

ACP-2021-057 Skyfarer BVLOS Demonstrations, Coventry

TDA extension request, prepared by Skyfarer 10/01/2023

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1. Introduction

Skyfarer Ltd are the sponsors of this proposal for a four-week extension to the availability period of the TDA established as part of ACP 2021-057, commencing 9 March and ending on 6 April 2023. Skyfarer are requesting the extension due to unforeseen issues outside our control which have so far limited the scope of the UAS demonstration activities. Additional stakeholder engagement was conducted by Skyfarer as part of this application; this document describes what was undertaken and the results of that engagement.

2. Stakeholder Engagement

2.1 Engagement period and material

An engagement period of two weeks was selected (with an additional period of one week to make allowance for the Christmas holidays) i.e. 3 weeks in total, which commenced on 19 December 2022 and ended on 9 January 2023.

Stakeholders received the following email.

Hello,

I'm getting in touch with you as part of Skyfarer's stakeholder engagement regarding ACP-2021-057 (and the subsequently issued AIC Y090/2022).

In accordance with CAP 1616, Skyfarer are requesting a TDA extension due to unforeseen issues outside our control which have so far limited the scope of the UAS demonstration activities. The reason being that the delivery of the new model of drone (the Phoenix Wings Orca) has been delayed by the manufacturer (Phoenix Wings in Germany) and as such Skyfarer have only been able to complete a limited number of flights with the smaller Phoenix Wings One UAS. Demonstrations involving the 'Orca' will not be possible before the current TDA expiry date (12 January 2023). Therefore, Skyfarer are requesting a 28-day extension to the TDA period. All details of the TDA, and details agreed with key stakeholders, will remain the same i.e. the only change is date range for potential activations. This extension request is a 'one-off' and no further extensions will be sought.

The requested TDA extension would commence on 9 March, ending on 6 April 2023.

As part of the initial stakeholder engagement, it was estimated that 45 TDA activations would occur. To date there have been 20 activations, with a further 8 scheduled prior to 12 January (i.e. a total of 28 which is 17 activations fewer than the original plans). There would be a maximum of 8 activations during the extension period in order to allow for demonstration flights involving the Orca to take place.

A stakeholder engagement period of 14 days has been adopted for this extension request, plus 1 additional week to make an allowance for the Christmas period. If you have any questions or comments with regard to the safety and operational viability of the extension, please do respond via return email prior to 9 January 2023.

Many thanks and I hope that you have a nice Christmas and New Year.

2.2 List of Stakeholders and responses

All stakeholders who had previously responded to the engagement related to ACP 2021-057 and all stakeholders previously identified as 'key stakeholders' were contacted via email during the engagement process for the this proposed TDA availability extension.

Table 1 shows the stakeholders contacted as part of this engagement and a summary of their responses where one was received. Original emails are included in Appendix A.

Key Stakeholders	Summary of Response (where one was received)
Birmingham Airport Air Traffic Limited (BAATL)	No objection
Coventry Airport Limited (CAL)	
East Midlands Airport (EMA)	
Babcock Onshore (Babcock)	
Bristow UK Search & Rescue, Humberside (Bristow)	
HeliAir Ltd	
Just Plain Sense Ltd (JPS)	
National Police Air Service (NPAS)	
Defence Airspace and Air Traffic Management	No objection
(DAATM)	
Sloane Helicopters	No objection
Stakeholders who had responded previously	
Almat	
ARPAS UK	
Mr H. Cook	
British Helicopter Association	
NATS	
Midland Air Training	
Mr R. Hughes	
Rothwell Airfield	
The Gliding Centre (Husbands Bosworth Airfield)	
Mr R. Wendes	General objection to the use of TDAs

Table 1: Stakeholders and responses



Appendix A: Evidence of engagement with stakeholders

A.A.1: Sloane Helicopters



A.A.2: DAATM



A.A.3: BAATL





A.A.4: Mr R. Wendes

Email received 21 December 2022

☆ rob

RE: Stakeholder engagement re ACP 2021-057 To: TDA Inbox E Inbox - tda@skyfarer.co.uk 21 December 2022 at 18:10



Abiding cottage

Station road

Dormansland

Surrey

RH76NL OBJECTI9N

Dear Sir

In do not object to the integration of drones/RPAS into UK airspace, but I do object to the creation of airspace that segregates such traffic, on the following grounds.

Point 1 Airspace does not guarantee safety

Discussion :-

Statistics published by the Airspace Safety Initiative

https://airspacesafety.com/statistics/;

demonstrate that the creation of more and more airspace increases the level of infringements for all classes of licence. Safety has not been enhanced by adding to the already complicated airspace structures across the. UK. The statistics support the view that airspace is an outdated concept.

The sponsor has not demonstrated that the proposed airspace will improve safety. Just saying that it will be safe is not satisfactory.

NATS are working towards an upper airspace largely free of restrictions.

https://www.nats.aero/news/the-biggest-airspace-change-ever-implemented-in-the-uk/

What argument can possibly support more airspace in the lower airspace domain.

CAA officers have allowed the application to progress without discharging their duty under criminal law. They have not examined safety and have not recorded the safety argument for this airspace,

Point 2 air transport Act 2000 section 70

https://www.legislation.gov.uk/ukpga/2000/38/section/70

(1)The CAA must exercise its air navigation functions so as to maintain a high standard of safety in the provision of air traffic services; aunnd that duty is to have priority over the application of subsections (2) and (3).

(a)to secure the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic;

(b)to satisfy the requirements of operators and owners of all classes of aircraft

(4)The CAA must exercise its air navigation functions so as to impose on providers of air traffic services the minimum restrictions which are consistent with the exercise of those functions.



Discussion :-

It is a criminal offence for the CAA or its employees to fail in their duty of care for safety. The Act provides no defence neither does it provide latitude as to when the CAA and its employees may exercise this duty. In a gateway assessment for Stage 1 or this application, the CAA's officers have not examined the safety criteria on which this application is founded. The officers have assessed that airspace is "an appropriate option" without publishing an investigation into safety criteria. It is they who are responsible under Criminal law for ensuring that the CAA's obligations under the laware met,

It is evident that CAA officers have committed a criminal act by failing to examine the safety for this airspace. The Act very clearly makes safety solely a CAA responsibility and gives no means of avoiding it.

Point 3 safety case - no safety case has been presented

From CAP1818

a. No part of a current functional system may be changed until a valid safety case exists that shows that the safety risk will be acceptable according to valid risk criteria for the change.

b. A safety case is: "a structured argument, supported by a body of evidence that provides a compelling, comprehensible and valid case that a [functional] system is safe for a given application in a given operating environment".

The purpose of the impact analysis is to identify all POSSs whose existing assurance (arguments and evidence that their specifications are trustworthy) will be invalidated by the change, and hence establish the Scope of the change (see below).

The purpose of the safety case is to convince the Service Provider that the proposed change will be safe and to communicate the reasons for that belief to an interested stakeholder e.g. directors and senior management, regulator, judicial review or court.

Discussion:-

Under the Transport Act, as described above, the CAA and is employees commit a criminal act if they fail to treat safety as a priority. There's is no defence. Despite this, CAA officers have allowed this application to continue without insisting on the creation of a safety case at the outset. Without a safety case the CAA officers have failed to establish on what basis airspace is a viable option. Instead they have treated safety as an afterthought. CAA officers have committed a criminal act by failing to insist on a safety case for this airspace from the outset. The Act very clearly makes safety a CAA responsibility and gives no means of avoiding or deciding when it should take place.

Point 3 airspace modernisation

CAP1711 airspace modernisation. There are many references to integration rather than segregation.

For example

"Airspace modernisation is also expected to improve access to airspace for General Aviation, by enabling greater integration (rather than segregation) of different airspace user groups. The same is true for new airspace users such as drones and spacecraft."

Discussion:-

CAA officers have failed at their stage 1 review to identify airspace modernisation as a constraint against which tthe sponsor's application would be judged. Airspace modernisation must be a fundamental design criterion, yet this isn't mentioned.

Segregation is fundamental the opposite strategy to CAP1711.



Point 4 Aircraft Certification

In the following text IFR flying is used as a broad metaphor for BVLOS.

My conventional world classifies aircraft as either.

- 1. Those types that will never be suitable for flight in IFR. (The 'flying flea' is an example)
- 2. Those types which can be flown IFR but are not suitably equipped.
- 3. Those types which can be flown IFR and are suitably equipped.

The pilot must be suitably rated.

If I, as a qualified IFR pilot, was to approach the CAA and ask to fly a type 1 aircraft IFR, I would , quite rightly be given short shrift.

If I as a qualified IFR pilot was to approach the CAA and ask to fly a type 2 aircraft IFR, I'd be told to go away and equip it and come back when it's certified.

I don't need to ask anyone whether I can jump in a type 3 aircraft and fly off into wild blue yonder in IMC.

There would be not a cats chance in hades of getting controlled airspace to fly a type 1 or type 2 aircraft IFR.

Discussion:-

The rules for flying different types of aircraft are clear. If iwere to fly a new aircraft type, a test programme would be agreed and the aircraft would be allowed to fly in an appropriate airspace under supervision. The aircraft may then receive a conditional certificate of airworthiness allowing flight under continued supervision or specific conditions.

At some point such restrictions may be removed. This established, safe process removes the need for restrictions as it progressively integrates new aircraft into existing airspace without segregation.

The debate regarding the safe integration of a new aircraft type without the constraint of airspace has not been made a constraint in their stage 1 review, nor has it been debated. It is the CAA and its employees who, under criminal law, are responsible for initiating the debate over safety, not the sponsor. The CAA are silent which constitutes a criminal act.

Point 5 Flight safety

Exercise 18 of the PPL syllabus includes an exercise in flying in poor weather at low level. A pilot who, for whatever reason, finds themselves over the sea VFR at 500ft, obeying rule 5, being clear of persons, property and vessels is legal but has no protection from controlled airspace. The aircraft can be flown legally at 500ft, and possibly below. There is no obligation to carry either a Radio or Transponder, and at 500 ft VHF line of sight is not viable

The establishment of a controlled airspace across a significant portion of airspace down to ground level presents a safety hazard to all airmen. An airman approaching such a barrier in unexpected marginal conditions will be flying under pressure , may not be able to turn back and has one safe route removed.

A RPAS that is either a certified BVLOS or operating under a certificate to fly would not require controlled airspace and the safety of other air users would not be compromised.

Discussion:

Safety of all airspace users is a priority. A RPAS is remotely controlled, and whereas its size can cause a great of damage, its operation doesn't threaten its own crew! A RPAS can threaten the lives of crew of another aircraft, not only through collision but also by denying other craft free movement through airspace in accordance with the Air Transport Act 2000 section 70. By denying safe transit through airspace CAA officers commit a criminal act by obstructing the free flow of traffic in an unsafe environment.

Objection

I object to this ACP and the conduct by which it is undertaken on the grounds described above.

Ensure that this response is published in the CAA's airspace change portal, verbatim. In the event that this submission is not published in the ACP, the sponsor may have committed a criminal act.

Rob Wendes

Email response sent 29 December 2022

TDA Re: Stakeholder engagement re ACP 2021-057 🗅 Sent - tda@skyfarer.co.uk 🛛 29 December 2022 at 16:41

Dear Mr Wendes,

To: rob

Thank you for your email. We will include your objection in our submission to the CAA.

Email received 3 January 2023

rob

Re: Stakeholder engagement re ACP 2021-057 To: TDA Inbox 🗈 Inbox - tda@skyfarer.co.uk 🛛 3 January 2023 at 09:49

🖹 Sent - tda@skyfarer.co.uk 4 January 2023 at 13:14

🗈 Inbox - tda@skyfarer.co.uk 🛛 4 January 2023 at 15:07



G

R

Details

When will you be entering into a dialogue in accordance with CAP1616? Please ensure this email is included in the Airspace Change Portal. We can use to measure your response.

In CAP1616 Appendix C the CAA says

1. Are there any seldom heard groups impacted?

2. engagement will be required throughout the process by sponsors.

3.The CAA's own stakeholder engagement, undertaken during the stages of the process that it leads

4. The core principle underpinning the CAA's assessment of whether a change sponsor is engaging stakeholders effectively will be evidence that the change sponsor is engaging in a two-way conversation.

5. How will they be engaged? What are their needs/requirements? Are there any seldom heard groups impacted? How will material be targeted for different groups and situations identified?

6. Throughout the process, the change sponsor owns the requirement for stakeholder engagement.

7. The change sponsor must be clear to stakeholders about how proposed airspace changes evolve through the stages of the process and how their feedback has informed these evolutions.

8. the CAA ... will seek evidence stakeholders are content that their views have been captured and taken into account by the change sponsor.

Regards Rob Wendes

Email response sent 4 January 2023

TDA

Re: Stakeholder engagement re ACP 2021-057 To: rob

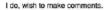
Dear Mr Wendes,

Happy New Year.

This TDA has already been approved by the CAA. The purpose of this engagement is specific to Skyfarer's application for a short extension to the availability period (please see original email dated 19 December 2022). Did you wish to make any comments specific to that?

Email received 4 January 2023

Re: Stakeholder engagement re ACP 2021-057



Just to be clear, you say that the CAA has approved the establishment of a TDA before going through the airspace change process.? This change is to now ro make it permenant? Have I missed something? This change talks about establishing a permenant airspace (even though the expectation is only until 2027).

Rob Wendes

Email response sent 4 January 2023

TDA Re: Stakeholder engagement re ACP 2021-057 E Sent - tda@skyfarer.co.uk 4 January 2023 at 15:10 Details



Dear Mr Wendes

No, I'm afraid none of your points are correct. If I could respectfully direct you back to the original email and ACP 2021-057, all the required information is given. Thank you.

