

Summary report of Temporary Operating Instructions stakeholder engagement feedback ACP-2022-031

1. Aviation Stakeholder

- a. Apian identified Newcastle International Airport ('Newcastle Airport') as a key aviation stakeholder before the Airspace Change Proposal (ACP) was started due to a number of factors;
 - i. Newcastle Airport Control Zone (CTR) proximity to the Temporary Danger Area (TDA) and in particular Wansbeck hospital landing site, which would require safety buffer policy dispensation
 - ii. Newcastle Airport provides a Lower Airspace Radar Service (LARS) to the region

Apian has worked with Newcastle Airport to develop a LoA that covers operations within the safety buffer policy and supports our request for dispensation.

Newcastle Airport will also be contracted to communicate emergency services access requests via VHF with our drone operator (Skyports), should ground communication not be available.

- b. Apian identified a number of aviation stakeholders before the formal ACP stakeholder engagement that are likely to require access to the TDA quickly to conduct emergency operations.

These emergency services and military operators were contacted before the formal stakeholder engagement period to discuss the necessary mitigations to ensure safe deconfliction with their operations. Apian has been working with these emergency service operators to develop a Temporary Operating Instruction (TOI) which is mutually agreeable to all parties.

Additional engagement with these stakeholders are summarised below.

| Stakeholder | Engagement | Agreement in principle |
|--|---|------------------------|
| ANSP | | |
| Newcastle Airport | <p>Oct 2021</p> <ul style="list-style-type: none"> Initial meeting to introduce Apian and project ideas <p>April 2022</p> <ul style="list-style-type: none"> Apian update on routings and discussion around operating near Newcastle CTR NCL supportive to work collaboratively to find a solution NCL keen to support flights within CTR in future <p>June 2022</p> <ul style="list-style-type: none"> Apian update on routings, discussion reference landing site as closet to CTR <p>June 2022</p> <ul style="list-style-type: none"> In person catch up with ATC Manager NCL excited to support the project <p>July 2022</p> <ul style="list-style-type: none"> NCL attended demo day with NHS NCL meet with drone operator <p>Sept 2022</p> <ul style="list-style-type: none"> Apian update with ACP submission timelines NCL emailed as part of stakeholder engagement Collaborative working on mitigations for Safety buffer policy dispensation, with Apian and Operations team (Skyports) NCL agreement to conduct emergency response relay | Yes |
| Emergency aircservices and military stakeholders | | |
| Defence Airspace and Air Traffic | <p>Feb 2022</p> <ul style="list-style-type: none"> Initial meeting to introduce Apian and project ideas <p>June 2022</p> <ul style="list-style-type: none"> Apian brief on project, potential airspace requirements (TDA) and ask for feedback | Yes, LoA not required |

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|---|---|---|
| Management (DAATM) | <p>July 2022</p> <ul style="list-style-type: none"> DAATM informed that initial look they could perceive no issues with project or routings. But would require formal feedback to all their stakeholders. DAATM provided data on military flights in the area. <p>Sept 2022</p> <ul style="list-style-type: none"> DAATM emailed as part of stakeholder engagement <p>Oct 2022</p> <ul style="list-style-type: none"> DAATM provided feedback, coordination via email exchange. | |
| Great North Air Ambulance Service (GNAAS) | <p>Jan 2022</p> <ul style="list-style-type: none"> Initial meeting to introduce Apian and project ideas GNAAS supportive, would like to understand deconfliction and access to airspace if TDA used. <p>Sept 2022</p> <ul style="list-style-type: none"> GNASS update in employee Apian update on ACP and request to discuss deconfliction plan GNAAS emailed as part of stakeholder engagement GNAAS telephone discussion and email exchange to understand deconfliction | On-going positive discussions and LoA drafted |
| NPAS | <p>Jan 2022</p> <ul style="list-style-type: none"> Initial meeting to introduce Apian and project ideas NPAS would like to understand deconfliction and access to airspace if TDA used. <p>Sept/Oct 2022</p> <ul style="list-style-type: none"> Apian update on ACP and request to discuss deconfliction plan (email and telephone call) NPAS emailed as part of stakeholder engagement Telephone discussion regarding the TOI and time to vacate. | Yes, LoA not required |
| MCA | <p>Sept/Oct 2022</p> <ul style="list-style-type: none"> Initial meeting to introduce Apian and project with ACP timelines. Request to discuss deconfliction plan (email and online meeting) MCA emailed as part of the formal stakeholder engagement | Yes, LoA drafted |

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|---------|---|-----------------------|
| | <ul style="list-style-type: none"> • MCA telephone and email exchange ref TOI | |
| Bristow | <p>Sept/Oct 2022</p> <ul style="list-style-type: none"> • Bristow emailed as part of the formal stakeholder engagement • Bristow reached out to discuss access to TDA for emergency situations • Discussion of project and TOI • Agreed to coordinate through MCA | Yes, LoA not required |

2. Summary of feedback

a. Newcastle Airport

- Newcastle ATC expressed the need for procedures and mitigations for CTR infringement to be robust to support the Safety Buffer Policy dispensation.
- Newcastle ATC could see no impact on commercial operations by the TDA structure proposed.
- Newcastle ATC confirmed agreement to communicate emergency services access requests via VHF to our drone operator (Skyports) should ground communication not be available

b. Emergency services and military stakeholders

Individual discussions with each emergency provider took place where possible to understand each provider's specific operation and how our drone service could potentially impact them.

- All stakeholders expressed a need for a TOI to allow access to the TDA at short notice.
- All stakeholders wanted to ensure robust communication between the Operations team (Skyports) and themselves.
- The UAS has both ADS-B IN & OUT to further enhance air safety, which is a provision also valued by the emergency services. One stakeholder informed us that as a result of our conversations, they were taking positive action to fit their aircraft with ADS-B capability.
- Some stakeholders stated their concerns if they needed access to the TDA due to poor met conditions. Discussions of the VMC conditions needed for flight operations were carried out.
- DAAIS service will be provided by Scottish Information.
- Facilitation of a request to the Operations team (Skyports) for access to the TDA will be facilitated by Newcastle Airport ATC should time not be available to make contact via telephone.
- One stakeholder felt they did not need an LoA with us and were comfortable without a formal agreement. Apian continued to liaise and share TOI with them to ensure they could provide feedback on the procedure

3. Appendices

a. Newcastle

NCL feedback - ACP-2022-031



Feedback for NCL is as below:

NIAL are supportive of the principles that this ACP aims to achieve in terms of the movement of essential medications efficiently, sustainably and safely.

Providing the assurances around 3D Geofencing are realised and the operational details of the LoA worked out and signed off well in advance of the operation becoming active NIAL have no significant objection to this ACP. We have been provided assurances that the TDA will not interfere/impinge with the CTA/R or any established IFPs and this is appreciated. To achieve this we understand that APIAN will require alleviation from the prescribed 'buffer policy' (SARG - Policy Statement - SPECIAL USE AIRSPACE - SAFETY BUFFER POLICY FOR AIRSPACE DESIGN PURPOSES dated 22 August 2014). As previously stated – provided the assurances of Geofencing, statistical data on reliability and risk assessments are realised and shared which makes any residual risk ALARP or ALoS NIAL has no objection to this application to the policy.



b. Bristow

Automatic reply: TOI - ACP-2022-031

[REDACTED]

I hope you have had a great time on leave. I am sure you have lots of emails to get through (probably about 10 from me, apologies!)

As you may see, I have liaise with [REDACTED] regarding our TDA. Following our previous discussions, I will assume that this will be suitable to cover your operations. If you wish to provide feedback early next week for me to include (before COP Wednesday 9th) then I can do this. Currently, I will include your email in the CAA submission and note that an TOI will not be needed directly with yourselves as it will be covered by MCGA. If you would like to update or confirm this, that would be much appreciated.

[REDACTED]

Automatic reply: TOI - ACP-2022-031

[REDACTED]

7 November 2022 at 21:09

Sorry for the late response, I am just back on shift today. I have read through the detail, and I am happy with the proposal. In short, we would request that the JRCC gain permission for us to enter and would only enter once assured of safety. In most cases, we would have at least a 30 min transit to the area anyway.

Best regards,

[REDACTED]

[REDACTED]

Bristow Search and Rescue
Humberside International Airport
Caistor Road
Kirmington
Ulceby
DN39 6YG

c. DAATM

TOI - ACP-2022-031

28 October 2022 at 13:34

[REDACTED]

Having spoken to the impacted MOD stakeholders, I can report that the MOD are happy to agree in principle to the processes in place to gain access to the TDA in the event of a short-notice operational tasking in support of the possibilities mentioned in my previous feedback. We would only require to contact the ops room via telephone number or on frequency, akin to Emergency Service ac, and do not require an LoA. To that end I have the following suggestions for amendments to the TOI for your consideration (red text):

Those parties marked with †are regarded as Emergency Services or Military Operators on short notice operational taskings, but have stated to Apian that they do not require a Letter of Agreement to be in place and their Operations Room/Military Operators will make contact by telephone if penetration of the airspace is required.

Penetration of the TDA by Emergency Services Aircraft

*If an Emergency Services aircraft or Military Operators on short notice operational taskings requires access to the TDA airspace, the Operations Room of that organisation is to make telephone contact with the Skyports local area number: 0*****.*

*In the event that the Emergency Services Aircraft or Military Operator is already airborne and needs to enter an active TDA and no Operations Room contact is achieved, the aircraft should make all available attempts to contact the Skyports team via Newcastle Airport on radio frequency ***** or via a phone patch service stating location, required route and destination. For certain Military Operators a TDA sector and time window may be passed instead. Newcastle Airport will relay the messages or requests to Skyports. Upon receipt of any entry request by Emergency Services Aircraft or Military Operator, Skyports' UA shall vacate the airspace and land as soon as possible to give way to the Emergency Services Aircraft or Military Operator. Once the UA has landed, Skyports shall confirm with the Emergency Services Aircraft Operator, Military Operator or Newcastle ATC that the UA has vacated the airspace, via the medium or means of communication that Skyports have been contacted on. Skyports' operations shall not resume until the Emergency Services Aircraft Operator, Military Operator or Newcastle ATC has confirmed that the traffic has left the TDA.*

The UAS Pilot in Command (PiC) if aware of the presence of the aircraft is to ensure the UAS is kept well clear of any such routing as per the Operation Safety Case.

Because of the covert nature of some of the likely operators, it may not be possible to pass a location or route as stated on insecure RT, hence the addition of 'sector and time window'.

Once finalised, post CAA decision, we would appreciate a copy so that I can forward the relevant contact details to those elements of the MOD that may require it (it will not go pan-MOD but only to a few operators).

Hopefully that makes sense and would work for both of us? If not, please do not hesitate to get in touch. Have a great weekend.

d. MCA

[Redacted]

Dear [Redacted]

Thank you for inviting us to comment in response to your stakeholder engagement for ACP-2022-031.

Having reviewed the information and the draft TOI, HMCG is happy with the proposal.

Regards

[Redacted]

[Redacted]



HM Coastguard
Joint Rescue Coordination Centre,
Kites Croft Business Park, Fareham, PO14 4LW

e. NPAS

| | |
|--|--------------------------------|
| Name | [REDACTED] |
| Email | [REDACTED] |
| Representing | National Police Air Service |
| Address (including postcode if possible) | WYP HQ Wakefield WF1 3QP |
| <p>Feedback:</p> <p>This proposal would have little impact on Police Air Support operations due to the coastal routing and <400ft vertical dimensions. Providing that a NOTAM giving contact details for the operator is provided then we judge the risk of conflict to be ALARP.</p> | |

TOI - ACP-2022-031



Hi

The Apian ACP-2022-031 appears to offer a high level of mitigation against collision whilst having minimal impact on Police Operations, the DAAIS from Newcastle ATC is particularly useful.

Best regards



f. GNAAS

Great North Air Ambulance / Apian Stakeholder Engagement ACP-2022-031 Response.



Firstly, many thanks for the engagement on the proposed ACP so far both via email and telephone.

We fully support any venture or innovation that could potentially help the NHS but would like to ensure minimal short- and long-term impact on our operations in the North East.

I have attached a diagram of the proposed Temporary Danger Areas (TDA) just for clarity in our response to the information we have been given so far.

I understand you are not in a position to provide a draft Letter of Agreement (LoA) at this time. Prior to us giving our full support to the proposal we feel we would have to have a LoA in place that would outline the following;

1. Exactly how we could gain access to the TDA's in the event that we were tasked to a Helicopter Emergency Medical Services (HEMS) site within one.
2. A proven, robust means of gaining access to the TDA's. Probably direct communication from our AirDesk to the Drone operator and or direct VHF communications from our aircraft to the operator.
3. The maximum time it would take for us to access one of the TDA's from request.

Other points that may be worth considering and that we have discussed are;

1. Could the North/South transit parts of the TDA's be moved fully off shore?
2. Could the take-off landing sites be given a separate TDA for the over land segment like TDA B. That way the over land sectors would only be active for a few minutes. Then if the transits were fully off shore then deconfliction and TDA access would be easier for our AirDesk and the operator.



Once again, many thanks for the involvement so far.
Kind Regards,



Great North Air Ambulance
Multiflight Ltd

Great North Air Ambulance / Apian Stakeholder Engagement ACP-2022-031 Response.

Thank you for your email, and for the continued discussions regarding ACP-2022-031. We're pleased to see your enthusiasm and support for our trials whilst ensuring you also protect your own operations.

I have included your email below with some additional information. I think it would be beneficial for us to talk through the Temporary Operating Instructions with our UAS operators so that we can clarify any questions you may have.

Hi Louisa,

Firstly, many thanks for the engagement on the proposed ACP so far both via email and telephone.

We fully support any venture or innovation that could potentially help the NHS but would like to ensure minimal short- and long-term impact on our operations in the North East.

I have attached a diagram of the proposed Temporary Danger Areas (TDA) just for clarity in our response to the information we have been given so far.

I understand you are not in a position to provide a draft Letter of Agreement (LoA) at this time. Apologies if this has not been clear, I have shared our proposed Temporary Operating Instructions with you which contain information reference in 1 and 2.

Prior to us giving our full support to the proposal we feel we would have to have a LoA in place that would outline the following;

1. Exactly how we could gain access to the TDA's in the event that we were tasked to a Helicopter Emergency Medical Services (HEMS) site within one. This is included in the TOI.
2. A proven, robust means of gaining access to the TDA's. Probably direct communication from our AirDesk to the Drone operator and or direct VHF communications from our aircraft to the operator. This is included in the TOI.
3. The maximum time it would take for us to access one of the TDA's from request. I can confirm that on contact with the UAS operator on the contact details, the UAS will take a maximum of 10 minutes to vacate when flying between Alnwick and Berwick, and 12 minutes when flying from Wansbeck to Alnwick.

Other points that may be worth considering and that we have discussed are;

05/11/2022, 22:04

apian.aero Mail - Great North Air Ambulance / Apian Stakeholder Engagement ACP-2022-031 Response.

1. Could the North/South transit parts of the TDA's be moved fully off shore? Following your feedback, we are looking to adjust the TDA to ensure more of the route is off the coast. I will share with you an updated proposed TDA as soon as possible.
2. Could the take-off landing sites be given a separate TDA for the over land segment like TDA B. That way the over land sectors would only be active for a few minutes. Then if the transits were fully off shore then deconfliction and TDA access would be easier for our AirDesk and the operator. Unfortunately, the TDA over the land segment needs to be active to ensure the UAS can be safely returned to the landing site in the event that it needs to vacate the area. Arranging a new NOTAM at a very short notice is also challenging to implement.

Regards





I recall we had a conversation regarding the met conditions that the UAS is allowed to operate in, and so wanted to share the detailed answer;

We follow the rules below as we are in Class G, below 3000ft and <140kts.

- *AIP ENR 1.2 Note 3: an aircraft in Class F or G airspace shall also be deemed to have complied with Table 1 if it is flown:*

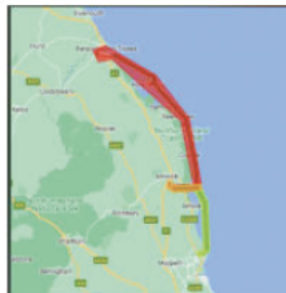
*During day only;
At and below 900 M (3000 FT) AMSL, or 300 M (1000 FT) above terrain, whichever is the higher;
At an indicated airspeed of 140 KT or less to give adequate opportunity to observe other traffic or any obstacles in time to avoid collision;
Remaining clear of cloud and with the surface in sight; and
With a flight visibility of at least 1500 M*

- We also have an additional requirement that the Cloud base must be above 1500ft.

I have also attached an updated draft TDA image for you, we are still confirming these, and so this is very much subject to change. But following feedback from stakeholders we have adjusted to move the TDA off land wherever possible.

Please let me know your availability to discuss the TOI previously shared.

Regards



draft TDA ACP-2022-031 subject to change.png
318K