by the proposed changes. They are shown in Appendix A.

Identified stakeholders are encouraged to inform Skyfarer if they are aware of any additional aviation stakeholders that they consider relevant, who are not already identified in Appendix A.

7.2 Engagement Period

Skyfarer proposes a standard engagement period of six weeks. The formal engagement period will commence on 20th May ending on 1st July 2021.

7.3 How to Respond

All identified stakeholders will receive this document via email or be notified by phone. It will also be publicly available on the CAAs Airspace Change Portal at:

https://airspacechange.caa.co.uk/PublicProposalArea?pID=369

Please provide any feedback, questions or comments by the end of the proposed engagement period by sending them to the following email address: TDA@skyfarer.co.uk

Please note that all responses will be included in the subsequent report and made publicly available (with personal contact details of the respondent redacted).

7.4 Post Engagement

With regards to next steps at the completion of the engagement period:

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- Skyfarer, as the change sponsor will review responses and produce a report summarising the
 results of this engagement activity. This report will be made available to the CAA as part of
 this engagement process and will also be published on the CAAs Airspace Change Portal.
- If the TDA proposal is approved, Skyfarer will collate, monitor and report to the CAA on the level and content of related complaints/feedback once TDA has been implemented.



Appendix B: List of Initial Stakeholders Contacted

Organisation/party	Contact method	Reason for Engagement		
AIRPORTS with an ATZ or CT	AIRPORTS with an ATZ or CTZ within 30nm			
Birmingham Airport		Operator of nearby aerodrome		
Coventry		Operator of nearby aerodrome		
Derby Airfield		Operator of TDA aerodrome		
East Midlands Airport		Operator of nearby aerodrome		
Leicester Airport		Operator of nearby aerodrome		
Northampton/Sywell Aerodrome		Operator of nearby aerodrome		
Oxford Airport		Operator of nearby aerodrome		
Tatenhill Airfield		Operator of nearby aerodrome		
Wellesbourne Mountford Airfield		Operator of nearby aerodrome		
Wolverhampton Halfpenny Green Airport	k	Operator of nearby aerodrome		
RAF AIRPORTS				
RAF Brize Norton	Via DAATM	Operator of nearby aerodrome		
RAF Weston on the Green Airport	Via DAATM	Operator of nearby aerodrome		
RAF Cosford	Via DAATM	Operator of nearby aerodrome		
AIRFIELDS within 25nm				
Baxterley Airfield		Operator of nearby airfield		
Bidford Gliding Site		Operator of nearby airfield		



Bromsgrove Airfield (Stoney Lane)	Operator of nearby airfield
Buttermilk Hall Farm Airfield	Operator of nearby airfield
Enstone Airfield	Operator of nearby airfield
Finmere Airfield	Operator of nearby airfield
Feldon Helipad	Operator of nearby airfield
Fisherwick Microlight Site	Operator of nearby airfield
Hinton in the Hedges Airfield	Operator of nearby airfield
Home Farm (Ebrington) Airfield	Operator of nearby airfield
Hook Norton Airfield	Operator of nearby airfield
Measham Cottage Farm Airfield	Operator of nearby airfield
Osbaston Lodge Airfield	Operator of nearby airfield
Overgreen Farm Microlight Site	Operator of nearby airfield
Pitsford Airfield	Operator of nearby airfield
Rothwell Airfield	Operator of nearby airfield
Shenington Airfield	Operator of nearby airfield
Shotteswell/Banbury Airfield	Operator of nearby airfield
Sittles Farm Airfield	Operator of nearby airfield
Snitterfield Gliding Site	Operator of nearby airfield
Stoke Golding Airfield	Operator of nearby airfield



Thornborough Grounds Airfield		Operator of nearby airfield
Turweston Aerodrome		Operator of nearby airfield
Twycross Airfield		Operator of nearby airfield
Wharf Farm Airfield		Operator of nearby airfield
ANSPs		
Birmingham ATC		ANSP in the region
East Midlands ATC		ANSP in the region
NATS		ANSP in the region
AVIATION OPERATORS / COM	MPANIES / PILOTS	
Airspeed Aviation Limited (derby Airfield)		Aircraft operator in the region
Banbury Gliding Club		Gliding club in the region
Bidford Gliding and Flying Club		Gliding club in the region
BIH Onshore (Birmingham Airport)		Helicopter operator in the region
Derbyshire, Leicestershire & Rutland Air Ambulance (DLRAA)		Emergency Services Operator in the region
Derby Aero Club and Flying School		Flight training school and aero club in the region
Enstone Flying Club		Flight training school in the region



C 51 0 (1	Flight training school and aero club in the
Go Fly Oxford	region
Hinton Skydive Centre	Skydive centre in the region
Leicestershire Aero Club	Flying training school and aero club in the region
National Police Air Service	Police operator
Shenington Gliding Club	Gliding club in the region
Tatenhill Aviation	Flying training school and aircraft maintenance organisation in the region
The Gliding Centre (Husbands Bosworth Airfield)	Glider operator in the region
The Microlight School Ltd (Fisherwick Microlight Site)	Flying training school in the region
Warwickshire & Northamptonshire Air	Emergency Services Operator in the region
Ambulance (WNAA)	
Coventry Airport Operators	
Aeros (Flight training & MRO)	Flying training school and aircraft maintenance organisation in the region
Aerotech Aircraft Maintenance	Aircraft maintenance organisation in the region
Almat Flying Academy (Flight training)	Flying training school in the region
Cat3C (Flight training)	Flying training school in the region
Coventry Aeroplane Club (Flight training)	Flying training school and aero club in the region
Helioride (Flight training)	Flying training school in the region
Midland Air Training (Flight training)	Flying training school in the region



Patriot Aviation (MRO)		Aircraft maintenance organisation in the region
Tenencia Aerospace Design (MRO)		Aircraft maintenance organisation in the region
MOD / MILITARY		
DAATM-AIRSPACE OPS SO2		Military aviation operator in the region
DAATM		Military aviation operator in the region
Defence UAS Capability Development Centre		Military aviation operator in the region
Military Aviation Authority (MAA)	100	Military aviation operator in the region
National Air Traffic Managemen	nt Advisory Committee (NATM	IAC) members
Airspace4All		A joint undertaking between Sports and Recreational Aviation, Military Aviation and Other Aviation stakeholders & NATMAC member
Aircraft Owners and Pilots Association (AOPA)		National GA association & NATMAC member
Airfield Operators Group (AOG)		National GA airfield operator's association & NATMAC member
Airspace Change Organising Group (ACOG)		Co-ordinators of airspace change program & NATMAC member
Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK)		National association representing UAS operators & NATMAC member
Aviation Environment Federation (AEF)		National NGO campaigning on aviation's impacts for people and the environment & NATMAC member



	T	
BAe Systems		NATMAC member
British Balloon and Airship Club		National association representing ballooning stakeholders and NATMAC member
British Gliding Association (BGA)		National association representing gliding stakeholders and NATMAC member
British Helicopter Association (BHA)		National association representing helicopter operator stakeholders and NATMAC member
British Hang Gliding and Paragliding Association (BHPA)		National association representing sport aviation stakeholders and NATMAC member
British Microlight Aircraft Association (BMAA) / General Aviation Safety Council (GASCo)		National association representing sport aviation stakeholders and NATMAC member
British Model Flying Association (BMFA)		National association representing model aircraft stakeholders and NATMAC member
British Skydiving		National association representing skydiving stakeholders and NATMAC member
Drone Major		NATMAC member
General Aviation Alliance (GAA)		National association representing GA stakeholders and NATMAC member
Guild of Air Traffic Control Officers (GATCO)		National association representing air traffic control stakeholders and NATMAC member
Honourable Company of Air Pilots (HCAP)		National association representing GA pilot stakeholders and NATMAC member
Helicopter Club of Great Britain (HCGB)		National association representing private helicopter owner and pilot stakeholders and NATMAC member
Iprosurv		NATMAC member
Light Aircraft Association (LAA)		National association representing light aircraft stakeholders and NATMAC member



PPL/IR (Europe)	NATMAC member
PPL/IR (Europe)	Relevant body for Airprox analysis in the UK NATMAC member
UK Airprox Board (UKAB)	National body representing commercial aviation stakeholders and NATMAC member
UK Flight Safety Committee (UKFSC)	National body representing commercial aviation stakeholders and NATMAC member



Appendix C: List of Additional Stakeholders Contacted During the

Engagement Period

Organisation/party	Contact method	Reason for Engagement
Sean Walters		Requested information - Pilot and aircraft owner operating from a non-identified private airstrip in Warwickshire
Kevin Walton		Requested information
Sloane Helicopters		HEMS operator Coventry Airport
Babcock Mission Critical Services Onshore		HEMS operator Gloucestershire Airport
Specialist Aviation Services		Children's Air Ambulance/HEMS operator Gloucestershire Airport
PDG Helicopters		Network Rail operator
NPAS		Police operator
Bristow Helicopters		SAR operator
Heliair		Pipeline patrol operator
Western Power		Powerline Patrol operator
National Grid		Powerline Patrol operator
Helicentre		Pipeline patrol operator
H. Cook		Requested information – Microlight pilot
GB Helicopters		Helicopter operator



Rowan Smith	GA pilot, submitted comments
Leicestershire Microlight Aircraft Club	Microlight Club in the region
Peter Hall Farm airstrip	Operator of airstrip partially within TDA 2



Appendix D: Email to Additional Stakeholders Identified During the Engagement Period

Good Morning,

I am writing to you on behalf of a Skyfarer Ltd, a UK-based Unmanned Aircraft (UA) operator leading the UKRI sponsored project 84502 - 'enabling drone powered medical logistics in the UK'. The project aims to progress the operational capability of drone technology into a logistical use case specifically for medical delivery in association with the NHS. The potential benefits of conducting medical deliveries by drone include reductions in transport times, road congestion and CO2 emissions.

The planned trials require Beyond Visual Line of Sight (BVLOS) drone operations between routes that connect Coventry University Hospital, Rugby Hospital and a staging area ('Feldon') located near the village of Marton (approximately six nautical miles to the south of Coventry Hospital). The trials would take place over a two-month period commencing 26th August 2021 and ending late-October 2021.

Current regulations mandate that BVLOS operations must be conducted within 'Segregated Airspace' unless the drone is equipped with an approved detect and avoid (DAA) capability. Skyfarer drones are not equipped with DAA (nor is there currently a CAA approved solution available) therefore, Skyfarer wish to make an application for three Temporary Danger Areas (TDAs) for the purpose of providing an appropriate operating environment in order to conduct these trials.

Skyfarer has made a formal request to the Civil Aviation Authority for the TDAs and details can be found under ACP-2021-038 on the CAA Portal here.

As part of this change request Skyfarer are engaging with aviation stakeholders (airspace users, air navigation service providers and aerodromes) on the safety and operational viability of the proposed TDAs and to ensure minimum possible impact on other air users. For full details of the proposed option for the TDAs, please see the attached Stakeholder Engagement document. We value Stakeholder feedback and request that it be submitted in accordance with the attached document (by return email to the address TDA@skyfarer.co.uk).

A six-week engagement period started on 20th May with a planned ending date of 1st July 2021 (the deadline for receiving feedback). Unfortunately we only became aware of yourself as a potential stakeholder now, and so I apologise for the delay in contacting you. I hope that you will find the 1st of July provides enough time for you to respond (if you wish to do so). If you feel this is not enough time, please do let me know.

I look forward to hearing from you.

Kind Regards,



Appendix E: Supplementary Stakeholder Email

Good Afternoon,

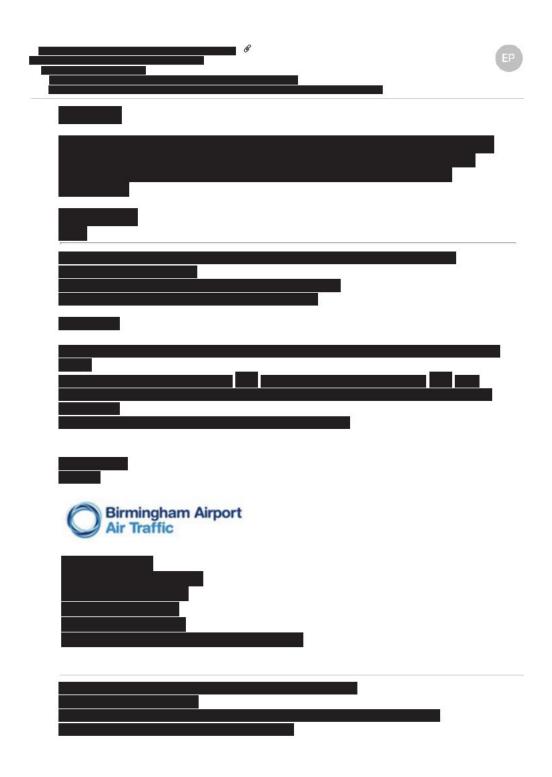
This is just a brief courtesy email to check in with you regarding the Skyfarer ACP-2021-038. I hope that you have had time to review the engagement material that I've sent previously. If you have already responded, many thanks, if not, please note that the engagement period will come to an end in a couple of weeks (on the 1st July), so could I ask you to please come back to me by then if you would like to ask any questions or make comments. Many thanks.

Best regards,

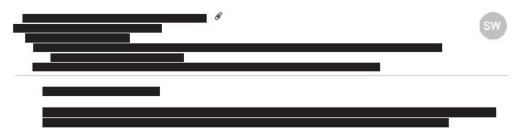


Appendix F: Communication with Stakeholders

Birmingham Airport







- 1. Find attached three kml files. These highlight the three applied for TDA's.
- 2. The ceiling of the TDA's are planned as follows. TDA 1 900 ft AMSL, TDA 2 900 ft AMSL and TDA 3 1000 ft
- 3. We've tried to design the TDA footprint to be as small as possible and to split it into the 3 sections to allow us to switch on and off the areas that aren't planned to be used during the day in an attempt to limit the impact on other airspace users. Note that there is only a small section of TDA 2 (near Coventry Hospital) sits below BHX Class D whilst the route itself doesn't.
- 4. The longest planned leg is between Coventry hospital and Rugby Hospital. This is 18.6km and will take the UAV 13 minutes.
- 5. Planned dates and projected tasking. Please note these are fairly loose at the moment and only an initial estimation of what we are going to achieve - hopefully it will give you a picture of what our planned trials will look like - again worthy of note that a 'flight' will include a 'there and back', and working on the longest leg above (also including turnaround times at the landing site) will have a time footprint of approximately 45-50 minutes.

Week 1 - 23rd August

- Initial configuration flights
- Weekdays: 3 days, 1 flight per day
 Weekend: NONE
- Total = 3 flights

Week 2 - 30th August

- Increasing daily ops
- Weekdays: 2 days, 2 flights per day
 Weekend: NONE
- Total = 4 flights

Week 3 - 6th September

- Ramping up Weekdays: 3 days, 2 flight per day
- Weekend: NONE
- Total = 6 flights

Week 4 - 13th September

- Prep for Demo Week
- Weekdays: 3 days, 3 flights per day
- Weekend: 1 day, 3 flights per day
- Total = 12 flights

Week 5 - 20th September

- DEMO WEEK
- Weekdays: 5 days, 3 flights per day
- Weekend: 1 day, 2 flights
- Total = 17 flights

Week 6 - 27th September

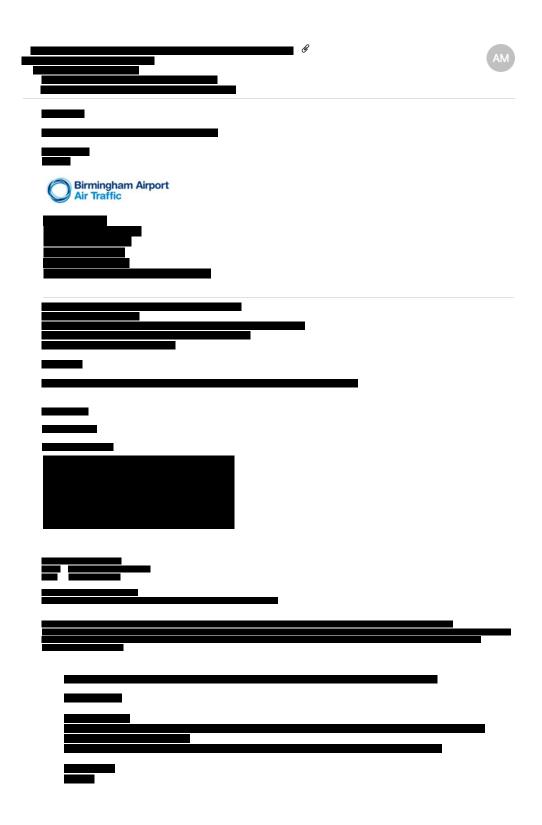
- Moving to Daily movement of samples
- Weekdays: 5 days, 1 flights per day
- Weekend: 1 day, 1 flight - Total = 6 flights

Week 7 - 4th October

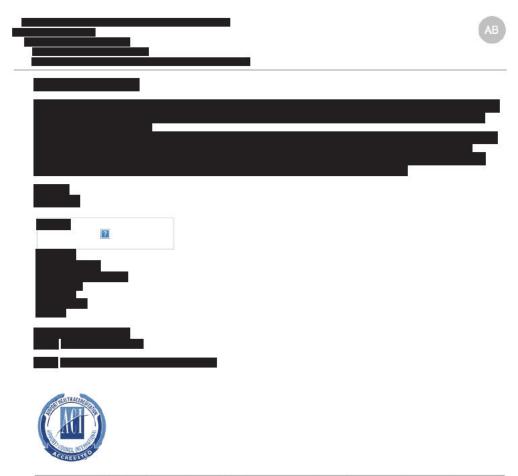
- A full week of movement
- Weekdays: 5 days, 1 flights per day
- Weekend: 2 days, 1 flight per day
- Total = 7 flights

Week 8 - 11th October









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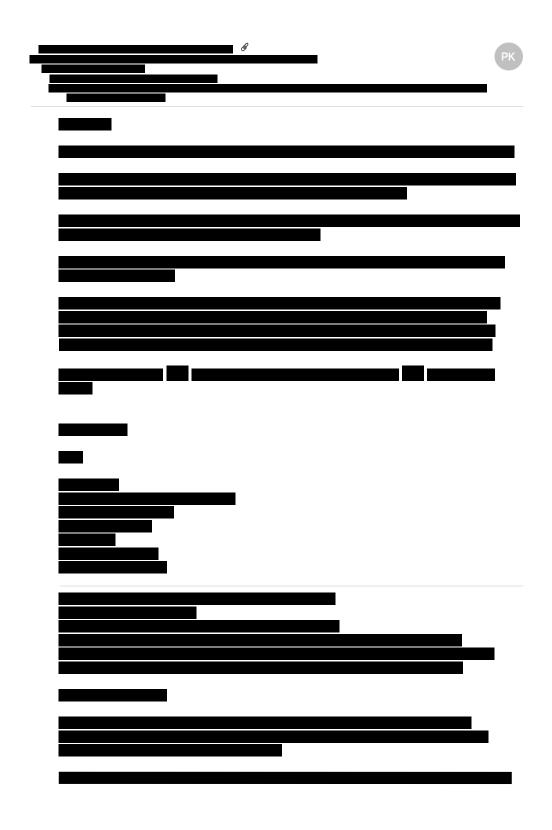








East Midlands Airport



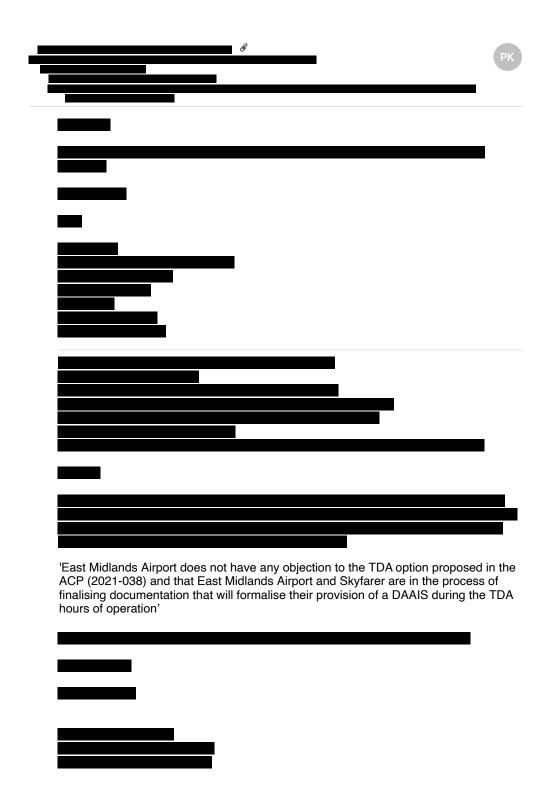






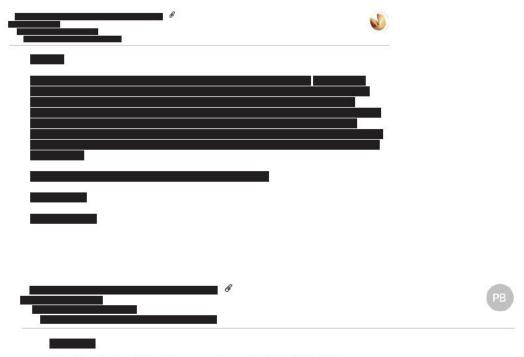








Coventry Airport



After discussing the details of the proposed project in depth with the CAA. Your proposed TDA from Rugby to Coventry will require Coventry to close for 1 hour every time you fly, and as such as an ANSP, we will not be accepting this due to the 3nm width which will wipe out our published route from Draycott water VRP, our circuit and final approach for runway 23.

As stated previously, any closure is not acceptable to the board of directors or the resident operators.

As such, yet again, I have to make it crystal clear that as far as Coventry Airport and the CAA is concerned, this is not a viable location for the trial.











Continuing on from my previous emails, please find attached the list of operators based at Coventry Airport that we have been able to put together so far. If you are able to fill in any missing parties it would be much appreciated. We intend to commence the stakeholder engagement next week so your input would be very welcome. Many thanks in advance





Banbury Gliding Club

Subject: Re: Stakeholder engagement ACP-2021-038

Date: 20 May 2021 at 13:15
To: TDA tda@skyfarer.co.uk



We received the initial contact from our website I believe. I am on the committee at the Banbury Gliding Club. You are welcome to use me as a contact until we have nominated somebody to take this forwards.

I will forward the details to the rest of the committee for our consideration.

All the best and here's to a sensible outcome for us all..



P.S. I assume that you will be contacting LAA and BGA...

From: TDA tda@skyfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038

Date: 20 May 2021 at 13:27

To:

Thanks for explaining, makes sense. Yes we certainly want to work with stakeholders such as yourselves to come up with a good solution.

Also, yes we have already emailed LAA and BGA; you can see a list of stakeholders that we've identified so far in Appendix A of the stakeholder engagement document. I look forward to hearing from you whenever you are ready to comment or if you have any questions.





Rothwell Airfield

From:
Subject: BVLOS
Date: 20 May 2021 at 15:48
To: TDA@skvfarer co uk

R

Thank you for including me in the emails you have sent out re the above.

I, like many of my fellow aviators, are extremely concerned about the impact that BVLOS – and drone activity in general – will have on both pleasure and commercial flying here in the UK.

Over the past 40 years available airspace to non-commercial aviation has been dramatically reduced as a result of air space grabs by the licensed airports etc and any further reduction will only make matters worse.

If more areas are to become restricted because of drone usage I believe it will have a dramatic, negative effect upon General Aviation activity and businesses associated with it; more pilots who flew for pleasure will cease to bother and the industry will start to decline.

All the reasons you put forward for the benefit of using BVLOS drones is accepted, particularly if traffic levels on our outdated road and rail systems increase but unless these devices are equipped with reliable DAA devices from the outset they will pose an unwarranted threat to other airspace users and a reduction in their safety. Private pilots will, inevitably find themselves in conditions of poor visibility, may be less than well current, or relying too much on board technology to see them through and that is when near misses or, worse, collisions with drones will take place.

When that happens who will be at fault? How will the pilot of a light aircraft fare from a responsibility point of view having collided with a tiny flying object so much smaller than what he is used to coping with hitherto?

You suggest a ceiling of 900 ft ASL but that is the height that a lot of small helicopters, gyroplanes and microlights fly at – below normal fixed wing traffic and many are still not equipped with ADSB devices, even if your machines have some sort of transponder system that can interpret nearby aircraft and take the necessary avoiding action.

I suppose that until death resulting from a collision with a BVLOS drone occurs it is anybody's guess as to what will happen next. More regulation for the humans being doubtlessly inevitable.

In conclusion, I feel very concerned about the difficulties associated with your experiments and will not be convinced of their true worth until they are equipped with DAA and can operate without creating no-fly areas for the rest of us.

Regards

Phone:

Website: www skyfarer.co.uk



Twycross Airfield

From:
Subject: RE: Stakeholder engagement ACP-2021-038 Date: 7 June 2021 at 18:11 To: TDA tda@skyfarer.co.uk



Dear Sirs

As the owner operator of zzzz Airstrip.

I have the following short comment. I am supportive of your work.

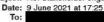
zzzz is a private airstrip, visitors are allowed with Prior notification. If I travel South, then I would be passing East of Coventry. I would expect to be flying at higher than 900ft in the areas referred to.

I see your comment in 3.4 'The TDA's are predominantly over Rural areas'. It not clear what other than stating the fact this comment is suggesting?

Just to be clear from a GA (farm strip flyers) view, Can you elaborate, as you have on the others within 3.4.



From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038





Thanks for your email. The 'rural areas' comment is really just to highlight that the operations are not over major population centres (in order to give some context with regard to potential for manned aircraft routing changes when the TDA is active and the potential for changes to the noise environment). I hope that answers your question OK.





Baxterley Aerodrome



Thank you for following up.

I reviewed the area on TDA zone's that you provided and the scope is very narrow and therefore unlikely to impact any operations at our aerodrome. Should your application be successful we will include any further information on your TDAs into our existing avoidance guidelines provided to pilots.

The project sounds very interesting and I wish you success with your trials.



Many thanks for your email and support. I will make sure we keep you informed.



BGA

From: Subject: ACP-2021-038
Date: 2 June 2021 at 09:17
To: TDA@skyfarer.co.uk

We note your proposed ACP re TDA's in the area of Draycote Water and Coventry. We have a question.

Gliders fly in the area described, normally in an operating band of, say 1500' agl to cloud base. If they cannot stay airborne in thermals, they may need to fly below the 900' asl. 900' asl is about the height that a glider pilot will be established in a circuit to land in a field or strip.

We note that most BVLOS TDA's have a lower upper limit than 900' asl. As TDA dimensions shall be the minimum practicable necessary to enable the tasks to be undertaken, please could you provide the justification for an upper limit of 900' asl.



Chief Executive Officer

British Gliding Association 8 Merus Court Meridian Business Park Leicester LE19 1RJ

T 0044 (0)116 2892956 M 07749 908444 www.gliding.co.uk





From: TDA Inbox tda@skyfarer.co.uk Subject: Re: ACP-2021-038 Date: 9 June 2021 at 17:07 To: Thanks for your email. The vertical extent of the TDAs (up to 900' AGL) are based on the elevation of the terrain along the route and the need to fly approx 400' AGL. Then there is a safety buffer between the maximum altitude of the drone and the upper limit of the TDA (i.e. the drone won't be operating at 900'). Since the upper limit can not be defined in relation to AGL (the CAA only allow for it to be defined as an ASL altitude), we have to take the highest terrain along the whole route as the limiting factor. I hope that answers your question? Please do let me know if you'd like anything else. Subject: RE: ACP-2021-038
Date: 9 June 2021 at 17:11 To: TDA Inbox tda@skyfarer.co.uk Cc: Thanks for the clarification. One further question – what is the required safety buffer? Presumably that's detailed somewhere in a CAA policy document? From: TDA Inbox tda@skyfarer.co.uk Subject: Re: ACP-2021-038 Date: 9 June 2021 at 17:21 To: The safety buffers vary from one operation to another - there is no specified buffer for proximity to the TDA boundaries as such. The CAP722 document discusses the principles and objectives but it depends on factors such as the command and control signal latency and manoeuvrability of the specific operations. I hope that helps.



Subject: RE: ACP-2021-038
Date: 9 June 2021 at 17:32
To: TDA Inbox tda@skyfarer.co.uk
Cc:

Thanks. You'll have to excuse my lack of knowledge, but I didn't see in CAP722 how a TDA sponsor would be directed towards or calculate a required safety buffer?

From: TDA Inbox tda@skyfarer.co.uk
Subject: Re: ACP-2021-038
Date: 9 June 2021 at 17:35
To:

It forms part off the drone operators safety case which is submitted to the CAA in order to obtain approval for BVLOS ops.

From: Subject: RE: ACP-2021-038
Date: 9 June 2021 at 17:39
To: TDA Inbox tda@skyfarer.co.uk
Cc:

Thanks and understood. I won't keep this going as we're all busy. However, we are concerned when 'buffers' are added to any restricted airspace that they are proportionate and necessary. And of course in the case of RPAS, are not established to mitigate inadequate control systems or other issues impacting accuracy. Our response to this TDA will challenge the dimensions of the TDA.



Stoney Lane Airfield

From:

Subject: Re: Stakeholder engagement ACP-2021-038

Date: 28 May 2021 at 10:48 To: TDA@skyfarer.co.uk



As operator of Stoney Lane airfield (which is near to the location of the proposed trial) I have been invited to respond

The proposals as presented should have no direct impact on operations at Stoney Lane airfield.

In terms of the wider principles of the operation, objection to the proposal is made for the following reason:

Azimo's First Law of Robotics:

A robot may not injure a human being or, through inaction, allow a human being to come to harm. It is not therefore acceptable to run the proposed robots blindly in to Class G airspace; accordingly the proposal seeks temporary segregated airspace.

But recent drone trails at Goodwood have shown that drones can go out of control (in that case infringing Gatwick's airspace then crashing), this is therefore a significant possibility and risk.

The proposal does not allow for the trial drones to be fitted with any traffic detection and avoidance technology to enable control of this and other similar risks; rather, it seeks to derogate any responsibility for this by stating there is currently no ".... CAA approved solution available..". Whilst it is not the CAA's responsibility to provide a solution, there are many such systems (at least to alert the presence and trajectory of a drone) available commercially and light enough to be carried by a drone. It would be reckless negligence for such technology not to be fitted routinely to drones and to be linked to autonomous avoidance systems (or at least to the active further development of such

Should the Proposer consider these avoidance systems to be insufficiently developed, then the trial should not go ahead until such systems are available.

From: TDA Inbox tda@skyfarer.co.uk

Subject: Re: Stakeholder engagement ACP-2021-038

9 June 2021 at 17:13 To:

Cc:



Thanks for your email and for your comments on the wider principles. I would say that the drone is fitted with an ADS-D out in order to provide electronic conspicuity - which may be one of the systems you were referring to?

From: Subject: Re: Stakeholder engagement ACP-2021-038

Date: 9 June 2021 at 18:43 To: TDA Inbox tda@skyfarer.co.uk

Do you mean ADS B? o herwise no use o GA

Ei her way his will be of help and may assis a more posi ive response o your consul a ion if you men ion i

Then here's he wider issue of au onomous avoidance ha needs o be addressed





From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038 Date: 16 June 2021 at 09:33 To:

Apologies for the miss-spelling, yes it is ADS-B equipped.





Sloane Helicopters

From: Subject: Re: Stakeholder engagement ACP-2021-038
Date: 8 June 2021 at 08:52

To: TDA Inbox tda@skyfarer.co.uk



We will definitely have some comments to make, however we are in the middle of a very busy period so we may well not make the 1st July cutoff.

This project will impact on our ability to conduct emergency medical services in the area, will it be possible to have a ground everything now line that we can call ?

We have an aircraft based at coventry airport which can be airborne within two minutes of receiving an emergency call and be in rugby within 5-6 minute of receiving that call.

You can appreciate the 'go now' requirements of a HEMS service will not permit us to give prior notice and the immediate threat to life will mean we may need immediate access to any of the proposed danger areas.

Sloane Helicopters Ltd.

From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038

Date: 9 June 2021 at 12:16 To



Thanks for getting in touch. I completely agree that your HEMS operations have to take priority and that time may be a critical factor. My suggestion is that we establish a procedure for the HEMS operation to contact the DAAIS (which could be via VHF airborne) and this would result in suspending the UAS operation until the HEMS aircraft no longer needs access to the area. Can I suggest that we draft a procedure for your input in order to generate a Letter of Agreement that will describe the prioritisation of your ops and how this is achieved?



Subject: Re: Stakeholder engagement ACP-2021-038 Date: 9 June 2021 at 15:37

To: TDA Inbox tda@skyfarer.co.uk

Cc:



Not sure that will work for us, but I will discuss further internally.

What happens if a drone is already in the TDA? Can it 'just land'? The onus should not be on a already established service to have to negotiate for the use of airspace, particularly given the nature of the task.

If this were just a commercial air transport operation we could coordinate more easily but this is an immediate

With proximity of the AtZ at Coventry, the need to already be dealing with at least one radio each by the pilot and technical crew member that is going to be difficult to achieve

Everyone I have discussed this with up to now thinks it is an accident waiting to happen.

We are not anti drone, far from it, but these kind of operations in areas serviced by HEMS helicopters are of grave concern for us and may well result in a level of reduced patient care that none of us wants, it potentially makes our lives more complicated and they are already complex enough, this is an additional risk that our crews should not have

We are happy to work with you but for the moment our stance is that we do not want these operations to take place until a lot more thought has been out into it.



From: TDA Inbox tda@skyfarer.co.uk

Subject: Re: Stakeholder engagement ACP-2021-038

Date: 9 June 2021 at 16:54 To:

To answer your questions, if the drone is airborne at the time, yes the idea would be to suspend operations and this could involve an immediate landing according to the area under the drone at the time (another potential option would be to descend to hover a couple of metres AGL for example). There isn't an intention to place an onus on the HEMS operator to negotiate entry at all, rather it would for the HEMS operator to advise that they are coming through the TDA and the onus is on the drone operator to ensure they are out of your way.

I'd also agree with you that more thought and discussion is a good idea, and would welcome an opportunity to do that with you (and other emergency service operators). Would you be open to an online meeting next week sometime?



Subject: Re: Stakeholder engagement ACP-2021-038
Date: 9 June 2021 at 17:41
To: TDA Inbox tda@skyfarer.co.uk
Cc:

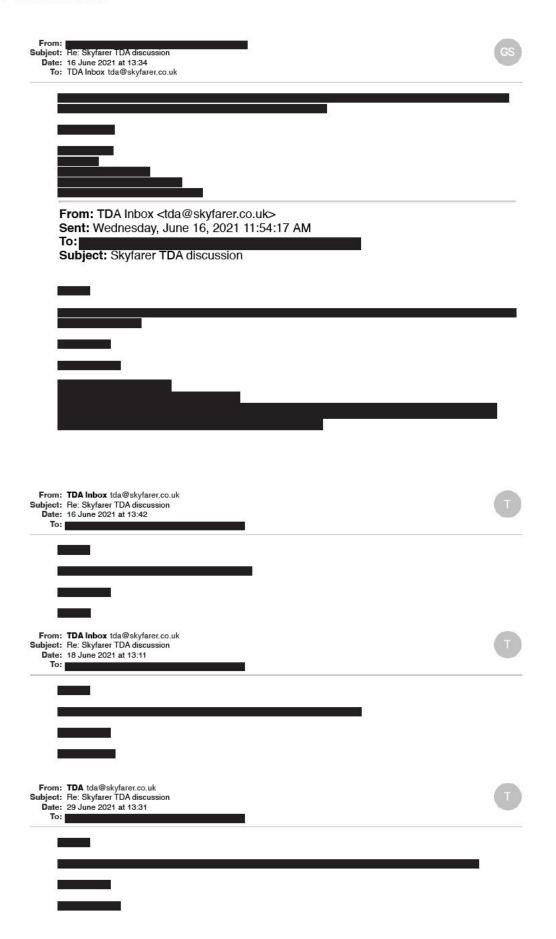
Are you engaged with the British Helicopter Association , in particular the Emergency Services Committee of which I am a small part.

The main reason I am involved at UHCW as we are their primary user.

From: TDA Inbox tda@skyfarer.co.uk
Subject: Re: Stakeholder engagement ACP-2021-038
Date: 10 June 2021 at 16:29
To:

Also, to answer your question, yes we sent the engagement material to
on the 20th May.







Date:	Re: Stakeholder engagement ACP-2021-038 30 June 2021 at 21:42 TDA Inbox tda@skyfarer.co.uk
I	
I	
I	
I	From: Date: Wednesday, 9 June 2021 at 15:37 To: TDA Inbox <tda@skyfarer.co.uk></tda@skyfarer.co.uk>
(Cc: Stakeholder engagement ACP-2021-038
I	
Ī	



National Grid

From: Subject: RE: EXT II Stakeholder engagement ACP-2021-038

Date: 9 June 2021 at 11 58 To: TDA Inbox tda@skyfarer.co.uk



Please can you send a kml file of the proposed TDAs so we can establish which of our assets we won't be able to survey during activation? You may also wish to contact WPD and/or PDG Helicopters to see how they might be affected during their surveys of powerlines.

Electricity Transmission Engineering Services nationalgrid MS TEAMS CHAT WITH JOHN RIGBY

onal Grid Stores, Old Militon Rd, Didcot, UK OX117HH rus on Twitter | YouTube | LinkedIn | Flickr consider the environment before printing this email.

From: I

Subject: RE: EXT II Stakeholder engagement ACP-2021-038

Date: 10 June 2021 at 08:53
To: TDA Inbox tda@skyfarer.co.uk



The proposed UAV routing doesn't cross any NGET powerlines so I am probably not going to comment on the consultation. I think GB Helicopters also do some powerline flying so they might benefit from the kml file to cross check with their routes.

From: TDA Inbox <tda@skyfarer.co.uk>

Sent: 09 June 2021 19:54

To:

Cc:

Subject: Re: EXT II Stakeholder engagement ACP-2021-038

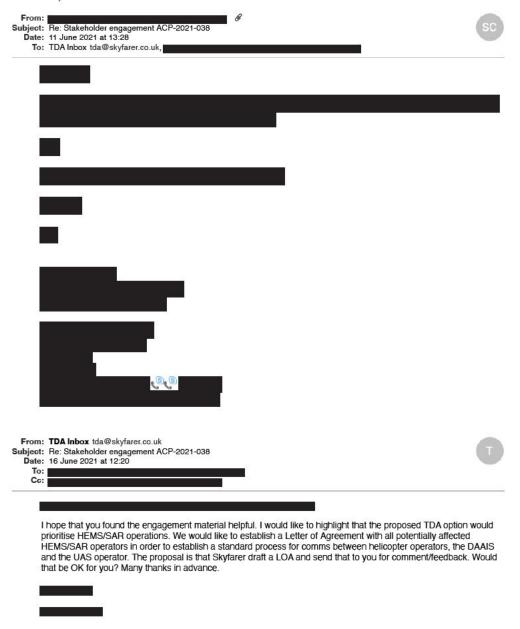
Please find attached a kml file for the proposed TDA's. Worthy of note that they are split into three sections with the intention of activating only the minimum required on the days of operation (and indeed will only be activated for 1-2 hours a day). Western Power and PDG helicopters have both been added to the stakeholder list and emailed vesterday on the 8th June 21 – thanks for bringing that to our attention.

Any further questions please don't hesitate to email.

Email: tda@skyfarer.co.uk Website: www.skyfarer.co.uk



Bristow Helicopters





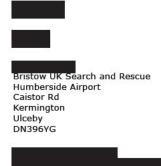
From:
Subject: ACP-2021-038 – Skyfarer NHS drone delivery trials Coventry
Date: 13 June 2021 at 17:44
To: TDA@skyfarer.co.uk,
Co:

I've been asked to comment on the overland TDA's that Skyfarer are proposing between Rugby and Coventry.

In short, I assess the impact of these proposals to our Operations as minimal. The geographical area in question is relatively small and it's an area that we rarely find ourselves. Neither of the two hospitals in question have a co-located Landing Site suitable for our aircraft and in the event of a drop off or pick up to Coventry University Hospital, Coventry Airport would be utilised.

The only scenarios that I can see a potential conflict would be in the event of a SAR-OP within one of the TDA's or if one of our aircraft needed to transit the area at short notice. As you have stated in the supporting document, you have made provision for this by Co-ordination from the DAAIS. My only comment would be the potential delay in getting the message to the UAS pilot and then the confirmation back, that the aircraft will be clear. As we have an airborne Sat/Cell phone capability, one solution to this would be for us to call the pilot direct. Could adding a direct dial number for the UAS pilot within the NOTAM be possible/practical to allow this facility?

Best of luck with the project, it seems like an exciting new development.



From: TDA Inbox tda@skyfarer.co.uk
Subject: Re: ACP-2021-038 – Skyfarer NHS drone delivery trials Coventry
Date: 16 June 2021 at 12:41

To
Cc:

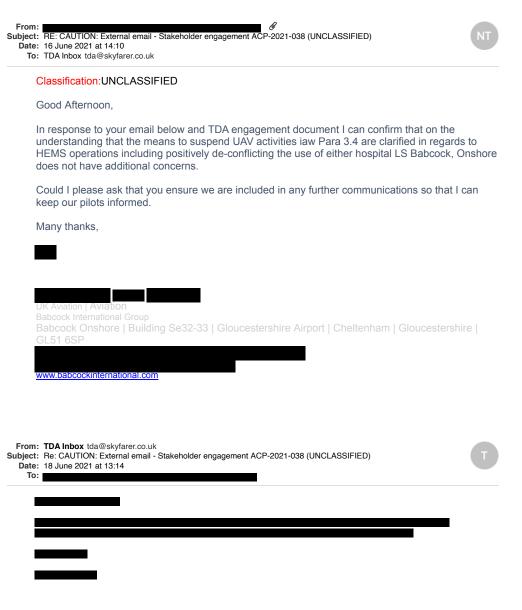
I appreciate your feedback regarding SAR access and have sent an email today on this topic. We would like to establish a Letter of Agreement with all potentially affected HEMS/SAR operators in order to establish a standard process for comms between helicopter operators, the DAAIS and the UAS operator. The proposal is that Skyfarer draft a LOA and send that to you for comment/feedback. Would that be OK for you? Many thanks in advance.



Subject: Re: ACP-2021-038 – Skyfarer NHS drone delivery trials Date: 17 June 2021 at 18:36	Coventry
To: TDA@skyfarer.co.uk	
Cc:	
In short, as long as there is a concise method of com the even of urgent requirement to enter the TDA, this	nmunication between our aircraft and the UAS pilot such that in
the even of digent requirement to enter the TDA, this	s can be done quickly and salely.
From: TDA Inbox tda@skyfarer.co.uk Subject: Re: ACP-2021-038 – Skyfarer NHS drone delivery trials	Coventor
Date: 18 June 2021 at 13:35	Coverilly
To: Cc:	
Many thanks for your response.	



Babcock





Helicentre Aviation

Subject: Stakeholder engagement ACP-2021-038 Date: 11 June 2021 at 15:01 To: TDA@skyfarer.co.uk Good Afternoon Thank you for the notification of the pending Drone TDAs. From the information provided it would appear the proposed TDAs would conflict with several of the gas pipeline routes we fly for National Grid. We operate R44 helicopters at 500ft - 600ft agl, with an exemption to operate as low as 300ft, the routes in question start West abeam Rugby running South to Wellesbourne. Please could you confirm that a crossing service would be available to us, provided the activities are NOTAM'd as suggested with a contact number / frequency, that will help us co-ordinate our activities. Helicentre Aviation From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038 Date: 16 June 2021 at 12:32 To: Thanks for getting in touch. It's certainly a priority for us to identify how we ensure minimal/no impact on your operations. In support of the TDA, we have proposed the use of a Danger Area Activity information Service (DAAIS) as opposed to a Danger Area Crossing Service. Since a DAAIS would not be able to support the issuing of crossing clearances, I'd like to suggest we put together a Letter of Agreement that prioritises your operations. In essence, this would mean that you let Skyfarer know of your requirement to access a TDA and then Skyfarer would ensure that the UAS is on the ground and only scheduled to fly when you no longer need the area. Does that sound like an approach that might work for you? Perhaps we could meet online to discuss further? From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038

Date: 29 June 2021 at 14:14 To:

m following up on my email form 16 June please Do you hink ha a LOA ha es ablishes a way o priori ise your

flying schedule would be a useful approach for you?



NPAS

Subject: ACP-2021-038-Skyfarer NHS drone delivery trials Coventry Date: 10 June 2021 at 16:39
To: TDA@skyfarer.co.uk

contact details are included in the NOTAM.



Thank you for the document detailing the above drone trial. I can confirm that this is unlikely to have a major impact on our operations, providing that the DAAIS

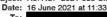


National Police Air Service





From: TDA Inbox tda@skyfarer.co.uk Subject: Re: ACP-2021-038-Skyfarer NHS drone delivery trials Coventry



To: Co:



Thanks for your response. I can confirm that the DAAIS contact details would be on the NOTAMs. Also, we would like to establish a basic SOP between emergency service operators, the DAAIS and the UAS operator in order to ensure safe and effective priority is always available for your operations. The plan is that we will draft an SOP for your comment and input. Would you be the correct person to engage with on that side of things? Many thanks.



From:

Subject: RE: ACP-2021-038-Skyfarer NHS drone delivery trials Coventry

Date: 16 June 2021 at 13:59
To: TDA Inbox tda@skyfarer.co.uk



Thank you for your reply and I am happy to review the SOP.



National Police Air Service



Leicestershire Microlight Aircraft Club

From:
Subject: Response to ACP-2021-038 Skyfarer NHS Drone delivery trials Coventry
Date: 21 June 2021 at 11:56

Date: 21 June 2021 at 11:56 To: TDA@skyfarer.co.uk



I would like to register an objection to these trials and their associated temporary danger areas.

The proposed trials are to be carried out in an area that is very busy with GA traffic. Whilst travelling north / south through the Midlands, much GA traffic routes to the $West\ of\ Draycote\ Water\ to\ avoid\ Birmingham\ airspace$. The area is also very busy with traffic between the Draycote and Southam VRPs routing to join circuit at Coventry Airport.

I understand that the drones will be operating up to 900 feet AMSL, which is below most GA traffic. However, these are experimental aircraft and things do go wrong. I draw your attention to the Alouda Airspeeder incident at Goodwood in 2019, which was also a drone flight authorised by the CAA.

In your proposed tests, you say that there will be no detect and avoid (DAA) systems carried. I do not think that peyond visual line of sight trials should take place in such close proximity to an area of high GA activity without being suitably equipped with DAA.

Regards,

Leicestershire Microlight Aircraft Club

From: TDA Inbox tda@skyfarer.co.uk

Subject: Re: Response to ACP-2021-038 Skyfarer NHS Drone delivery trials Coventry

Date: 22 June 2021 at 08:12

To:

Œ

Thanks for your feedback. Certainly the Alauda accident was unacceptable, but I would just like to highlight that that not all UAS operators and operations are of the same standard, and Skyfarer place a priority on the the safety of their operations.



Midland Air Training Ltd.

From: Subject: Re: Stakeholder engagement ACP-2021-038 Date: 16 June 2021 at 13:58
To: TDA Inbox tda@skyfarer.co.uk As a flight Training Organisation operating out out of Coventry Airport I object strongly to the proposal that has been put forward regarding the operation of drone aircraft clost to an active and busy ATZ with the restrictions we have to comply with i.e. not above 1500' amsl due to Birmingham controlled airspace and the recommendation to remain at least 200' below that altitude to help avoid any airspace infringements. I regard the proposal as yet another restriction that will impact on the continuing operation and safety of GA aircraft both outbound and inbound to Midland Air Training Ltd. From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038 Date: 18 June 2021 at 13:24 To: Cc: Thanks for your email and for raising your concerns. I'd like to propose an online meeting so that we can discuss this further; to better understand specific problem areas and explore ways to address them. Would you be available for a From: Subject: Re Stakeholder engagement ACP-2021-038

Date: 21 June 2021 at 13 31 DA nbox tda@sky arer co uk I suggest that you speak to Air Traffic Services at Coventry Airport.

Version 1 Dated 02/07/2021



The Honourable Company of Air Pilots

From: g Subject: Re: Stakeholder engagement ACP-2021-038 Date: 17 June 2021 at 15:53

To: TDA Inbox tda@skyfarer.co.uk



Many thanks for the reminder.

We note that as all your activity is in Class G airspace, the major impact will be to General Aviation pilots. Accordingly, your intent to sub-divide into three TDA "to ensure the volume of airspace is kept as small as possible..." is welcomed. However:

- TDA3 western end appears larger than is essential for the operation, presumably to 'cut the corner' when connecting to either TDA1 or TDA2.
- In the interests of minimum impact on other users, we believe there should be a reduction in the size of TDA3, as shown in the attached image (which should still account for your air vehicle's turning performance and the need to avoid overflying populated areas).
- We would also seek assurance that when the NOTAM is active, the ANSP providing a DAAIS will have enough controller capacity to handle requests for information at a rate that reflects current GA activity levels in the area.

Director of Aviation Affairs
The Honourable Company of Air Pilots
Cobham House
9 Warwick Court
Gray's Inn
LONDON WC1R 5DJ
www.airpilots.org

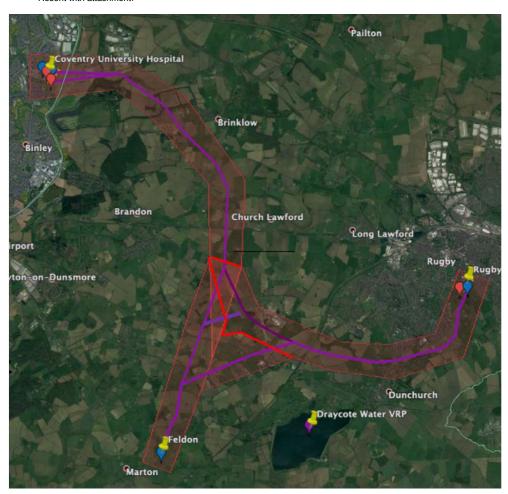


Subject: Re: Stakeholder engagement ACP-2021-038

Date: 17 June 2021 at 15:57

To: TDA lebert 1 C : 1 To: TDA Inbox tda@skyfarer.co.uk

Resent with attachment!



Director of Aviation Affairs The Honourable Company of Air Pilots Cobham House 9 Warwick Court Gray's Inn LONDON WC1R 5DJ www.airpilots.org

From: TDA Inbox tda@skyfarer.co.uk

Subject: Re: Stakeholder engagement ACP-2021-038
Date: 18 June 2021 at 13:33

To:

Many thanks for the constructive feedback. Much appreciated.



BHPA

Subject: Re: Stakeholder engagement ACP-2021-038

Date: 26 May 2021 at 17 56 To: TDA tda@skyfarer.co.uk



Good afternoon

There are at least three BHPA operations that may potentially be affected by your proposed ACP. Paragliders and hang gliders routinely fly between the surface and up to cloud base anywhere in the open FIR and do not carry transponders. A collision with a drone could be catastrophic for the hang glider / paraglider pilot as these are open cockpit slow moving aircraft with little or no protection in the way of canopies.

I have copied in the BHPA's Airspace Liaison Officer Andy Mcdonald.

Kind regards

BHPA Technical Officer

Tel:

Web: www.bhpa.co.uk

British Hang Gliding and Paragliding Association (BHPA)

8 Merus Court, Meridian Business Park, Leicester, LE19 1RJ, England Tel: 0116 289 4316

Fax: 0116 281 4949

British Hang Gliding and Paragliding Association Limited. A company limited by guarantee and registered in England no 2618166 Registered office: 340 Melton Road, Leicester, LE4 7SL

From: TDA Inbox tda@skvfarer.co.uk Subject: Re: Stakeholder engagement ACP-2021-038

Date: 27 May 2021 at 15:26

To:

Thanks for your email and for connecting us with

I couldn't agree more that a collision between drone and hang glider / paraglider has the potential to be a catastrophic scenario, this is why we are looking establish a Temporary Danger Area (TDA) in support of these trials (i.e. to ensure separation via airspace structure). We also recognise that TDAs have the potential to affect other airspace users activities, and this is why we have proposed an option that seeks to minimise the disruption to other airspace users by: a) being as small, laterally and vertically, as possible, b) being modular so as to only segregate the minimum area necessary for a specific route, c) limiting the activation period to as short a time as possible i.e. just one hour, and d) limiting the period over which the project is conducted to just 60 days (instead of the 90 days for which most TDA applications are usually made).

If you have any particular information regarding specific routes or operating times that you or your membership could point out as specific areas of concern, we would certainly welcome the information and seek to incorporate that into the final TDA design proposal where possible.





Subject: Re: Stakeholder engagement ACP-2021-038 Date: 27 May 2021 at 16 00 To: TDA Inbox tda@skyfarer.co.uk Cc:

Thanks for the update.

To date the amount of ACPs and TDA make large parts of the open FIR un-flyable if activated.

I would suggest the trial is completed my 1000 each day, which is plenty of time from first light, or fly the drone at night but I am not sure on you capability.

Most companies say 90 days but don't stipulate planned time windows, yes weather plays a part but if you can fly it's

I am happy to do two way emails for a time, then will submit concerns via the portal.



Subject: Re: Stakeholder engagement ACP-2021-038
Date: 27 May 2021 at 16:20

To:



Thanks for your email and the point you made regarding activation timing, we will certainly take that into consideration. I'd just highlight that there isn't a submission section on the ACP portal but whatever you send to this email address (tda@skyfarer.co.uk) will be reproduced in full in the engagement report that goes to the CAA at the end of the engagement period, and this report will be also published on the portal.

Please do get in touch anytime (before the 1st July please).

From: TDA Inbox tda@skyfarer.co.uk

Subject: Re: Stakeholder engagement ACP-2021-038
Date: 16 June 2021 at 11:28

To:



I just wanted to get in touch to ask if you were going to send me any details of the three BHPA operations that you mentioned in your email of 26 May. I'd be happy to communicate directly with them, especially if the ACP information has not gone out to them via the BHPA channels. Many thanks.



From:
Subject: Re: Stakeholder engagement ACP-2021-038
Date: 21 June 2021 at 15:47
To: TDA Inbox tda@skyfarer.co.uk

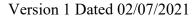


I will require their permission to provide their contact details, which I am seeking to obtain. I have bcc'd them into this email so that they may respond directly to you, however I can provide you with the clubs' website details, as below.

Midland Aerotow Club http://www.lmac.org.uk

Northampton HGC http://www.nhgc.co.uk

The third club, Mercian Hang Gliding Club does not have a website.





MOD

From:
Subject: MOD Response to ACP-2021-038
Date: 1 July 2021 at 10 04
To: TDA@skytarer.co.uk

I am responding to your ACP-2021-038 engagement document, on behalf of all MOD stakeholders that are identified in Annex A of the document. I can confirm that the MOD has no objection to the proposed TDA.

I wish you well in carrying out your NHS delivery trials.



Peter Hall Farm Airstrip

From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Skyfarer TDA proposal ACP 2021-038 Date: 2 July 2021 at 11:46 Cc:



Thanks for your call this morning. Great to speak with you and to clarify some important points of the proposal. As discussed, I've put together a few bullet points to summarise our conversation:

- The temporary danger area is limited to a 60 day period and there is absolutely no intention to establish a
- permanent danger area.
 The TDA would only be active for periods of 1 hour at at time. This would be via NOTAM with at least 24 hours notice.
- We would be very happy to work with you to draft a Letter of Agreement in order to define a communications strategy that will prioritise your movements over Skyfarer drone activities.
- Based on the above, you do not have any objection to the TDAs that have been proposed in the engagement document.

Could I ask you to please confirm I have summarised our conversation correctly via return email?





Individual responses:

Kevin Walton

From:
Subject: Coventry Airspace Request
Date: 22 May 2021 at 15:30
To: TDA@skyfarer.co.uk



Please stop requesting large chunks of airspace for use by small groups of individuals or businesses to the exclusion or detriment of most other users of that airspace.

We should be working on how to share all airspace fairly, not locking existing users out.



From: TDA Inbox tda@skyfarer.co.uk Subject: Re: Coventry Airspace Request Date: 27 May 2021 at 15 06

To:

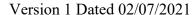


Thanks for your email. I just wanted to fill in a couple of bits of information for you that might help.

Given that TDA environments are the only safe way to conduct BVLOS flights for now, our proposed TDA option seeks to minimise the disruption to other airspace users by: a) being as small, laterally and vertically, as possible, b) being modular so as to only segregate the minimum area necessary for a specific route, c) limiting the activation period to as short a time as possible i.e. just one hour, and d) limiting the period over which the project is conducted to just 60 days (instead of the 90 days for which most TDA applications are usually made).

We will incorporate your comments into the engagement report which will be submitted to the CAA and made

By the way, I cant seem to find your details on our original stakeholder list and I'm just wondering if you are happy fro me to add you to it for future communications please?





Sean Walters

From

Subject: D: ACP-2021-038

Date: 21 May 2021 at 14 52

To: TDA@skyfarer.co.uk



Good Afternoon.

I wish to comment on the proposed trial of drones between Coventry and Rugby Hospitals and an area to the SW of Draycote Water

This area is subject to intense General Aviation Activity and is used by air traffic passing to the East of Birmingham travelling North/South.

Speaking as a pilot and aircraft owner I am concerned about the potential for danger and collision with these unmanned drones. I don't believe that they have any conspicuity capability and therefore would not be detected by aircraft with compatible avionics.

I fly North over Draycote Water frequently and must admit to be very concerned about this proposal.



From:

Subject: Re: D: ACP-2021-038 Date: 28 May 2021 at 13 50

To: TDA Inbox tda@skyfarer.co.uk



Thank you for your reply. Please add me to your stakeholder list thank you.

I am not based at Coventry Airport, I fly from a private strip in Warwickshire.

Best Regards

On 27 May 2021, at 15:03, TDA Inbox <tda@skyfarer.co.uk> wrote:

Thanks for your email. I just wanted to fill in a couple of bits of information for you that might help.

The drones will be operating CAA approved ABS-D so they will transmit GA usable electronic conspicuity, but more importantly, the objective of using the TDA is to ensure separation form manned aircraft in the first instance.

Given that TDA environments are the only safe way to conduct BVLOS flights for now, our proposed TDA option seeks to minimise the disruption to other airspace users by: a) being as small, laterally and vertically, as possible, b) being modular so as to only segregate the minimum area necessary for a specific route, c) limiting the activation period to as short a time as possible i.e. just one hour, and d) limiting the period over which the project is conducted to just 60 days (instead of the 90 days for which most TDA applications are usually made).

We will incorporate your comments into the engagement report which will be submitted to the CAA and made available publicly on the CAA ACP portal.

By the way, I cant seem to find your details on our original stakeholder list and I'm just wondering if you are happy fro me to add you to it for future communications please? May I ask please if you based at Coventry Airport?





H Cook



H

Dear Sir or Madam

I have recently become aware of this proposal and having read the few documents I am concerned and request you urgent clarification. I am an active microlight/GA pilot and a member of the BMAA Airspace Team so have a keen interest in airspace issues/changes.

I seek clarification of the following

- 1. Your Stakeholder Engagement documents states "7.2 Engagement Period Skyfarer proposes a standard engagement period of six weeks. The formal engagement period will commence on 20th May ending on 1stJuly 2021" whereas CAP1616 is specific that the standard is 12 weeks. Can you tell me whether the CAA has agreed to a truncated timescale please as at this busy time of GA for GA pilots and in busy GA airspace we would press strongly for the maximum time for engagement.
- 2. What, if any, liaison has been conducted with other NHS Logistics trails, and especially what data sharing has occurred?
- 3. The Assessment Meeting with CAA was due to take place only on 4 Jun 2021 and so far no Minutes have been published. Are they ready?
- 4. When is the engagement period now due to start?

I look forward to a swift response.

Kind regards



Cc:

From: TDA Inbox tda@skyfarer.co.uk Subject: Re: ACP-2021-038 Date: 16 June 2021 at 11:12



Thanks for getting in touch. Please see responses to your questions in line below. Please do let me know if you have any comments/ observations / concerns related to the proposed option for the TDAs. If there are ways that we can minimise the potential inconvenience to you or your members, please do let us know. We are keen to work with you to find the best options available.

Please note that our engagement period will close on 1st July. Many thanks for your interest.



Dear Sir or Madam

I have recently become aware of this proposal and having read the few documents I am concerned and request you urgent clarification. I am an active microlight/GA pilot and a member of the BMAA Airspace Team so have a keen interest in airspace issues/changes.

I seek clarification of the following

1. Your Stakeholder Engagement documents states "7.2 Engagement Period Skyfarer proposes a standard engagement period of six weeks. The formal engagement period will commence on 20th May ending on 1stJuly 2021" whereas CAP1616 is specific that the standard is 12 weeks. Can you tell me whether the CAA has agreed to a truncated timescale please as at this busy time of GA for GA pilots and in busy GA airspace we would press strongly for the maximum time for engagement.

Since this is a temporary change as opposed to an airspace trial or permanent change, and requires 'engagement' as opposed to 'consultation', we have adopted a 6 week period. We contacted the BMAA on the published NATMAC address at the start of the engagement period - on the 20th May.

2. What, if any, liaison has been conducted with other NHS Logistics trails, and especially what data sharing has occurred?

I'm afraid that I do not have any information for you on that topic. The ACP applicant is Skyfarer, the UAS operator, and not the NHS.

3. The Assessment Meeting with CAA was due to take place only on 4 Jun 2021 and so far no Minutes have been published. Are they ready?

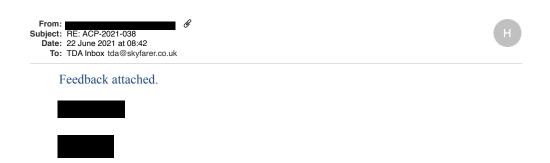
The draft minutes are with the CAA for review and will be published when that is finalised, the meeting presentation is published on the CAA Airspace Change Portal

4. When is the engagement period now due to start?

As per the original email, the engagement period commenced on 20 May and is scheduled to close on 1st July

I look forward to a swift response.







ACP-2021-038 NHS COVENTRY - FEEDBACK

Ref Docs:

- 1. Statement of Need ('SoN')
- 2. Stakeholder Engagement Document ('SED')
- 3. CAP1616 Airspace Change ('CAP')
- 4. CAA Policy for the Establishment of Permanent and Temporary Danger Areas ('Policy')
- 5. E-mail Sponsor to H T Cook dated 10 Jun 21

1. SUMMARY

This is yet another NHS Logistics:RPAS trial which repeats the aim of so many others, some even involving Skyfarer. It is disappointing that these multiple trials (ACP-2021-002 for Skyfarer, and several other similar ACPs) are not better coordinated for efficient and effective use of UK public money and airspace. Surely not every NHS Trust needs to conduct Logistics:RPAS trials?

It would be much more effective if NHS Trusts and RPAS operators collaborated, to share one trial and the results. The operators might, then, be able to devote time and money to a robust DAA system for RPAS to operate safely in unsegregated airspace, where they would be welcomed by GA pilots like me.

There are deficiencies in this proposal detailed in the following paras which preclude my support for it. More importantly, until there is much better coordination of trials for NHS Logistics using RPAS I am entirely opposed to this proposal.

2. OPERATIONAL FEDBACK

2.1 Justification/Statement of Need

Para 97 of the CAP requires "The Statement of Need must set out clearly the identified need..." and this is mirrored in the 'title' to Section 5 of the SoN, the sponsor is to provide information "clearly explaining what issue or opportunity this proposal is seeking to address".

CAP para 98 however requires "The change sponsor must be explicit in what issue or opportunity it is seeking to address and what outcome it wishes to achieve without specifying solutions.." Note, 'issue or opportunity' singular.

Yet in none of the documents supplied and/or published is any issue clearly identified, and the closest statement seems to be:

"The potential benefits of conducting medical deliveries by drone include reductions in transport times, road congestion and CO2 emissions" (SoN), as all are given? If reducing CO2 then an electric vehicle would suffice.



"The project aims to progress the operational capability of drone technology into a logistical use case specifically for medical delivery in association with the NHS" (SoN), a somewhat less-than-specific proposal.

Overall, the issue or opportunity is not clearly and specifically stated and unless it is clearly stated it is difficult to see:

"whether an airspace change is a relevant option to consider" (CAP table on page 31),

Without clarity neither stakeholders, the CAA nor the change sponsor can ensure that "proposals are received by an informed, engaged audience" (CAP page 175).

It is equally difficult to see how - without a clear aim or issue to address - a trial or a TDA can be properly designed and carried out.

2.2 Airspace

2.2.1 TDA Dimensions

2.2.1a Size of Airspace vs Aim. "Skyfarer's proposed option is for three different TDAs in order to ensure the volume of airspace requested is kept as small as possible in order to allow for the intended operations whist minimising the effect on other airspace users" (SoN) but when did 3 x TDAs keep volume as 'small as possible' and 'minimise effect on other airspace users'? The area and volume of airspace proposed is disproportionately large for such an ill-defined aim.

2.2.1b <u>TDA Upper Limit</u>. The chosen TDA top of 900ft amsl was presumably chosen to be 500ft above average ground height amsl. However, much of the ground is below 400ft amsl and GA a/c could legally fly at 900ft amsl to transit below cloud.

The proposal also assumes the whole area is not only devoid of small/farm/private strips but is also NOT used by airfields/flying schools as their 'normal' operating/training area for Practice Forced Landings and such. Much wider stakeholder engagement is essential and during the busy Summer 'flying season' that requires a much longer time period than 6 weeks.

2.2.2 Creation of Choke Points.

The upper TDA limit of 900ft amsl and "A small section of the western portion of TDA 2 is overlayed by Birmingham CTA (Class D) with a lower limit of 2000' AMSL" (SoN) creates a vertical choke point with increased risk which should be avoided.

Similarly, the TDAs create an additional choke point to E of Coventry airport, with attendant risk.



2.3 DAACS/DAAIS

The irregular shape/height of TDAs in congested area is a risk and will increase likelihood of infringements.

This increased risk posed by vertical and horizontal choke points means that "An Air Navigation Service Provider (ANSP) would provide a Danger Area Activity Information Service (DAAIS) on a VHF frequency." is essential not just 'nice to have'. As such it needs agreement and confirmation before engagement, not afterwards. Otherwise the Proposal fails to ensure that "proposals are received by an informed, engaged audience" (CAP page 175).

3. CONSULTATION FEEDBACK

3.1 Engagement vs Consultation

At their e-mail the sponsor states "Since this is a temporary change as opposed to an airspace trial or permanent change, and requires 'engagement' as opposed to 'consultation', we have adopted a 6 week period."

This demonstrates a clear lack of understanding of the process since 'Engagement' includes consultation – CAP1616 page 175.

3.2 **Documents**

3.2.1 <u>Document NOT Published for Consultation</u>

Regarding the engagement/consultation materials CAP Para 73 states "Thus, in particular, interested parties are able to see, and be consulted on where appropriate:progress of a proposal through defined incremental 'gateways'"...and

"consultation material and any supporting documentation in an accessible format adhering to best practice consultation principles"

While at Page 149 'Assessment Meeting' para a 7 "The change sponsor will produce minutes of the assessment meeting and publish these on the online portal as soon as they are agreed with the CAA (no later than two weeks after the meeting)."

The Assessment Meeting Minutes required by the CAP (page 149 para A7 of CAP1616) had not been published as of 8am Tue 22 Jun 21. Therefore engagement does not meet the requirement that "proposals are received by an informed, engaged audience" since without access to the Minutes (meeting 4 Jun 21) stakeholders cannot be 'informed' and 'engaged'. The GA community cannot, therefore, "effectively feed-in their views"

Consideration of the ACP would be difficult enough in the short timescale and at the height of the 'flying season'. However, the process becomes impossible if, as in this case, not all the documents required for engagement are available on the ACP Portal. Para 71 of CAP requires that all required documents in relation to a proposal are published, including "documents from and notes of meetings" and para 59 "the change sponsor remains solely responsible for complying with the process".



I just don't see how the consultation period can start without all docs having been published – we cannot make 'informed responses' as required by Govt consultation principles.

Consultation Principles. Consultation is supposed to be conducted in accordance with the UK Government's consultation principles (CAP page 181). These require:

Provision of "sufficient reason for any proposal to permit intelligent consideration",

Permit "informed responses" and

"allow adequate time for consideration and response"

Without access to the required documents none of these requirements can be met. As the CAP states on page 182:

"Materials must provide respondents with enough information to ensure that they understand the issues and the potential impact of the proposals on them, and can give informed responses – failure here will lead to ineffective consultation, which will be of little use to the change sponsor and will be unacceptable to the CAA"

3.3 Engagement Timescale

The SoN states "Skyfarer proposes a standard engagement period of six weeks" but at para 170 of CAP "The accepted standard is that consultations should last for 12 weeks". CAA policy does permit a reduced engagement period for TDAs "the engagement may be scaled to a maximum of 6 weeks" (Policy para A3.1) but surely that is not only a decision of the CAA not the sponsor.

Moreover, iaw the CAP should not the reduced period only follow "where the change sponsor provides a strong rationale"? No rationale is given. Indeed, the sponsor claims authority itself to truncate the engagement "we have adopted a 6 week period" (E-mail). At the start of busy GA 'flying season' and for a complex proposal/TDA in a busy part of UK GA airspace there is every reason NOT to curtail the standard consultation time period.

In response to my question about the Minutes the sponsor replied "The draft minutes are with the CAA for review and will be published when that is finalised, the meeting presentation is published on the CAA Airspace Change Portal" (E-mail). Yet Page 149 'Assessment Meeting' para a7 "The change sponsor will produce minutes of the assessment meeting and publish these on the online portal as soon as they are agreed with the CAA (no later than two weeks after the meeting)."

It is unacceptable that a key document is not available for review more than 4 weeks into the engagement period.



4. FEEDBACK SUMMARY

This proposal is yet another NHS Logistics trial using RPAS. It is most disappointing that yet another volume of segregated airspace is required when with simple coordination the NHS and RPAS suppliers could use one such piece of airspace for results that would apply to and benefit the whole of the NHS and UK. I and, I'm sure, all GA pilots and GA organisations would support such an approach. As it stands, the myriad of ACPs and trials cannot be justified and I object to this one.

Even if this trial were the only one to be proposed it has serious flaws in its location and its engagement. The location is in an area of busy GA activity, close to a number of airports and controlled airspace yet the design generates further choke points and, thus, increases the risk of infringement. This is compounded by the shape and vertical extent which makes it most complex further adding to the increased infringement risk.

To consider a complex TDA such as this takes time but the sponsor seems willing to truncate the engagement timescale and the information being considered by not publishing a relevant document. Meaningful engagement is impossible until all relevant documents are published and the engagement period should not start until that has happened.

The truncated engagement period and the lack of a key document would, of themselves, cause me great concern. In this case this concern is greatly overshadowed by the complex shape/size of this proposed TDA, the increased infringement risk it poses and the lack of agreed ATS provision to mitigate that risk. I object to this proposal most strongly.

H Cook GA Pilot 22 Jun 21







Rowan Smith

From: Subject: NHS Coventry Drone Trials - ID: ACP-2021-038

Date: 28 June 2021 at 14:23

To: TDA@skyfarer.co.uk

Dear Sir

I wish to make comment in association with the ongoing consultation on this temporary airspace proposal. I write as a pilot of 30 years experience, active in the Coventry area.

- 1. I believe the choice of Marton as a staging ground is unwise. The use of this location means that all aircraft using the standard joining procedure for Coventry of 1200ft above Draycote Water will need to cross the drone path / airspace with a margin of 300ft. If the staging post location were north of the "route" between Rugby and Coventry hospitals, this situation would be avoided.
- 2. While most pilots should be able to reliably avoid the proposed corridor, Coventry is a training airport. Many flights are undertaken by training or novice pilots for whom this corridor poses not just a challenge, but also a risk both to themselves and the drones. Many will not even be qualified pilots. Some will be making their <u>first ever solo approach</u> to Coventry Airport via the Draycote Water VRP. These novice pilots have it drilled into them that they must not be higher than 1200ft in order to give 300ft margin to Birmingham airspace above. Now they have to be drilled that they must be at 1200ft to avoid restricted airspace 300ft below at 900ft. The proposal sets these poor pilots a major challenge - with a likelihood that some percentage of failure is inevitable at one of the limits.
- 3. Even the activation plan of many and various periods from an hour upwards on any day of the week including weekends - poses an unnecessary risk. Information to find, verify and then observe
- 4. While the proposed restricted airspace is nicely defined with relatively straight lines on a map, the majority of pilots flying in the area will not be using electronic maps as they are VFR training. They will be using land features. The proposed leg to Marston has no identifiable land features from which a VFR pilot can locate the airspace when navigating. The use of the disused railway or local roads as approximate definitions of the restricted space would at least make the space identifiable to pilots old and new.
- 5. Placing this corridor between Draycote Water and the Coventry circuit base and downwind legs in the full knowledge that novice pilots / pilots in training are required to fly that corridor no higher than 1200ft in order to avoid controlled Birmingham airspace above is simply prejudicing the safe operation of aircraft in the locality and creating a
- 6. For the CAA, I would ask them to consider all the effort they are putting into safe flight in the vicinity of controlled airspace. They have spent £'000s on publicity, plans and dissemination of guidance to pilots on how they should conduct safe flight if they have to traverse the altitude restricted Low Level Corridor at Manchester - and yet here we are voluntarily setting up a bit of airspace for an experiment that will bring exactly the same challenges to novice pilots in the area
- 7. I strongly suggest that an alternative staging post to Marston is found so that the restricted airspace is not located between Draycote Water and Coventry Airport.

From: TDA Inbox tda@skyfarer.co.uk

Subject: Re: NHS Coventry Drone Trials - ID: ACP-2021-038

Date: 29 June 2021 at 12:37 To:

Thanks for taking the time to send your comments on this ACP. We will certainly take a close look at your suggestions and will incorporate your response into our engagement summary. For our records, could I ask please how you came to our ACP? I can't seem to find you on our initial Stakeholder list. Certainly, I'll be happy to include you on the Stakeholder list for further communications