

**MINUTES OF ACP-2022-031 ASSESSMENT MEETING
HELD ONLINE ON 16th AUGUST 2022**

16th August 2022

To be distributed to all meeting attendees.

Present	Appointment	Representing
	CAA case officer/ Airspace Regulator (Technical)	CAA
	Technical inspector (RPAS Team)	CAA
	Airspace Regulator (Technical) 1	CAA
	Airspace Regulator (Technical) 2	CAA
	Airspace Regulator - Consultation and Engagement	CAA
	Airspace Regulator (Environment)	CAA
	Head of Aviation	Apian (change sponsor)
	Co-founder & medical director	Apian (change sponsor)
	Programme Director	Apian (change sponsor)
	Consultant & advisor 1 (on behalf of Apian)	Cyclops Air
	Consultant & advisor 2 (on behalf of Apian)	Cyclops Air

CAA Assessment Meeting (Airspace Trial) Opening Statement

The CAA noted the following: Statement of Need; were received in advance of the Assessment Meeting and confirmed that the documents must be published by the sponsor, together with minutes of the meeting, on the Airspace Change Portal . CAA explained the purpose of the meeting and confirmed that the meeting was an Assessment Meeting. The CAA reinforced that the sponsor was required to provide a broad description of their proposed approach to meeting the CAP 1616 requirements, but the CAA was not deciding whether the proposed approach met the detailed requirements of the CAA's process at this stage. The purpose of the Assessment Meeting (set out in detail in CAP 1616) was broadly:

- for the Sponsor to present and discuss their Statement of Need,
- to enable the CAA to consider whether the proposal concerned falls within the scope of the formal airspace change process.

Additionally, the sponsor was required to provide information on how it intended to proceed to fulfil the requirements of the airspace change process and to provide information on timescales. Lastly, the sponsor was required to provide information on how it intended to meet the engagement requirements of the airspace change process.

	ACTION
<p>Item 1 – Introduction</p> <p>All meeting attendees introduced themselves.</p> <p>The CAA case officer opened the meeting at 1502 and read the CAA Assessment Meeting Opening Statement (see above). The CAA has received and read the Statement of Need (SoN), and expects the presentation to be redacted and uploaded after this meeting.</p> <p>Apian’s co-founder and medical director introduced Apian as the ACP sponsor and outlined the project’s objectives - to measure health improvement as a result of using drones.</p> <p>Apian’s co-founder and medical director explained that Apian have developed the use case with Northumbria NHS. Apian’s Programme Director introduced the engagement with selected aviation stakeholders thus far and the Regional Airspace Users Working Group. Apian’s Head of Aviation introduced the existing relationship between Apian and the CAA innovation team and the previous engagement with DAATM and Newcastle ATC regarding this project.</p>	<p>Consultant & advisor 1 to redact and upload presentation to ACP portal.</p>
<p>Item 2 – Statement of Need (discussion and review)</p> <p>Consultant and advisor 1 summarised the SoN: Apian in conjunction with the Northumbria Healthcare NHS Foundation Trust and utilising the government-funded Small Business Research Initiative (SBRI), is looking to conduct feasibility project using uncrewed air vehicles (UAVs) between hospitals in Northumbria for the distribution of medical payloads such as chemotherapy drugs and urgent medical supplies and samples. This is with the view of setting up a broader network in the longer term.</p> <p>Apian is proposing an evaluation of the potential advantages of transporting such time-sensitive small and medium-weight healthcare items by use of Uncrewed Aircraft Systems Beyond Visual Line of Sight (BVLOS) delivery operations during autumn of 2022*. Consultant and advisor 1 requested this date to be changed to match the new timelines of engagement to Q1 2023.</p> <p>In order to do this in the area selected for this activity, current regulation requires the activity to be contained within segregated airspace. There is a route preference up the coast but also inland e.g. Alnwick. Routes are within the blanket area on slide 4.</p> <p>Consultant and advisor 1 stated that Apian is applying for segregated airspace to fit within the current policy.</p> <p>The CAA case officer confirmed the SoN had been assessed and that there were no observations.</p>	
<p>Item 3 – Issues or opportunities arising from proposed change</p>	

<p>Consultant and advisor 1 summarised the issues and opportunities arising from the proposed change:</p> <p>Other ACP in region Offshore Renewable Energy ACP-2021-089 (paused), any others?</p> <ul style="list-style-type: none"> ● Advisor 1 stated that Apian are aware of ACP-2021-089 and believe that it is paused and asked if the CAA were aware of others which may affect the Apian application. (Post meeting CAA has provided Apian with a list of operators to be included in stakeholder engagement.) ● No low-fly systems have been identified to the best of the Apian’s knowledge that conflict with the route (seeking feedback). <p>Electronic Conspicuity use of SSR and ADS-B (SSR for Newcastle Airport) EC CAP 1391.</p> <ul style="list-style-type: none"> ● Apian seeking advice on if we should use a unit that meets both of these requirements or individual. <p>CAA advised that the sponsor should monitor the progress of ACP-2022-024 which is trialling Electronic Conspicuity for RPAS operations.</p> <p>CAA Safety Buffer Policy wish to have a dispensation on the 3NM from the Controlled Airspace requirement.</p> <ul style="list-style-type: none"> ● Apian is aware of the constraints and has read the applicable documentation. ● Consultant and advisor 1 stated Wansbeck General Hospital is 200m laterally inside Newcastle Airport’s CTR, and that discussions have been started with Newcastle Airport with positive engagement to date with the understanding that if we don't encroach on their airspace then they are content with what we do. Apian and the selected operator will have to show a robust method of how this will not be encroached. ● Consultant and Advisor 2 asks if any ACPs are looking into this as well or are going close to a CTR, and whether there were other ACPs that have done this. <ul style="list-style-type: none"> ○ The CAA case officer stated the Safety Buffer Policy is regularly challenged and many other ACPs ask for dispensation from the buffer policy. This should not be seen as a hurdle so long as a good argument is put forward as to why this ACP should be exempt. ○ Technical Regulator 2 reminded Apian that if the TDA is required to enter, exit or transit controlled airspace, dispensation can be requested from the ANSP involved. They also advised that there are other ACPs with buffer policy exemption but these could not be disclosed because of confidentiality. <p>Operational Approval (OA) and ACP alignment. Need to ensure alignment of OA request, enabling it to be issued alongside the TDA process.</p> <ul style="list-style-type: none"> ● Apian is responsible for the ACP and selection of operators wanting to use airspace with appropriate OA. ● Technical Inspector advised that the Airspace and RPAS team confer over an application with details being highlighted from RPAS perspective to inform the Airspace team. This means operations aren't authorised unless the RPAS team knows the airspace is allocated. <p>Would like to use two drone operators to support the NHS requirements (payload), ensuring a deconfliction plan is agreed upon.</p> <ul style="list-style-type: none"> ● Apian’s Head of Aviation stated that we will seek to use two different operators as payload requirements will be different: one with a 2kg payload, one with a 7-10kg payload with operations planned at 1000ft above sea level. . 	<p>CAA case officer to provide feedback as to if there are any low fly systems which conflict with the route that have not been identified.</p> <p>Head of Aviation to share work on Safety Buffer Policy exemption request in advance of submission.</p>
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<ul style="list-style-type: none"> • The CAA case officer advised that Apian will need to decide what deconfliction plans would look like between operators, as well as the heights and flying routes upon selection of an operator with aviation stakeholders (especially Newcastle Airport) to ensure safety between operations. <p>Consideration whether a TMZ is more appropriate than a TDA.</p> <ul style="list-style-type: none"> • Apian believe a TDA would be the most appropriate airspace to apply for since it offers the safest way to provide segregation in accordance with regulation for UAS. • The CAA case officer advised that under current environmental and regulatory frameworks, a TDA would be the most appropriate way. <p>The CAA case officer raised whether Apian would like to apply for a Trial or TDA as there are nuances to how the process is different between these.</p> <ul style="list-style-type: none"> • Technical Regulator 2 advised Apian not to focus on output for the purpose of the process as we can apply for a TDA or a temporary trial TDA. Advised that Apian need to be able to narrow down what they are doing, if they want to conduct an airspace or business trial as there are differences between the two. • The CAA case officer asked the group if applying for a TDA is a more streamlined process than for a trial, with the understanding that a trial should be for a new and innovative concept, which they do not believe this to be. • After some discussion it was agreed that Apian did not intend to use a TDA to trial new airspace procedures and therefore an ACP for a standard TDA would be preferred. 	<p>Consultant & advisor 1 to make clearer on the map in slide 7 which airspace is for the current ACP before the slides are made public.</p>
<p>Item 4 - Options to exploit/address opportunities & issues identified</p> <p>Apian’s co-founder and medical director explained the further options to exploit/address issues and opportunities identified in the future [outside the scope of this ACP]:</p> <ul style="list-style-type: none"> • Plan for a wider network linking additional sites in the Northumbria and North Cumbria Areas at a later date. • Gain operating experience and airspace used to build knowledge and procedures for future overland routes. • Roadmap towards operating in central Newcastle (North Tyneside and NSEC) which are either in or under Newcastle Airport’s CTR. 	
<p>Item 5 – Process requirements</p> <p>Led by the CAA case officer</p> <p>i. TDA Policy Statement</p> <p>CAA identification of CAP 1616 requirements and stages required.</p> <ul style="list-style-type: none"> • On proceeding to a TDA ACP and after this assessment meeting, Apian is to upload documents from the presentation and minutes. • Advised Apian will then proceed to stage 4 (shortcut process) on the ACP portal. • Advised in the interim to plan for stakeholder engagement as the change sponsor will need to evidence stakeholder engagement and safety assessment. <p>ii. Stakeholder Engagement</p> <p>Details from Apian on parties already identified.</p> <p>Seeking confirmation of timescales required.</p> <p>Requirements for public awareness of overflight.</p> <ul style="list-style-type: none"> • List of stakeholders Apian are planning to engage with and timelines discussed. <p>CAA advised that duration of the engagement needs to be explained and justified</p>	

<p>in the stakeholder engagement material. Shorter (e.g. 6 week) engagement can increase the risk to the sponsor and, if necessary, engagement may need to be extended.</p> <ul style="list-style-type: none"> ● Apian were reminded not to just focus on aviation stakeholder engagement, and that Public Relations was likely to be of interest to local mainstream media. <p>iii. Safety Assessment</p> <p>Drone Service Provider will make application for an OA in the Specific Category</p> <ul style="list-style-type: none"> ● The CAA case officer advised the change sponsor to provide indication and justification of typical altitudes aircraft will be operating at due to likely interaction with GA traffic in the area ● Consultant & advisor 1 advised that CAP1915 will be used to guide the size of the TDA applied for and that Apian will be leading the ACP, with operators submitting individual OAs. ● The CAA case officer stated that they are assuming they will be expecting two OAs in that case. 	
<p>Item 6 – Provisional timescales*</p> <p>The timescales were presented by Apian as follows:</p> <ul style="list-style-type: none"> ● Stakeholder engagement - to be completed by 14th Oct 2022 ● Submission - 21st Oct 2022 ● Decision - 18th Nov 2022 ● Submission of AIC - 25th Nov 2022 ● AIC publication date - 12th Jan 2023 ● Implementation/Start ops date - 16th Jan 2023 <p>The CAA case officer states they think this timeline is not generous but is achievable.</p> <p><i>* The timeline agreed may become subject to change by the CAA. This is because the Secretary of State for Transport has directed the CAA to prioritise RNP Instrument Approach Procedures (IAPs) without an Approach Control proposals; this may impact Airspace Regulation resource and consequently timelines.</i></p>	
<p>Item 6 – Next steps</p> <p>The next steps are as follows:</p> <ul style="list-style-type: none"> ● Apian to provide meeting minutes by the end of this week. ● The CAA will review the meeting minutes. ● Apian will update the meeting minutes as necessary and upload a redacted version to the airspace change portal. ● Stakeholder engagement to be started formally on 31st August. <p>This was approved by the CAA case officer.</p>	
<p>Item 7 – Any other business</p> <p>The Airspace Regulator (Environment) highlighted the noise assessment requirements for temporary ACPs (as per CAP1616 Appendix B paras B81-85):</p> <ul style="list-style-type: none"> ● Noise impact below 7,000 ft. from Apian’s own operations as well as consequential impact from any rerouted/displaced air traffic must be assessed. ● There is no requirement to assess other environmental metrics (CO₂, local air quality, biodiversity, or tranquillity). ● Details on the exact route, flight frequency and typical operational altitudes must be provided. ● A qualitative description of the changes to traffic patterns of flights below 7,000 ft. e.g. any impact on Newcastle Airport’s operations must be provided. 	<p>Ask Airspace Regulator (Environment) to review and check this is correct.</p>

- LAmox noise levels at key locations e.g. schools, places of worship and hospitals must be evaluated and correlated with frequency/altitudes/times these locations will be overflowed.
- Operational diagrams illustrating routes, traffic patterns, key locations, etc. must be used to support the assessment.
- Noise data from the drone manufacturer may be used to determine impact.
- Noise levels from other common sources e.g. aircraft, car, typical household items may be included for comparison.
- Communities must be informed and provided with all details so they know the impact of noise before and after the airspace change is implemented.
- If Apian believes that a scaled noise assessment is more appropriate then the rationale and supporting evidence must be provided to the CAA in accordance with CAP 1616 Appendix B para B26 and CAA/Apian can agree on a noise assessment methodology going forward.

Consultant & advisor 1 informed the group that a level of routing had been completed to avoid anything that will be an overflight hazard, but that this was too detailed to share in today's meeting.

The CAA Consultation and Engagement Regulator sought clarification on who the ACP sponsor is. Consultant & advisor 1 and 2 confirmed that they are consultants assisting with ACP, and that Apian is the formal sponsor of the ACP.

The CAA Consultation and Engagement Regulator queried why the CAA logo was on the Apian's assessment meeting slides, and requested it to be removed in the interest of transparency. Apian agreed to do so before publication on the ACP portal.

The CAA Consultation and Engagement Regulator sought further information of the pre-engagement with relevant airspace users already conducted by Apian.

- Advised engagement with relevant national representative organisations from NATMAC lists, (CAA has provided the list of NATMAC members). Advised engagement material should be sent to all NATMAC members.
- Advised they would like to see how Apian has applied the methodology to identify stakeholders.
- Advised Apian they will need to provide a list of targeted stakeholders and provide justification on why, as well as engagement methods and associated timelines.
- Advised Apian to provide sufficient information to stakeholders to allow them to respond accordingly, of note the days and times of operation.
- Advised Apian that all engagement evidence should be maintained, and that the post-engagement report should summarise the results of engagement activity and how this has impacted the process or not (as well as an audit trail of this).
- Advised Apian if any stakeholder feedback criticising whether guidance has been followed correctly, or claims there has been a breach of process, that this is not for Apian to determine, but for the regulator to determine.
- Advised to establish a complaint monitoring plan, and how the Apian will collate and respond to these. Provided link to CAP1616 pg 95-96 for guidance.

The CAA Consultation and Engagement Regulator requested that the rationale for minimising formal stakeholder engagement to 6 weeks is explained. Apian stated they believed 6 weeks is an appropriate time due to prior engagement given this is for a TDA application. The CAA Consultation and Engagement Regulator queried what has changed due to prior engagement, stating 6 weeks appeared short due to the size of the TDA applied for.

The CAA Consultation and Engagement Regulator stated they were happy to discuss outside of the meeting..

The CAA case officer advised that the length of time to conduct stakeholder engagement was for Apian to decide and that even during the engagement period they can extend the engagement timeline if they felt it would be appropriate.

Consultant & advisor 1 to remove CAA logo from sponsor presentation

<p>Technical Regulator 2 offered to put Apian in contact with the CAA case officer's Flight Operations colleague ASAP to go through potential stakeholders Apian may have missed, for example: pipeline inspections; national rail; fishery patrols and electricity providers.</p> <p>The CAA Case Officer stated that 12 weeks for stakeholder engagement is a guideline, not a minimum, stemming from cabinet office guidelines. Apian Head of Aviation asked for clarity as it was their understanding that permanent airspace changes required a minimum of 12 weeks. The CAA Consultant and Engagement Regulator referred the sponsor to DA Policy statement para A3.1.2 which indicates that with CAA approval engagement may be scaled to 6 weeks..</p> <p>Technical Regulator 1 advised using DACS / DAAIS (Danger Area Crossing Service / Danger Area Activity Information Service) to reduce impact, and to look into this with NATS and/or Newcastle Airport.</p> <p>Technical Regulator 1 advised that the sponsor should clearly define the minimum requirements for a successful business trial as has been done in their previous ACP.</p> <p>Technical Regulator 1 encouraged Apian to be clear as to their role and responsibility in the ACP, given that stakeholders are familiar with the ACP Sponsor and Drone operator being the same organisation. They also advised that Apian needs to be clear about who the ACP sponsor is, who is conducting the operations and who will be activating the TDA and NOTAM. They also stated that stakeholders responded well to being involved e.g. sharing trial outcomes.</p> <p>Technical Regulator 2 advised that designing and sharing a flight schedule is useful to justify flight hours.</p> <p>The CAA Consultation and Engagement Regulator recommended that information used for stakeholder engagement should be uploaded to the Airspace Change Portal at the same time as being shared with stakeholders,</p> <p>The CAA case officer advised Apian to indicate daily times the TDA will be activated in the stakeholder engagement.</p> <p>The CAA case officer reminded Apian to be mindful of the Portsmouth/loW TDA request for the extension of TDA beyond 90 days, and to de-risk this to prevent this from happening again. They stated that they could see the use of two drone operators as mitigation. Advice was provided for Apian to explain in the stakeholder engagement how they will seek to prevent this reoccurring.</p> <p>The Technical Inspector advised that whatever procedures have been agreed between stakeholders and sponsor e.g. comms plan or Letter of Agreements (LoAs) needs to be reflected in the operator's procedures and Operating Safety Case documentation.</p> <p>Technical Regulator 2 advised temporary operating instructions (DACS/DAISS) to be included in any LoA. Advised that there may be a requirement for LoAs with the emergency services (NPAS and air ambulance). This will need to be seen in at least draft format by the CAA at the time of submission. If not signed, the CAA will not allow activation until they see signed LoAs.</p> <p>Close of call 1631.</p>	<p>Set up contact with Flt Ops colleague for stakeholder engagement (complete)</p>
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ACTIONS ARISING FROM ACP-2022-031ASSESSMENT MEETING

Subject	Name	Action	Deadline
Meeting minutes	CAA case officer	CAA to review minutes	26 Aug 2022
Meeting minutes	Consultant & advisor 1	Redact and upload presentation and minutes to ACP portal.	30 Aug 2022
Airspace advice	CAA case officer	CAA to provide feedback as to if there are any low fly systems which conflict with the route that has not been identified.	30 Aug 2022
Airspace advice	Head of Aviation	Apian to share work on Safety Buffer Policy exemption request in advance of submission .	30 Sept 2022
Meeting minutes	Consultant & advisor 1	Add a line to make clearer on the map on slide 7 which airspace is for the current ACP before the slides are made public.	17 Aug 2022
Environmental advice	Airspace regulator for environment	Ask the airspace regulator for environment to review and check minutes on noise assessment are correct.	31 Aug 2022
Meeting minutes	Consultant & advisor 1	Remove CAA logo from sponsor presentation	17 Aug 2022
Further contacts	Technical Regulator 2	Technical Regulator 2 to set up contact with Flt Ops Colleague for stakeholder engagement	17 Aug 2022

Apian
ACP Sponsor