# Conclusions

As ACP-2023-015 stands the British Microlight Aircraft Association cannot support it. Apian need to reconsider:

- The inclusion of a robust Detect and Avoid system. The burden for detection and avoidance cannot be solely on the human pilot, spotting other large aircraft is difficult let alone small drones. Robust Detect and Avoid systems may negate the need for TDAs in the first place.
- The lack of ADS-B OUT which have been pushed by the CAA for microlight pilots.
- The effective closure of the East Coast VFR route with TDA Zone B -Forcing pilots further out to sea, away from rescue in the event of an engine failure, to take a zone transit (increasing Newcastle Airport workload) or if non-radio potentially cause a 180NM detour to the west.
- The blocking of the of the key coast-to-coast Type Valley GA Transit route when the cloud base is 2,000ft or less.
- The vertical and horizontal extents of the TDAs, which create choke points increasing collision risks in an already congested airspace system.
- Relating to the extent of proposed TDAs, can Apian reconsider the boundaries and number of overall TDAs, particularly the large Zone B & C TDAs?
  - $\circ~$  Can these be subdivided in to smaller TDAs to more accurately represent 600ft AGL?
  - $\circ$  Apian must also provide further clarity on total number of the TDAs that would be active concomitantly.
- TDA C which causes the effective closure of Stanton and Hexham Farm Airstrips.
- TDAs which have an effect on Athey's Moor Airstrip and Eshott Airfield, the flight training schools and the safety of its student pilots and their training requirements both with instructor and when solo.
- The trial taking place close to RAF Spadeadam given that it is an Electronic Warfare facility, which routinely conducts GNSS jamming.

And finally, though outside of the BMAAs expertise, the premise for drone delivery seems flawed especially in this area. The UK is a developed country with asphalt roads rather than dirt tracks. Can existing delivery companies or 'blood bikes' not satisfy the needs of a variety of facilities located on or close to A-Roads?



# Re: [Airspace] ACP-2023-015 - British Microlight Aircraft Association Feedback

1 message

12 October 2023 at 10:40

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from pilots who fly in the local area is extremely important. This feedback from the BMAA and others from the aviation community will help us continue the airspace change process, by taking into consideration the feedback we have received to develop a more refined airspace.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we understand this is not a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace, that allows equitable use for all airspace users.

This trial forms the initial stages of Apian's roadmap to integrated flights. We are closely monitoring the progress of the <u>Airspace Modernisation Strategy</u> and <u>electronic conspicuity regulation and policy development</u> in the UK, as that will ultimately determine the technical requirements for integrated flights.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you soon.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. The airspace team were pleased to be able to visit some airfields you reference and stakeholders while visiting Northumbria. We do not intend to close businesses, affect livelihoods or affect students learning to fly.

The feedback we have received from local aviation regarding flying conditions in Northumbria has been vital. We are aware of the constraints increased traffic can add to an ATC unit and we will continue to re-evaluate the DACS and DAAIS requirements. We will also continue to work closely with Newcastle ATC.

Thank you for raising concern around the operations from RAF Spadeadam, we are aware of the exercises and jamming trials that take place and we are in contact with the military, including RAF Spadeadam about these. We will ensure we have suitable mitigations in place for safe operations.

Apian's focus is the NHS and this trial will allow us to investigate the improvements drone delivery can provide to clinicians and patients, as well as testing and evaluating how UAS can operate safely in UK airspace. We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. This trial builds on our previous project by demonstrating other use cases that would bring valuable healthcare benefits for our patients and clinicians in the region. This UAS service will add additional capabilities and bring new benefits to existing ground NHS logistics services.

It is important to understand that whilst other modes of transport provide an essential and critical service to the patients and clinicians within Northumbria, some are run entirely by the goodwill of volunteers. This means they are only able to offer a limited, but vital, service for emergency use during out-of-hours and are unable to support the scale of clinical needs from the NHS. A person in a van would be unsustainable and inefficient given the number of deliveries required.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Tue, 19 Sept 2023 at 19:29 Hello, My name is I am a member of the Airspace Committee at the

Please see our attached feedback on ACP-2023-015.

Return correspondence can be conducted through this e-mail address or or finally by post to:





# [Airspace] ACP-2023-015 Feedback

1 message

19 September 2023 at 20:54

Dear Sir / Madam, Lwish to object to this proposal, co

I wish to object to this proposal, comments below

Name E mail - the second Representing myself

Address

Feedback - I have flown several times from the south coast to Scotland, routing along the north east coast route, as this route enables me to make other required stops en route. The proposed ACP would render this route dangerous, forcing lower flight and flying further out to sea, and if the weather (specifically the cloud base) is poor, the route would be impassable. I therefore object to this proposal.

Sent from my iPad



# Re: [Airspace] ACP-2023-015 Feedback

1 message

4 October 2023 at 10:26

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Tue, 19 Sept 2023 at 20:55, Dear Sir / Madam,

I wish to object to this proposal, comments below

wrote:

## Name

E mail Representing myself

#### Address -

Feedback - I have flown several times from the south coast to Scotland, routing along the north east coast route, as this route enables me to make other required stops en route. The proposed ACP would render this route dangerous, forcing lower flight and flying further out to sea, and if the weather (specifically the cloud base) is poor, the route would be impassable. I therefore object to this proposal.

Sent from my iPad



## [Airspace] ACP-2023-015 Apian Northumbria NHS Air Grid

1 message

19 September 2023 at 20:57

Dear

These are not my words but they very adequately express my disgust at your attempt to claim airspace for a trial with no consideration for any other airspace users.

I object to the ACP in the strongest terms as the TDA design completely fails to adhere to the CAA requirement to minimise impact on other air users. The extensive nature of this TDA will severely and negatively impact other air users in Northern England. I believe this trial only becomes viable when certified Detect and Avoid Technology is available enabling co-existence rather than implementation via a TDA. By progressing the TDA option, the wider flying community is being hugely restricted and put at significant risk which is totally unacceptable.



# Re: [Airspace] ACP-2023-015 Apian Northumbria NHS Air Grid

1 message

4 October 2023 at 11:16

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We are currently in Stage 1 of the airspace change process, this allows us the opportunity to gain feedback from the wider aviation stakeholders on our proposal. It is not until this stakeholder engagement has been completed that we are able to have a complete view of operations in the area. Following stakeholder engagement, we will review all the feedback and reevaluate our proposal before conducting further engagement.

Our intention is to work with the local aviation community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the Airspace Modernisation Strategy.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

wrote:



On Tue, 19 Sept 2023 at 20:57,

Dear

These are not my words but they very adequately express my disgust at your attempt to claim airspace for a trial with no consideration for any other airspace users.

I object to the ACP in the strongest terms as the TDA design completely fails to adhere to the CAA requirement to minimise impact on other air users. The extensive nature of this TDA will severely and negatively impact other air users in Northern England. I believe this trial only becomes viable when certified Detect and Avoid Technology is available enabling co-existence rather than implementation via a TDA. By progressing the TDA option, the wider flying community is being hugely restricted and put at significant risk which is totally unacceptable.



# [Airspace] Apian Northumbria NHS Air Grid -ACP-2023-015 Objection

1 message

	19 September 2023 at 21:23
Name:	
Email	
Representing:	
Address:	

#### Feedback:

I strongly object to the proposed Temporary Danger Area (TDA) in its current form due to concerns about its impact on air users in Northern England. The design does not meet the Civil Aviation Authority's requirement to minimize impact on other air users.

Key objections include:

**1. Blocking East Coast Transit Route:** The TDA effectively blocks a busy VFR coastal transit route under the Newcastle Control Area (CTA), potentially leading to increased congestion and the need for formal zone transits with Newcastle Air Traffic Control.

**2.** Impact on the Tyne Valley Route, Hexham and Stanton Airstrips: When active, the TDA would close Hexham and Stanton airstrips, which have been in operation for many years and host various aircraft types. The design uses a blanket 600ft AGL above tallest known feature, giving between 1750ft AMSL - 2000ft AMSL which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. The Tyne valley is a primary coast to coast transit route for both civil and military traffic in the North and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast to coast access. I fly this route regularly from Manchester Barton, if the cloud base is around 2000ft and the TDA is activated there would be no way through to the North East.

**3. Vertical Planning Concerns**: The TDA's vertical planning is unreasonable, extending to around 1500ft above ground level (AGL) in the Tyne Valley transit route, this will restrict general aviation (GA) coast-to-coast access.

**4. Lack of Danger Area Crossing Service (DACS):** The claim that a DACS won't be provided is seen as misleading, as it could allow for continued operations at Stanton and Hexham while facilitating transit routes within the TDA.

**5. TDA Activation/Notification:** I have concerns about the activation and notification of the TDA, how this will be managed and communicated, giving other air users sufficient time to plan alternate routes. The current proposal suggests 7 days a week 24hrs a day. This will not only affect GA traffic but military traffic too.

**6. Transparency and Airspace Usage:** We need transparency regarding TDA activation and airspace usage statistics. Data should be publicly available to the GA community and regulators throughout the trial.

#### Summary:

In summary, I believe that the proposed TDA will severely impact and endanger air users in Northern England. The trials should only proceed when certified Detect and Avoid Technology is available to ensure safe coexistence with other airspace users, the current proposal is unacceptable.

As a stakeholder the CAA has not seen any data on the previous TDA. Apian were bound to report outcomes as part of the CAP 1616 Airspace Change Process, and Airspace regulation who handle the TDA should share the information with you and that information should also be in the public domain and available for all stakeholders.

It seems that a decision will be made with only half the information available, and that Airspace regulation should have presented all the findings and outcomes of the first TDA.



# Re: [Airspace] Apian Northumbria NHS Air Grid -ACP-2023-015 Objection

1 message

5 October 2023 at 11:37

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other, we completely understand that this is not always feasible. It is extremely challenging to gain data on the GA operations at uncertified aerodromes, and proves why the stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

Current regulations mean that we are required to apply for a TDA, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the Airspace Modernisation Strategy

If we anticipate the TDA is not required during the trial we will cancel it as per the NOTAM process. Cancellations of TDA usage are due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations are not often seen in advance. This approach to TDA utilisation is taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator following feedback on our previous trial and are finalising details with the CAA of an improvement process.

A report from our previous trial can be found on the ACP portal <u>here</u>. All detailed flight data is shared with the regulator.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



(	On Tue, 19 Sept 2023 at 21:23, wrote:
	Name:
	Email
	Representing: GA Pilot and GA community
	Address:
	Feedback:
	I strongly object to the proposed Temporary Danger Area (TDA) in its current form due to concerns about its impact on air users in Northern England. The design does not meet the Civil Aviation Authority's requirement to minimize impact on other air users.
	Key objections include:
	<b>1. Blocking East Coast Transit Route:</b> The TDA effectively blocks a busy VFR coastal transit route under the Newcastle Control Area (CTA), potentially leading to increased congestion and the need for formal zone transits with Newcastle Air Traffic Control.
	<b>2. Impact on the Tyne Valley Route, Hexham and Stanton Airstrips:</b> When active, the TDA would close Hexham and Stanton airstrips, which have been in operation for many years and host various aircraft types. The design uses a blanket 600ft AGL above tallest known feature, giving between 1750ft AMSL - 2000ft AMSL which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. The Tyne valley is a primary coast to coast transit route for both civil and military traffic in the North and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast to coast access. I fly this route regularly from Manchester Barton, if the cloud base is around 2000ft and the TDA is activated there would be no way through to the North East.

**3. Vertical Planning Concerns**: The TDA's vertical planning is unreasonable, extending to around 1500ft above ground level (AGL) in the Tyne Valley transit route, this will restrict general aviation (GA) coast-to-coast access.

**4. Lack of Danger Area Crossing Service (DACS):** The claim that a DACS won't be provided is seen as misleading, as it could allow for continued operations at Stanton and Hexham while facilitating transit routes within the TDA.

**5. TDA Activation/Notification:** I have concerns about the activation and notification of the TDA, how this will be managed and communicated, giving other air users sufficient time to plan alternate routes. The current proposal suggests 7 days a week 24hrs a day. This will not only affect GA traffic but military traffic too.

**6. Transparency and Airspace Usage:** We need transparency regarding TDA activation and airspace usage statistics. Data should be publicly available to the GA community and regulators throughout the trial.

#### Summary:

In summary, I believe that the proposed TDA will severely impact and endanger air users in Northern England. The trials should only proceed when certified Detect and Avoid Technology is available to ensure safe coexistence with other airspace users, the current proposal is unacceptable.

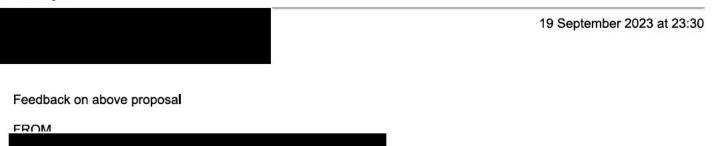
As a stakeholder the CAA has not seen any data on the previous TDA. Apian were bound to report outcomes as part of the CAP 1616 Airspace Change Process, and Airspace regulation who handle the TDA should share the information with you and that information should also be in the public domain and available for all stakeholders.

It seems that a decision will be made with only half the information available, and that Airspace regulation should have presented all the findings and outcomes of the first TDA.



# [Airspace] Airspace proposal - ACP-2023-015. - Feedback

1 message



FEEDBACK

As a locally based private pilot (28 years licence held) I must object to this proposal in the strongest of terms .

For pilots based in north Cumbria and southern Scotland the route following the Tyne Valley has become an established safe passage a from East to West or vice versa avoiding the high Pennines when low cloud has become an issue.

Often the weather in that area can be unpredictable and on a number of occasions during my flying career non forecast low cloud over the Pennines has resulted in my having to change route plans and return back to Cumbria via the lower route of following the Tyne Valley. Your plans would remove this needed "safety route".

Additionally, your plans would result in the effective closure of Hexham airfield, again a loss that has safety implications.

I trust that you will reconsider your request and accommodate changes that will allow the preservation of the safe passage for existing GA traffic to freely use the Tyne Valley "low route" crossing of the Pennines.

Many thanks

Sent from my iPad



# Re: [Airspace] Airspace proposal - ACP-2023-015. - Feedback

1 message

5 October 2023 at 11:31

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We would be more than happy to meet and discuss this with you.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the Airspace Modernisation Strategy

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Tue, 19 Sept 2023 at 23:30, wrote: Feedback on above proposal

As a locally based private pilot (28 years licence held) I must object to this proposal in the strongest of terms .

For pilots based in north Cumbria and southern Scotland the route following the Tyne Valley has become an

https://mail.google.com/mail/u/0/?ik=2ba05b64d4&view=pt&search=all&permthid=thread-f:1777506874248022986%7Cmsg-a:r83587283958064... 1/2

established safe passage a from East to West or vice versa avoiding the high Pennines when low cloud has become an issue.

Often the weather in that area can be unpredictable and on a number of occasions during my flying career non forecast low cloud over the Pennines has resulted in my having to change route plans and return back to Cumbria via the lower route of following the Tyne Valley. Your plans would remove this needed "safety route".

Additionally, your plans would result in the effective closure of Hexham airfield, again a loss that has safety implications.

I trust that you will reconsider your request and accommodate changes that will allow the preservation of the safe passage for existing GA traffic to freely use the Tyne Valley "low route" crossing of the Pennines.

Many thanks



Sent from my iPad

How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the CAA's Airspace Change Portal. Feedback on the proposed trial TDA, or requests for further information should be sent to: Aviation team at airspace@apian.aero

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by

22nd September 2023.

Name		
Emai		
Representing		
Address (including		
postcode if possible)		

Feedback This is completely disproportionate in that it in effect closes a large piece of airspace to GA pilots. It would also close two airfields.

I am pasting in a detail analysis of the effect this will have. I want to state that I am in full agreement with this analysis.

#### **Bottom Line**

I object to the ACP in the strongest terms as the TDA design completely fails to adhere to the CAA requirement to minimise impact on other air users. It closes two grass airstrips, blocks the busy East Coast VFR coastal transit route under the Newcastle CTA, creates choke points that will result in a large increase in traffic seeking Newcastle zone transits/Spadeadam D510 crossings and is unreasonable in its vertical planning, extending to around 1500ft AGL in the busy Tyne Valley transit route.

### Area B

The East coastline under the base of the 1500ft Newcastle CTA is a busy transit route for VFR GA traffic and also allows non-radio traffic to move freely. Area B (SFC-1300ft) effectively blocks this route and will force east coast traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head 4 miles out to sea, significantly increasing risk for these air users who are traditionally historic aircraft or basic microlights.

#### Area C & D

When active, Area C closes the Hexham and Stanton airstrips that have operated for many years and are home to a variety of LAA, BMAA and historic aircraft.

The design uses a blunt approach of 600ft AGL above tallest known feature, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. The Tyne valley is a primary coast to coast transit route for both civil and military traffic in the North and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast to coast access.

## DACS

Apian claim "Due to the heights of the proposed TDA complex (600 ft AGL above the tallest known feature), a Danger Area Crossing Service (DACS) will not be provided.". A DACS would allow both Stanton and Hexham to operate whilst allowing the continued flow of the busy Coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. The onus should be on Apian to resolve rather than a disingenuous and misleading statement.

### **TDA Activation**

During previous <u>UAS operations</u> on the Northumberland Coast, I didn't see any evidence that Apian cancelled TDA activation by fresh Notam when operations were suspended for weather or serviceability, often for days on end. Instead airspace remained blocked to other users despite it being unused for days. Apian should release airspace once it is clear operations will be suspended. In the interest of transparency, Airspace usage statistics (days/hours flown v days/hours Notamed) should be publicly available to both the GA community and the regulator.

#### Summary

The extensive nature of this TDA will severely and negatively impact other air users in Northern England. I believe this trial only becomes viable when certified Detect and Avoid Technology is available enabling co-existance rather than implementation via a TDA. By progressing the TDA option, the wider flying community is being hugely restricted and put at significant risk which is totally unacceptable.



## Re: [Airspace] feedback

1 message

5 October 2023 at 11:27

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other, we completely understand that this is not always feasible. It is extremely challenging to gain data on the GA operations at uncertified aerodromes, and proves why the stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

Apian was founded by two NHS doctors, and all of our work is focused on providing improved healthcare to our patients and clinicians. We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. The airspace proposed is directly linked to the use case requirements which are outlined in Annex B.

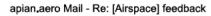
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Regarding NOTAMs in our previous trial, these were cancelled by the UAS operator directly when we did not anticipate flying. As per the NOTAM process, these were cancelled through the Airspace Regulation (Utilisation) Operations team at the CAA, who communicate them to the aviation industry. Cancellations of TDA usage were due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations were not seen in advance. This approach to TDA utilisation was taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator and are finalising details with the CAA of an improvement process, however if you have suggestions to improve the safe sharing of this information, please let us know and we can discuss them with the CAA.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

05/10/2023, 11:27





On Wed, 20 Sept 2023 at 08:53,

wrote:

Attached

## GAA Response to ACP-2023-015 Apian Northumbria NHS Air Grid Airspace change

## General

The General Aviation Alliance, on behalf of the constituent bodies, **object** strongly to this ACP as being unnecessary in the first instance, as impacting upon the safety of other airspace users including from other areas of the UK transiting North / South and East/West and economically impacting operators within the airspace boundaries.

- 1. This ACP is repeating trials that have been carried out multiple times before. The duration requested by Apian at 6 months is excessively long for a "trial" and in comparison with previous similar TDAs. The data from those trials should have been made available to APIAN in order to avoid this expensive and pointless repetition.
- 2. The trial has no apparent aeronautical value and is instead seeking to demonstrate what is and should be generally known or should be achieved by other means.
- 3. From a report in the BBC News website dated 9 September, it was noted that it was a formal engagement process and that "no decision had been made" concerning the airspace . Which appears to deny the fact that this application to change the airspace is just such a decision.
- 4. The BBC article quoted an Apian spokesperson as wanting to "engage with as many individuals and groups as possible to hear their feedback and take it on board wherever we can". Howver had Apian carried out some basic consultation, including referring to an aeronautical chart, prior to deciding upon this particular volume of airspace, and applying for an ACP, they could have avoided wasted time and effort for all concerned.
- 5. It must be a priority to avoid the imposed closure of airfields which we understand is the result. Likewise negative impact on businesses and on other users of the airspace
- 6. Adjoining the Spadeadam Danger Area makes this TDA location a particularly unfortunate choice in terms of potential disruption caused to other airspace users. As with any change to airspace that results in concentration of movements, the risk of mid air collisions (MAC) is increased. This is the case here as well and yet no assessment is made of that risk.
- 7. The airspace requested is, in area, far larger than any seen previously for almost exactly the same "trial" operation. Thus the suitability of the technology employed, if that is the determining factor, must be questionable due to the relatively low efficiency in use of airspace. Other TDA sponsors have utilised relatively narrow corridors between the destination locations. What worked in African wide open spaces and over significant distances may not be appropriate for the relative high density in the UK.
- 8. The BBC report suggests, presumably from Apian suggestion (?), that other aircraft can continue to operate as the Apian craft can "fly at low altitude and narrow corridors" and that Apian is "working in collaboration with the CAA to support the development of integrated airspace..." This is plainly not the case as the statement belies a lack of appreciation of the terrain and the use of airspace by the GA community. Further this ACP is not employing, or even attempting to trial, the see and avoid technology that is reportedly fitted to the craft in use that will no doubt be required for integration.

- 9. The GAA support the need for integration in airspace and between users of the airspace. However this ACP does nothing to further that as an objective.
- 10. Briefing in person session held at Wansbeck Hospital was logistically inaccessible for the GAA representative and only latterly was a phone contact possible. The GAA attempt to provide constructive input to assist the sponsors of ACPs such as this, whilst of course seeking to minimise the impact upon the safety of the general aviation community.
- 11. We note too that the summary of results from Apian previous "trial" ACP-2022-031- failed to quantify the results in any meaningful way and neither did it compare the claimed achievement against any kind of control, such as the man and van. The subjective results were bland unverifiable statements of some logistical activity.

## Trial Plan

2.2 – Will these results be quantified and published ? See general Item 11 above.

## 3.0

It is regrettable that this trial is not able focus on the testing and proving of the detect and avoid technology referred to as being available and FAA approved. Though such a trial is overdue and would ideally carried out in a controlled environment, and elsewhere, in order to minimise risk.

There is no mention, beyond "engagement" of facilities to arrange GA access to the TDA ? Pilots routing through this area, including necessarily at low level, come from all over the UK and potentially Europe and so an access facility / crossing service is essential.

## Annex A

Presumably in order to "drop" a load from 60ft Apian will have secured a relaxation from the low flying rule ?

Does the dropping of "dangerous goods" form part of the trial plan?

## 3.2

As commented above the area of airspace forming the TDA appears to be out of proportion to the location of the facilities being served. The area chosen prevents operation at two airfields and impacts operations at one gliding club.

3.3. The impact of altitudes within the TDA, which are misleading in relation to the local terrain so that 600ft AGL is effectively 2000Ft above the Tyne Valley, will be significant to the transiting GA community. As a result it will likely be impossible for pilots to avoid both terrain and poor weather in the area, surrounded as it is by significant high ground. The Tyne Valley being a popular East – West Routeing and the Hexham Gap serving North South on occasions.

Those choosing to route offshore, usually due to poor weather inland and refusal of a transit through Newcastle airspace, seem now to be confined to a very shallow vertical corridor that may encourage them to route even further over water to avoid risking infringing and so at increased risk.

The stated intention to not provide a danger area crossing service and thus to exclude other users, with no statement as to how their safety will be ensured, is an unacceptable potential impact upon safety of those users. Other potential users extend beyond the military, police, HEMS etc.

3.5 As with a number of other TDA's offering similar objectives, such as "on demand" service, the stated intent to activate the TDA by notam with 24 hours notice is clearly in conflict with those stated trial objectives which could only be met if the TDA is continuously activated.

## Background

The General Aviation Alliance (GAA) is a group of organisations representing the interests of many in the UK General Aviation (GA) industry and coordinating some 72,000 subscription paying members of these bodies. Members of the GAA include: British Balloon and Airship Club (BBAC); British Gliding Association (BGA); British Hang Gliding and Paragliding Association (BHPA); British Microlight Aircraft Association (BMAA); British Model Flying Association (BMFA); British Skydiving; Helicopter Club of Great Britain (HCGB); Light Aircraft Association (LAA); PPL/IR Europe - European Association of Instrument Rated Private Pilots; Royal Aero Club of the United Kingdom (RAeC).

The website www.gaalliance.org gives more information.

Over 21,000 aircraft are registered in the United Kingdom, of which 96% are involved in General Aviation (GA), and these fly some 1.35 million flying hours each year.

There are in total there are some 20,000 private pilots, and 10,000 glider pilots in the United Kingdom.

The economics of general aviation in the UK are under severe pressure and restrictions and other impacts on GA activity in the UK, including TDAs with apparently little or no demonstrable aeronautical benefit, serve to increase costs, hinder income generation and ultimately drive the business abroad but above all impact negatively upon safety of the GA Community.



# Re: [Airspace] ACP-2023-015 - Northumbria Grid

1 message

12 October 2023 at 10:46

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

We are currently in Stage 1 of the airspace change process, this allows us the opportunity to gain feedback from the wider aviation stakeholders on our proposal. It is not until this stakeholder engagement has been completed that we are able to have a complete view of operations in the area. Following the end of this initial stakeholder engagement, we will be reviewing all the feedback and reevaluating our proposal before conducting further engagement. This is all completed in advance of a formal submission to the CAA. The CAA has not made a decision to reject or accept the airspace change request.

Stage 4b includes safety, operational and other assessments that may be required to support our submission. The stages for a trial airspace change can be found on the <u>CAA Airspace Change Portal</u> and details of what information needs to be provided can be found in <u>CAP1616</u>.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

We have been able to utilise heat maps which are very useful but these provide minimal information and miss important data we need, for example the heights pilots regularly fly at in the region and the weather conditions which impact these routes. As a direct result of this stakeholder engagement, we now have a better understanding of the operations conducted by the general aviation community, which is extremely helpful.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with local Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement. We do not intend to close any airstrips or close local businesses.

Other countries around the world are pioneering this and we would like the UK, specifically the NHS, to benefit from the reliability and sustainability of this technology. Given there are differences in airspace/regulations, we would like to ensure safe integration whilst pushing the boundaries through innovation both in the aviation and healthcare sector.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

This trial will be the first stage of Apian's integration plan and will seek to identify technical and operational solutions that can be developed over the coming months and years to enable integration for future flights.

We apologise that our feedback event wasn't accessible for members of the GAA, and we will take this into consideration for any future events we run. We tried our best to accommodate as many people as possible. Virtual calls and phone calls were offered to those that wanted to come but couldn't attend. You can also find the meeting summary on the ACP portal <u>here</u>. It can be difficult to capture a large audience in one event, so we will look to run more events including virtual options next time. Equally, we will happily accommodate an in person meeting with yourselves if you feel that would be of benefit.

We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

Regarding relaxation of the low flying rule. We have researched the regulation reference and requested support from Apian's CAA Innovation Advisor and we believe we've identified the regulation which references the low flying rule and dropping articles.

The regulation we believe you are referring to has been taken from the <u>Rules of the Air Regulations 2007</u> and we also found it quoted <u>here</u>. However, this regulation is not applicable to Apian's proposed flights as it is out of date, dropping of articles is in scope of the Air Navigation Order 2016 and drone regulations, and the Rules of the Air Regulations do not apply to drone flights in the specific category.

Apian's proposed operations will only carry or deliver dangerous goods with the required approvals from the CAA. We are working closely with the CAA to determine how dangerous goods regulations and policies apply to delivery of dangerous goods and this work is almost complete.

All TDA ceilings should be reported and briefed as AMSL in accordance with ICAO Annex 11 2.30.2.

We have experience in accommodating and de-conflicting with HEMS and other similar airspace users and they will always be a priority. We are in constant communication with all the emergency services and the military to establish safe operations when required in the TDA.

Apian's focus is the NHS and this trial will allow us to investigate the improvements drone delivery can provide to clinicians and patients, as well testing and evaluating how UAS can operate safely in UK airspace. We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. This trial builds on our previous trial (please see report <u>here</u>.) by demonstrating other use cases that would bring valuable healthcare benefits for our patients and clinicians in the region. This UAS service will add additional capabilities and bring new benefits to existing ground NHS logistics services.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future. If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Wed, 20 Sept 2023 at 10:59

· wrote:

Please find attached our objection to the above ACP sent on behalf of the General Aviation Alliance.

Would you kindly acknowledge receipt please.

Thanks



# ACP-2023-15

1 message

20 September 2023 at 09:45

I am objecting to this as I haven't seen any information from the previous TDA which I understand is the responsibility of CAA airspace regulation department.

I have grave concerns about the visibility (visual and otherwise) of drones to light aircraft and I have no information from the trial already undertaken.



Sent from my iPhone

\_\_\_

You received this message because you are subscribed to the Google Groups "hello" group.

To unsubscribe from this group and stop receiving emails from it, send an email to hello+unsubscribe@apian.aero. To view this discussion on the web, visit https://groups.google.com/a/apian.aero/d/msgid/hello/E816161A-E6BE-41EB-BAFD-92ED581F88A3%40aol.com.



# [Airspace] Northumberland TDA

1 message

20 September 2023 at 10:44

I am writing in response to your proposal for a TDA in the above area. I am not in support of your proposal as it does not adequately address the needs of general aviation in the area. The proposal would create danger to GA users and force the closure of airstrips within the TDA.

In my opinion this proposal does not align with the requirements for airspace change as noted by the CAA.





# Re: [Airspace] Northumberland TDA

1 message

5 October 2023 at 11:22

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We would be more than happy to discuss this with you.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland, and as a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Wed, 20 Sept 2023 at 11:34,

wrote:

I am writing in response to your proposal for a TDA in the above area. I am not in support of your proposal as it does not adequately address the needs of general aviation in the area. The proposal would create danger to GA users and force the closure of airstrips within the TDA.

In my opinion this proposal does not align with the requirements for airspace change as noted by the CAA.





# Re: [Airspace] ACP-2023-015

23 October 2023 at 13:29



Dear Sirs,

#### Proposed New Temporary Danger Area - ACP-2023-015

The new Temporary Danger Area (TDA), proposed by Apian Northumbria NHS Air Grid encompasses a very large piece of Class G Airspace to the north and to the west of the Newcastle CTA, from the North Sea coast in the east, to the the town of Haltwhistle in the west.

Those proposing the TDA, Apian Ltd, a medical logistics startup founded by NHS doctors, wishes to move, *"Prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies and medical documentation"* by drone. With a Skyports drone with a payload of just 3kg, or with a Zipline drone which drops its package, of a similar weight, by parachute, or by wire and then returns to the distribution centre.

To do this and without access to 'detect and avoid' technology Apian wishes to operate its drones beyond visual line of sight (BVLOS) by creating a TDA in Class G airspace. This will close the airspace to other members of the general aviation community and, at the same time, have a significant financial impact on those airfields within the TDA. In effect, Apian wishes to ground other airspace users so that they may transport a payload of just 3kg, the equivalent of 3 bags of sugar, for a cost that has yet to be specified. This plan has very little merit after taking into account the full cost of the operation, to the NHS, currently a hidden cost which is supported by innovation grants. Moreover, a much larger payload may be carried in all weathers, day or night, by a courier driving a van, or riding a motorcycle. If, as Apian suggest, 'green' technology is important factor, then an electric vehicle, to transport medical supplies by road, may be preferred.

In my view, this application lacks merit and it should not be approved.

Yours sincerely,





## Re: [Airspace] ACP-2023-015

1 message

5 October 2023 at 11:18

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the Airspace Modernisation Strategy.

Please note there will be only one UAS operator as indicated in the trial documentation.

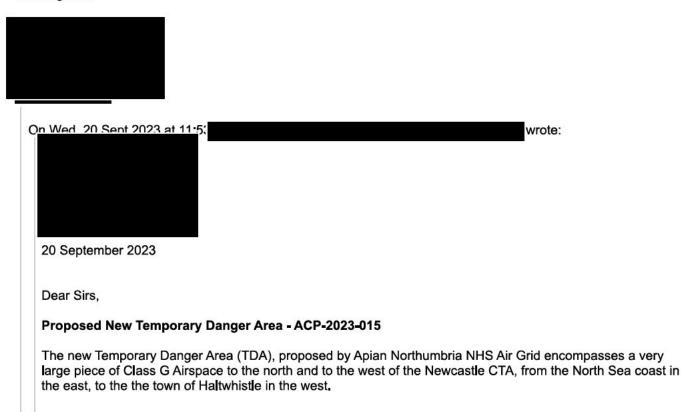
We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. This trial builds on the previous trial by demonstrating other use cases that would bring valuable healthcare benefits for our patients and clinicians in the region. This UAS service will add additional capabilities and bring new benefits to existing ground NHS logistics services.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



Those proposing the TDA, Apian Ltd, a medical logistics startup founded by NHS doctors, wishes to move, "Prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies and medical documentation" by drone. With a Skyports drone with a payload of just 3kg, or with a Zipline drone which drops its package, of a similar weight, by parachute, or by wire and then returns to the distribution centre.

To do this and without access to 'detect and avoid' technology Apian wishes to operate its drones beyond visual line of sight (BVLOS) by creating a TDA in Class G airspace. This will close the airspace to other members of the general aviation community and, at the same time, have a significant financial impact on those airfields within the TDA. In effect, Apian wishes to ground other airspace users so that they may transport a payload of just 3kg, the equivalent of 3 bags of sugar, for a cost that has yet to be specified. This plan has very little merit after taking into account the full cost of the operation, to the NHS, currently a hidden cost which is supported by innovation grants.

Moreover, a much larger payload may be carried in all weathers, day or night, by a courier driving a van, or riding a motorcycle. If, as Apian suggest, 'green' technology is important factor, then an electric vehicle, to transport medical supplies by road, may be preferred.

In my view, this application lacks merit and it should not be approved.

Yours sincerely,





# Re: [Airspace] ACP-2023-015

23 October 2023 at 13:33

vrote:

On Wed, 20 Sept 2023 at 12:14,

12.14,

Dear Sirs,

Thank you for the opportunity to comment on the above proposal.

I regret to say that I believe the proposal is certain to severely restrict to the point of preventing the safe flight of General Aviation aircraft in the proposed TDA. This is because the adoption of 600' above ground level (in effect 600' above the highest ground or obstacle nearby) in reality will mean that safe operation with cloud bases below 1500'-2000' will be impossible over much of the TDA. In effect the common East/West transit of the Tyne Valley from Cumbria to Northumbria will not be viable with the TDA active and fairly normal cloud conditions. Moving on, the North/South coastal option will also be restricted to the extent that it may only be possible in some weather by going further offshore than is currently necessary. Both of the foregoing increase risk and or prohibit safe flight.

I am also aware of 2 or 3 small airfields which will in any case be closed when the TDA is active. Coupled with the above the proposal is disproportionate and not in alignment with:-

# CAP2533: Airspace Policy Concept - Airspace Requirements for the Integration of Beyond Visual Line of Sight (BVLOS) Unmanned Aircraft

Finally, the intention to provide better health care on a just in time basis is confused as 24 hours advance notice can't be given in response to urgent need, then there is the restrictions on flight due to weather. Accordingly it seems that the motorcycle and van deliveries will still provide the necessary care and UAV/Drone Delivery can't contribute much until they can be safely integrated with other aerial traffic.

Given all of the above I am compelled to say that this proposal should not be proceeding.

Yours sincerely,



Sent from my iPad



## Re: [Airspace] ACP-2023-015

1 message

5 October 2023 at 10:39

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with local Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

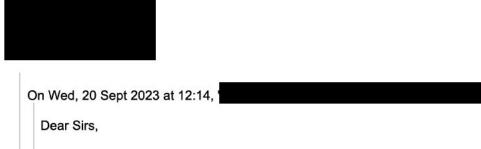
Apian are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. This trial builds on the previous trial by demonstrating other use cases that would bring valuable healthcare benefits for our patients and clinicians in the region. This UAS service will add additional capabilities and bring new benefits to existing ground NHS logistics services.

It is important to understand that whilst other modes of transport provide an essential and critical service to the patients and clinicians within Northumbria, some are run entirely by the goodwill of volunteers. This means they are only able to offer a limited, but vital, service for emergency use during out-of-hours and are unable to support the scale of clinical needs from the NHS. A person in a van would be unsustainable and inefficient given the number of deliveries required.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



Thank you for the opportunity to comment on the above proposal.

wrote:

I regret to say that I believe the proposal is certain to severely restrict to the point of preventing the safe flight of General Aviation aircraft in the proposed TDA. This is because the adoption of 600' above ground level (in effect 600' above the highest ground or obstacle nearby) in reality will mean that safe operation with cloud bases below 1500'-2000' will be impossible over much of the TDA. In effect the common East/West transit of the Tyne Valley from Cumbria to Northumbria will not be viable with the TDA active and fairly normal cloud conditions. Moving on, the North/South coastal option will also be restricted to the extent that it may only be possible in some weather by going further offshore than is currently necessary. Both of the foregoing increase risk and or prohibit safe flight.

I am also aware of 2 or 3 small airfields which will in any case be closed when the TDA is active. Coupled with the above the proposal is disproportionate and not in alignment with:-

# CAP2533: Airspace Policy Concept - Airspace Requirements for the Integration of Beyond Visual Line of Sight (BVLOS) Unmanned Aircraft

Finally, the intention to provide better health care on a just in time basis is confused as 24 hours advance notice can't be given in response to urgent need, then there is the restrictions on flight due to weather. Accordingly it seems that the motorcycle and van deliveries will still provide the necessary care and UAV/Drone Delivery can't contribute much until they can be safely integrated with other aerial traffic.

Given all of the above I am compelled to say that this proposal should not be proceeding.

Yours sincerely,



Sent from my iPad

# () apian

# Re: [Airspace] ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

23 October 2023 at 13:33

On Wed, 20 Sept 2023 at 12:17 To whom it may concern I wish to object to the ACP in every possible way and in the loudest and strongest moral terms. My reasons for this are: 1. The temporary drone area (TDA) design makes complete nonsense of the CAA requirement to minimise impact on other air users. 2. It creates 2 potentially RISK-laden navigation choke points.

- 3. It blocks the busy East Coast VFR coastal transit route under the Newcastle CTA.
- 4. It closes two very active and popular grass airstrips.
- 5. It will mean a large increase in traffic seeking Newcastle zone transits/Spadeadam D510 crossings
- 6. It's vertical planning has obviously been thought through on a "grab everything" basis. Never mind the consequences or disruption we may cause.
- 7. There is no reasonable basis in its vertical planning, extending to around 1500ft AGL in the busy Tyne Valley transit route.

#### Area B

The East coastline under the base of the 1500ft Newcastle CTA is a busy transit route for VFR GA traffic and also allows non-radio traffic to move freely. Area B (SFC-1300ft) effectively blocks this route and will force east coast traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head 4 miles out to sea, significantly increasing risk for these air users who are traditionally historic aircraft or basic microlights.

### Area C & D

When active, Area C closes the Hexham and Stanton airstrips that have operated for many years and are home to a variety of LAA, BMAA and historic aircraft.

The design of the TDA uses a SLEDGEHAMMER approach of 600ft AGL above tallest known feature, thus giving 1750ft AMSL in Area C and 2000ft AMSL in Area D which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. Here, I believe, deliberately deceptive and misleading. The Tyne valley is a primary coast to coast transit route for both civil and military traffic in the North and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast to coast access.

### DACS

Apian claim "Due to the heights of the proposed TDA complex (600 ft AGL above the tallest known feature), a Danger Area Crossing Service (DACS) will not be provided.". A DACS would allow both Stanton and Hexham to operate whilst allowing the continued flow of the busy Coastal and Tyne

apian.aero Mail - Re: [Airspace] ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial ....

Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. The onus should be on Apian to resolve rather than a disingenuous and misleading statement.

### TDA Activationit may concern

During previous UAS operations on the Northumberland Coast, No one saw any evidence that Apian cancelled TDA activation by fresh Notam when operations were suspended for weather or serviceability, often for days on end. Instead airspace remained blocked to other users despite it being unused for days. How can Arian ever justify this total indifference to the needs of other airspace users. Apian should release airspace once it is clear operations will be suspended. In the interest of transparency, Airspace usage statistics (days/hours flown v days/hours Notamed) should be publicly available to both the GA community and the regulator.

# () apian

# Re: [Airspace] ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

23 October 2023 at 14:49

On Wed, 20 Sept 2023 at 12:17 vrote: To whom it may concern I wish to object to the ACP in every possible way and in the loudest and strongest moral terms. My reasons for this are: 1. The temporary drone area (TDA) design makes complete nonsense of the CAA requirement to minimise impact on other air users. 2. It creates 2 potentially RISK-laden navigation choke points. 3. It blocks the busy East Coast VFR coastal transit route under the Newcastle CTA. 4. It closes two very active and popular grass airstrips. 5. It will mean a large increase in traffic seeking Newcastle zone transits/Spadeadam D510 crossings 6. It's vertical planning has obviously been thought through on a "grab everything" basis. Never mind the consequences or disruption we may cause. 7. There is no reasonable basis in its vertical planning, extending to around 1500ft AGL in the busy Tyne Valley transit route. Area B The East coastline under the base of the 1500ft Newcastle CTA is a busy transit route for VFR GA traffic and also allows non-radio traffic to move freely. Area B (SFC-1300ft) effectively blocks this route and will force east coast traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is short-staffed and operating with reduced hours. The only option for nonradio traffic will be to head 4 miles out to sea, significantly increasing risk for these air users who are traditionally historic aircraft or basic microlights. Area C & D When active, Area C closes the Hexham and Stanton airstrips that have operated for many years and are home to a variety of LAA, BMAA and historic aircraft. The design of the TDA uses a SLEDGEHAMMER approach of 600ft AGL above tallest known feature, thus giving 1750ft AMSL in Area C and 2000ft AMSL in Area D which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. Here, I believe, deliberately deceptive and misleading. The Tyne valley is a primary coast to coast transit route for

both civil and military traffic in the North and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast to coast access.

DACS

Apian claim "Due to the heights of the proposed TDA complex (600 ft AGL above the tallest known feature), a Danger Area Crossing Service (DACS) will not be provided.". A DACS would allow both

apian.aero Mail - Re: [Airspace] ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial ...

Stanton and Hexham to operate whilst allowing the continued flow of the busy Coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. The onus should be on Apian to resolve rather than a disingenuous and misleading statement.

### TDA Activationit may concern

During previous UAS operations on the Northumberland Coast, No one saw any evidence that Apian cancelled TDA activation by fresh Notam when operations were suspended for weather or serviceability, often for days on end. Instead airspace remained blocked to other users despite it being unused for days. How can Arian ever justify this total indifference to the needs of other airspace users. Apian should release airspace once it is clear operations will be suspended. In the interest of transparency, Airspace usage statistics (days/hours flown v days/hours Notamed) should be publicly available to both the GA community and the regulator.

Name	
Email	
Representing	
Address (including postcode if possible)	
Feedback	•

I wish to protest about the proposed airspace change in ACP-2023-015 which will affect General Aviation in the North East in a number of negative ways.

1. the effective elimination of both the uncontrolled VFR coastal and inland routes around Newcastle Airport, forcing all North-South transits of the area to be through controlled airspace. This vastly increases controllers workload, at busy times now GA is often diverted round the CTA.

2. Effectively blocks the Tyne Valley bad weather VFR route between East and West coasts. This route is vital for safe access and the vertical limit of 1500ft is too high for aircraft caught out by low cloud. This is a major safety concern for us in the area. I would say that the limit of 600' above

3. Effectively blocks operations at two grass strips and will seriously affect operations at Currock Hill Gliding site.

4. Results from the previous trial have not been promulgated including proportion of proposed flights prevented by weather, missed on-time deliveries, the actual utilization of the airspace and any safety concerns. This proposal is being forced past stakeholders like ourselves without examination or disclosure of the previous evidence. I believe this was a condition of the previous trial.

5. The blanket closure of the airspace as a TDA by Airspace Regulation is a huge blunt instrument, indicating that the UAS cannot work within the existing airspace framework. This indicates that they are not yet a suitable vehicle for this kind of service. Only when UAS can reasonably integrate into existing airspace will this kind of service be viable. All GA is expected to see and avoid, UAS need to do the same.

6. "Crewed aviation. This trial does not impact traffic distribution below 7000ft" The negative impact on GA is massive, Apian obviously never considered this in their plan.

7. Dangerous goods, some goods not considered dangerous to carry by air could be considered very dangerous in this context, examples could be controlled drugs and body parts as well as the UAS Lithium batteries. What plan do Apian have in the event of a missing UAS (something that will happen).



### Re: [Airspace] ACP-2023-015

1 message

9 October 2023 at 15:15

#### Dea

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Information about our previous trial including a report, can be found on the ACP portal here.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the Airspace Modernisation Strategy

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other, we completely understand that this is not always feasible. It is extremely challenging to gain data on the GA operations at uncertified aerodromes, and proves why the stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

The 7000ft is in reference to commercial aircraft and the environmental considerations that we must make as part of the application. This trial will not impact the distribution of air traffic patterns into/out of Newcastle Aerodrome, and therefore will not alter any published arrival or departures routes. We are thankful for your feedback and will reword this section to ensure this is clear in future versions.

Apian's proposed operations will only carry or deliver dangerous goods with the required approvals from the CAA. We are working closely with the CAA to determine how dangerous goods regulations and policies apply to delivery of dangerous goods and this work is almost complete.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards





On Wed, 20 Sept 2023 at 12:37, Please find the required form attached wrote:

Dear Stakeholder,

### Request for support to <u>ACP-2023-015</u> Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

I am writing to you on behalf of Apian, a medical logistics startup founded by NHS doctors with support from the NHS Clinical Entrepreneur Programme. We work on behalf of the NHS to operationalise uncrewed air system (UAS) technology and research its impact on patient health outcomes and staff wellbeing.

Apian, in conjunction with the Northumbria Healthcare NHS Foundation Trust, is looking to conduct feasibility flights using UAS between hospitals, GP surgeries, care homes and pharmacies. We would like to trial a regular, on-demand delivery service for the distribution of medical payloads such as, prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies, medical documentation, as well as emergency deliveries. These flights will allow us to research, validate and provide vital data to establish whether the use of UAS, in these clinical settings will lead to improved patient care.

You may have supported us on our previous project in Northumbria (<u>ACP-2022-031</u>), and we would like to thank you for the support and feedback you provided during and after the <u>project</u>. That feedback allowed us to gain an understanding of how we can better integrate UAS. Please see the summary and lessons learnt during that project <u>here</u>.

As part of our application for a trial TDA, we have identified you as a key stakeholder. We have attached our trial plan for our proposal which includes details of our trial TDA in Annex C. We have also included a feedback form which we kindly request you return to us before the end of our stakeholder engagement period, 22nd September 2023, and look forward to receiving your confirmation of support.

If you have any further questions or would like to discuss the project in further detail, please do not hesitate to contact me.

### Kind regards,

### How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the <u>CAA's Airspace Change Portal</u>. Feedback on the proposed trial TDA, or requests for further information should be sent to:

Aviation team at

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name	
Email	
Representing	
Address (including postcode if possible)	

Feedback:

We operate a full time flexwing microlight flying school at East Fortune airield, East Lothian.

We have around 40 aircraft based there and around 120 flying members.

Many of our members tour, undertaking flight south either through the Newcastle airspace or around it, flying VFR.

The proposed TDAs have worrying implications for all of us, due to the proposal to add 600ft to the highest known feature in each zone in order to arrive at an AMSL upper limit. This severly restricts flights in low cloud, where a minimum altitude operation would be viable.

The low level route below the Newcastle CTA over the sea is effectively closed off. Similary the west side routes would be closed off in a low cloud situation.

The private strips at Hexham and Stanton are both airfields which our club pilots visit. These airstrips will be closed down under the present proposal.

I would like you to note our strong objection to such a large piece of airspace being taken for drone testing. It appears very heavy handed with little consideration for the current airspace users. I would urge a more considered approach to take into account the above points.



### Re: [Airspace] Feedback on proposed TDAs Northumberland.

1 message

5 October 2023 at 10:27

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other, we completely understand that this is not always feasible. It is extremely challenging to gain data on the GA operations at uncertified aerodromes, and proves why the stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Wed, 20 Sept 2023 at 13:25, Please see attached feedback form. wrote:

Aviation team at

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name		
Email		
Representing		
Address (including postcode if possible)		

Letter of Objection Regarding Apian Trial Plan Northumbria Stage 2 ACP-2023-015

I am a private pilot and have been operation a light aircraft from Hexham Airstrip since 2010. I work as a Consultant Orthopaedic Surgeon for an NHS Trust which is neighbour to Northumbria NHS Foundation Trust. I live near Hexham, Northumberland.

This trial plan is written with ignorance and arrogance. I will begin by listing the 3 main areas for objection, and then will say more about each.

- 1. It does not show a case for a need to use a UAS delivering items where there is a perfectly good road network.
- 2. It does not specify any delivery details.
- 3. It makes no reference to the current users of the airspace and the real threat to safety that the proposed Danger Area would cause.
- 1. With reference to Annex A. Having spoken to a number of people who live and work in the Tynedale/Northumberland region, it is obvious that there is no need for a UAS delivery service. The existing van arrangement works well, and people who work as delivery drivers for General Practice Surgeries cannot recall there ever being a problem with vehicle breakdowns. Fridges have not broken down. To suggest otherwise infers that the existing maintenance schedules and these employees are somehow inadequate, which is not true. Medical implants should always be in readiness if they may be required for a surgical procedure, and the appropriate implants would normally be arranged in accordance with the operation list schedule which is usually finalized a week before the day of surgery. It would

be negligent for a surgeon to start an elective operation at Hexham Hospital or anywhere else when it was known that an implant which may be required was not within 5 minutes of the operating theatre. Most of these implants in their packaging would be too heavy and bulky for the UAS to transport. I would seriously question the safety of "just-in-time" logistics arrangement for a medical implant, and am sure the Northumbria surgeons would refuse to operate under such an arrangement. Medical devices delivery is guite adequate, and nearly all of the items listed under the Haltwhistle Hospital "problem" are too heavy and bulky for the UAS. Medical and consumable supplies is a vague term, and any NHS organization should be expected to have them in readiness via road transport. I cannot see how pharmaceutical products would be delivered any more reliably that be existing arrangements. The UAV is not able to maintain any particular temperature for the items it is carrying. All the pharmaceutical products would need to be checked after delivery before being given to the patient. Blood packs would be too bulky for the UAV, and there is an existing arrangement using vans and motorcycles. Maintenance, Repair and Operations is too vague a term to address given the above. Emergency deliveries are very unusual, as in the case of a real patient emergency the patient would be moved to a medical facility (usually Cramlington, occasionally Hexham or Wansbeck) where the required level of care was available.

- 2. With reference to Annex B. There is no information where safe and reliable drop zones have been identified. Apian have not bothered to consider these details, which are fundamental to the proposal. Hexham hospital sits within housing at the base of a north facing hill. It has no nearby safe areas where items can be safely dropped by parachute. When there are strong south west winds (not uncommon), the down draughts and rotor would make low flight hazardous for anyone nearby. The nearest safe place to drop a parachute would be the farmland not accessible to the public around 1 mile east of the hospital near the A69 road. It would need to be collected and transported the last mile by vehicle. The parachute itself would need to be returned to the take-off site by vehicle. All items would need to be checked by the appropriate staff before use.
- 3. With reference to Annex B. The proposed Temporary Danger Area would cause a number of airfields to cease flying. Hexham, which is in Class G airspace has been operational for 19years, the normal circuit pattern is within a radius of 1mile from the airstrip up to 1000ft above ground level – as is found at most small airstrips. Hexham airstrip can be seen on the commonly used Skydemon maps database. The Tyne valley is often traversed at this point avoiding the cloud covered Pennines to the west and the Newcastle zone to the east. The Tyne Valley is also a busy east -west route for other air traffic towards Carlisle, south west Scotland and towards Manchester. We look out for helicopters delivering jockeys to Hexham racecourse which is less than a mile to the north of us. We offer a friendly stop off point for light aircraft en route to Scotland, and are sometimes used as a precautionary landing site for gliders operating from Currock Hill, which is 10 miles to the east of us. With reference to area C, D and E on Figure B.3, none of this activity could continue if the Temporary Danger Area was imposed, and northsouth traffic may attempt to fly closer to the high ground and low cloud to the west. The imposition of area B as shown on Figure B.3 would effectively block northsouth traffic following the coast, and would pose an unacceptable risk to the safety of this traffic who may be tempted to fly far out to sea, much further than the safe

gliding distance to land in the event of an engine failure.

The Apian Trial Plan Northumbria Stage 2 ACP-2023-015 imposition of a Temporary Danger Area is not worthy of serious debate due to the lack of detail. The document does not show a case need, and the details of the delivery are not given. Most importantly, the continued safety of the traffic already using this airspace has not been considered. That is why I call it both ignorant and arrogant.



# Re: [Airspace] Trial Plan Northumbria Stage 2 ACP-2023-015

1 message

12 October 2023 at 10:50

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

Apian and Northumbria NHS Trust have been researching and testing how UAVs could be safely integrated in the aviation and healthcare setting. This trial aims to demonstrate and measure the impact on care pathways, patient outcomes and staff wellbeing through using on-demand deliveries. Using a UAV service will help augment existing ground transportation networks by providing a more reliable, environmentally friendly and faster alternative to improve the resilience within Northumbria's logistics.

In addition, given the geography and rurality of the population within Northumbria's care, an on-demand delivery can enable products and services to be shared through a regionalisation model, which can improve access to healthcare by bringing care closer to patients' homes. This UAS service will add additional capabilities and bring new benefits to existing ground NHS logistics services.

Whilst other modes of transport provide an essential and critical service to the patients and clinicians within Northumbria, some are run entirely by the goodwill of volunteers. This means they are only able to offer a limited, but vital, service for emergency use during out-of-hours and are unable to support the scale of clinical needs from the NHS. A person in a van would be unsustainable and inefficient given the number of deliveries required.

This trial will include a variety of use cases to capture the data and impact that this service could provide to the wider healthcare service, whilst demonstrating the benefits from a clinical, operational and environmental standpoint.

If you would like a call with our healthcare team; we would be more than happy to facilitate a meeting where we can discuss the use cases in more detail.

Thank you for the points you have raised regarding drop sites. We are in stage 1 of the Airspace Change Process (ACP), and our delivery locations and routes will be established when we have as much information from stakeholders as possible. We have received feedback from airfields, model flying units and VLOS operations who we will work with to ensure they can operate as normal. This in turn allows us to revise our TDA dimensions.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

We have been able to utilise heat maps which are very useful but these provide minimal information and miss important data we need, for example the heights pilots regularly fly at in the region and the weather conditions which impact these routes. As a direct result of this stakeholder engagement, we now have a better understanding of the operations conducted by the general aviation community, which is extremely helpful.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Wed, 20 Sept 2023 at 13:48, wrote: Please find the attachment containing details of my objection to Trial Plan Northumbria Stage 2 ACP-2023-015

Please let me know that it has been received

Thanks

vrote:



# Re: [Airspace] Proposed TDA in Northumberland

23 October 2023 at 13:37

On Wed, 20 Sept 2023 at 14:05, Dear Apian

It is with huge dismay that I have read your proposed TDA covering a huge area of airspace in an area I regularly fly through. My aircraft is based in Perth and I fly in this airspace and visit the affected airfields on a regular basis. I appreciate that trials must be performed however the airspace grab for this TDA is hugely excessive to the needs. Blocking the Tyne Valley and coastal transit routes for general aviation will cause massive limits on when we can fly vfr. In addition the closing of Stanton and Hexham airfields may cause considerable consequences to the farmers who own the airfields.

My opinion is that the TDA has not been thought through with any input from the grass roots flyers who are based or fly through this area. I strongly oppose this proposal and urge you to consult more of the stakeholders for input.

#### Regards





## Re: [Airspace] Proposed TDA in Northumberland

1 message

5 October 2023 at 10:20

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

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We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



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Blocking the Tyne Valley and coastal transit routes for general aviation will cause massive limits on when we can fly vfr. In addition the closing of Stanton and Hexham airfields may cause considerable consequences to the farmers who own the airfields.

My opinion is that the TDA has not been thought through with any input from the grass roots flyers who are based or fly through this area. I strongly oppose this proposal and urge you to consult more of the stakeholders for input.

Regards

23 October 2023 at 13:39

wrote:



# Re: [Airspace] Apian Northumbria NHS Air Grid Airspace change ID: ACP-2023-015

On Wed, 20 Sept 2023 at 14:33,

I object most strongly to the above proposal.

The proposal will make travel down the East Coast from Scotland to south of Newcastle potentially difficult to plan and carry out if I am being forced to fly out over the see or be restrained by unacceptable hight limits when there is low cloud. It also prevents access to 2 airfields that are potential diversion sites.

These and similar proposals should only be considered when drones are fitted with a see and avoid system.





### Re: [Airspace] Apian Northumbria NHS Air Grid Airspace change ID: ACP-2023-015

1 message

	5 October 2023 at 10:16
Dea	

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We would be more than happy to meet and discuss this with you.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

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Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the Airspace Modernisation Strategy

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



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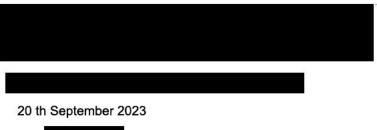
vrote:

These and similar proposals should only be considered when drones are fitted with a see and avoid system.



# [Airspace] Response to proposed airspace restriction TDA ACP 2023 15 UAS

1 message



20 September 2023 at 14:34

Dea

I detail below my initial responses in the required format ,to the above proposed TDA and initial trial operation using the UAV principle.

Your template for response ,via the CAA website, was not downloadable.

Name:	
E.mail address	
Representing	
Address:	

Feedback:

1. Having read through all of the proposal documentation and, particularly analysis of a similar trial operating to the north of Newcastle, the initial data from the latter seems unconvincing as, for presumably 120 outbound and return flights, the clinical gains seem small.

2. There is a lack of transparency over project forward costing data and, particularly, details of UAV costs and, whether there would be outright purchase of vehicles with maintenance or, lease and maintenance .Light aircraft are subject to specified maintenance and licensing and the UAV's must surely be aligned with that required of commercial aircraft, with attendant costing. How would such operational costs compare to those of perhaps a small fleet of electric 'white vans' with low carbon footprint, higher load capacity ,route flexibility and potentially better 'all weather' capability?

3. Reference in the technical specification was made to "relationship with the Newcastle Air Traffic with regard to ' possible ADS B absolute requirement to be fitted to the UAV ", and surely this must be mandatory ,specified as ADS B in and out, to ensure optimal safe identification and tracking of the UAV and collision avoidance? ADS B out is a requirement in the USA.

4. How safe are the proposed UAVs with respect to operation in poor weather conditions, frequently encountered in the Borders area and, particularly, what risks are there to the public and property if significant UAV airframe icing were to occur? Would these UAVs be fitted with ballistic recovery parachutes to, hopefully, minimise risks to the public and property and payloads? Payload content would often contain items with strict confidentiality observation requirement hence, reassurance over security needs to be evident.

5.What efforts will be made to provide and protect, possibly upon scheduled time periods per 'traffic lighting', for access' for light aircraft flying low level visual flight rule or, instrument flight rule, to ensure fair continuation of safest transit routing ,as opposed to forcing light aircraft to fly further west with increased mountainous collision risk or, further east out over the sea and in conflict with the designated instrument approach path for Newcastle Airport?

6. Finally, there appears to have been redaction over identification of 'project leads' upon the proposed trial, and as the service would be utilising NHS Public monies to underpin the trial, why has this occurred?

Whilst I am very much in favour of supporting technical advances in Healthcare which bring about cost efficiencies, modernisation and improved patient access and , specifically keeping both Primary and Secondary Care Practitioners and their teams in effective contact with patients I am unable to reconcile myself with this proposal until there is improved clarity over the specification and, in these difficult NHS funding times, that significant value for money can be demonstrated.

I look forward to further information with regard to this project either, directly from Apian Aero or, via the CAA website.

Yours sincerely,



Re: [Airspace] Response to proposed airspace restriction TDA ACP 2023 15 UAS 1 message

12 October 2023 at 16:01

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the <u>Airspace Modernisation Strategy</u>

Trials conducted by Apian are a staged, iterative process, which is common in aviation and also healthcare. In that process, there is always a stage that begins the journey and this is that stage for Apian. Trials enable learning which, in turn, enables safe scalability and increases delivery volumes.

The UAS operator for this trial will be equipped with ADS-B in to provide the UAS operator with a picture of air traffic. We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace. This trial forms the first phase of Apian's roadmap to integrated flights. We are closely monitoring the progress of the <u>Airspace Modernisation Strategy</u> and <u>electronic conspicuity</u> regulation and policy development in the UK as that will ultimately determine the technical requirements for integrated flights.

Whilst regulation in the USA is not applicable in the UK, ADS-B is mandated in the USA for all aircraft operating in Class A, B, and C airspace, as well as Class E airspace at or above 10,000 feet MSL, excluding airspace at and below 2,500 feet AGL.

Our UAS operator for this trial can fly in IFR conditions and has safety measures in place for all emergencies. As part of the approval process for our operations, the UAS operator will be required to have Operational Authorisation to operate. This process is completed alongside the airspace change process and is regulated by the UAS team within the CAA.

Regarding your comment about redaction of project leads, a redaction of personally identifiable information is standard for ACP Portal documents (irrespective of sponsor) as required by the CAA. Apian are the project leads and airspace change sponsors. This project is not funded by the NHS.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Wed, 20 Sept 2023 at 14:34,

wrote:

20 th September 2023

Dea

I detail below my initial responses in the required format ,to the above proposed TDA and initial trial operation using the UAV principle.

Your template for response ,via the CAA website, was not downloadable.

Name	
E_mail address:	
Representina:	
Address	

Feedback:

1.Having read through all of the proposal documentation and, particularly analysis of a similar trial operating to the north of Newcastle, the initial data from the latter seems unconvincing as, for presumably 120 outbound and return flights, the clinical gains seem small.

2. There is a lack of transparency over project forward costing data and, particularly, details of UAV costs and, whether there would be outright purchase of vehicles with maintenance or, lease and maintenance .Light aircraft are subject to specified maintenance and licensing and the UAV's must surely be aligned with that required of commercial aircraft, with attendant costing. How would such operational costs compare to those of perhaps a small fleet of electric 'white vans' with low carbon footprint, higher load capacity ,route flexibility and potentially better 'all weather' capability?

3.Reference in the technical specification was made to "relationship with the Newcastle Air Traffic with regard to ' possible ADS B absolute requirement to be fitted to the UAV ", and surely this must be mandatory ,specified as ADS B in and out, to ensure optimal safe identification and tracking of the UAV and collision avoidance? ADS B out is a requirement in the USA.

4.How safe are the proposed UAVs with respect to operation in poor weather conditions, frequently encountered in the Borders area and, particularly, what risks are there to the public and property if significant UAV airframe icing were to occur?Would these UAVs be fitted with ballistic recovery parachutes to, hopefully, minimise risks to the public and property and payloads? Payload content would often contain items with strict confidentiality observation requirement hence, reassurance over security needs to be evident.

5.What efforts will be made to provide and protect, possibly upon scheduled time periods per 'traffic lighting', for access' for light aircraft flying low level visual flight rule or, instrument flight rule, to ensure fair continuation of safest transit routing ,as opposed to forcing light aircraft to fly further west with increased mountainous collision risk or, further east out over the sea and in conflict with the designated instrument approach path for Newcastle Airport?

6 Finally, there appears to have been redaction over identification of 'project leads' upon the proposed trial, and as the service would be utilising NHS Public monies to underpin the trial, why has this occurred?

Whilst I am very much in favour of supporting technical advances in Healthcare which bring about cost efficiencies, modernisation and improved patient access and , specifically keeping both Primary and Secondary Care Practitioners and their teams in effective contact with patients I am unable to reconcile myself with this proposal until there is improved clarity over the specification and, in these difficult NHS funding times, that significant value for money can be demonstrated.

I look forward to further information with regard to this project either, directly from Apian Aero or, via the CAA website.

Yours sincerely,

Sent from my iPad



# [Airspace] ACP-2023-015

1 message

20 September 2023 at 16:03

Hi,

I've been asked a question and have struggled to find the definitive answer to respond with from the available documentation. Please can you help?

- 1. Assuming that the ACP is successful what are the currently proposed start and end dates for the airspace?
- 2. For what time periods per day is it envisaged that the TDAs will be active?

Apologies if I can't see the information for looking!!! SpecSavers need a new diagnosis called "ACP Data Blindness"!!!

Thank you





### Re: [Airspace] ACP-2023-015

1 message

21 September 2023 at 16:19

Good afternoon

Ha ha, sorry for adding to your reading, never apologise and thank you for reaching out.

The current stakeholder engagement references feedback on proposed operations for 6 months from 12 Feb 2024 for 24 hours a day. However, we want to make you aware that as a result of the stakeholder engagement we have received, we are going to revise our proposed TDA, this will have an impact on our timelines, as we want to ensure stakeholders have suitable time to provide us feedback.

As we have your details, we will include you in all our future communications and will be in contact with you soon relating to updating timelines.

Please let me know if you have any further questions.

Kind regards



On Wed, 20 Sept 2023 at 16:03,

Hi,

I've been asked a question and have struggled to find the definitive answer to respond with from the available documentation. Please can you help?

wrote:

- 1. Assuming that the ACP is successful what are the currently proposed start and end dates for the airspace?
- 2. For what time periods per day is it envisaged that the TDAs will be active?

Apologies if I can't see the information for looking!!! SpecSavers need a new diagnosis called "ACP Data Blindness"!!!

Thank you



### Aviation team at <u>airspace@apian.aero</u>

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name	
Email	
Representing	
Address (including postcode if possible)	

Feedback:

The Stage 1 trial did not impact our members and clubs, but the proposals detailed in Stage 2 will negatively impact a number of our affiliated clubs, operating model aircraft from the surface up within VLOS from fixed locations that fall within or close to the proposed TDA.

We are working to establish details of those clubs that will be impacted by the ACP which we can provide in due course.

We will require further engagement to see whether these sites can be avoided or whether there is a mechanism available to permit their continue operation within the TDA otherwise your proposal will have a serious negative impact on our members.



# Re: [Airspace] ACP-2023-015 - Feedback from the BMFA

1 message

Dear

9 October 2023 at 15:19

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided.

Thank you for your communication with your members and clubs on our behalf. As a result of this, we are now in contact with several of them who have kindly shared with us more details of their operations. We will remain in constant communication with them as we progress and will ensure they can still operate as normal.

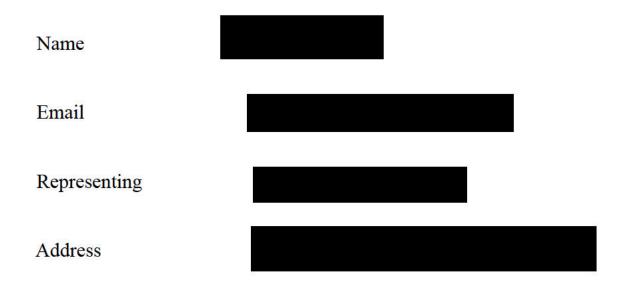
As a direct result of the feedback we have received from the GA community, we will now undertake a period of review before communicating a revised TDA and associated timelines with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards



On Wed, 20 Sept 2023 at 17:20, wrote: Please find attached our feedback in response to ACP 2023-015. Kind regards



Feedback

I am extremely disappointed that you see the need to close off such a large section of Airspace to all General Aviation users in the North East for what appears to be such a limited use. You are effectively removing the ability for GA aircraft to transit up the coast underneath Newcastle Airspace (which has a ceiling height of 1500 ft) & closing off the North South transit route & the East West route along the Tyne Valley past Hexham. This blocks all access along these routes unless there is a high cloudbase since we must fly VFR. You are also effectively closing airfields in the area & restricting the access to others. I also note that your proposal states integration to remove the need for segregated airspace & operate within controlled & uncontrolled airspace but by closing the airspace to other users you do not appear to have any intention of pursuing that aim. I also remember from a report on BBC Look North that you also stated that your drone would only fly VFR which restricts its use as an all weather 24/7 operation so would always need a back up service of road vehicles. I would think the money spent on this trial would be better spent on a less weather dependent delivery service.

My conclusion I object to the need to close off such a large amount of Airspace & to such a height.



an opuoo (wapianiaoi o

### Re: [Airspace] ACP-2023-015 Northumbria TDA Feedback

1 message

12 October 2023 at 16:10

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

We are currently in Stage 1 of the airspace change process, this allows us the opportunity to gain feedback from the wider aviation stakeholders on our proposal. It is not until this stakeholder engagement has been completed that we are able to have a complete view of operations in the area. Following stakeholder engagement, we will review all the feedback and reevaluate our proposal before conducting further engagement.

We aren't quite sure of the BBC Look North reference you have made, but the UAS that we are proposing to operate can operate in IFR. However, we would like to emphasise that using a UAV service will help augment existing ground transportation networks by providing a more reliable, environmentally friendly and faster alternative to improve the resilience within Northumbria's logistics.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Wed, 20 Sept 2023 at 21:08,

Attached is my feedback in response to the above.

Regards

vrote:



### [Airspace] TDA near Newcastle Airfield

1 message

20 September 2023 at 21:24

I am a retired Military Pilot but continue to fly out of Eshott Airfield some 5nm North of Newcastle CTA. There is also an active Microlight site at Atheys Moor a short flying distance from us.

Most aircraft flying South fly down the East Coast (proposed area B) this allows us to fly below Newcastle CTA of 1500ft. This route is available for non Radio traffic as well. Direct routing is subject to civilian traffic and controller pressure and on many occasion not available. It is unthinkable that this busy route would be denied to us and have a severe impact for many aviators.

Routing to the West round Newcastle CTA is an excellent way to the West via the Hexham gap and South to the Lake District however myself as a Microlight Pilot can only fly VFR and I have frequently flown at 1000ft agl down the Tyne Valley due to low cloud base. As a Military Pilot the Hexham gap is used for Low Level transit at 250 to 500ft MSD.

To conclude what is being proposed on the possible TDA both East and West of Newcastle should not happen on Flight Safety issues.

Sent from Mail for Windows



### Re: [Airspace] TDA near Newcastle Airfield

1 message

12 October 2023 at 16:26

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Thank you for sharing information regarding military operations, we are aware of the Hexham gap and continue to be in communication with the military regarding the airspace they utilise for exercises and operations.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

#### Kind regards



On Wed, 20 Sept 2023 at 21:24,

wrote:

I am a retired Military Pilot but continue to fly out of Eshott Airfield some 5nm North of Newcastle CTA. There is also an active Microlight site at Atheys Moor a short flying distance from us.

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To conclude what is being proposed on the possible TDA both East and West of Newcastle should not happen on Flight Safety issues.



# [Airspace] Objection to ACP-2023-015

1 message



20 September 2023 at 21:35

#### Dear Sir/Madam,

I wish to raise the following objections to the proposed Danger Area to cover the entire south of Northumberland. Please ensure that this is forwarded in its entirety to the CAA.

Risk of airborne collision:

The drone must be assumed to be at any point within the proposed Danger Areas. Possibly the worst collision scenario is as follows; following a road traffic accident, the air ambulance lifts with a patient onboard and during a particularly high workload phase is struck by the NHS drone. Safety from see-and-avoid is dependant on good lookout by both flying vehicles. This proposal is for the NHS to fly launch and forget UAVs and rely upon avoidance being actioned by the other airspace user. Technically this is a missile without explosive but impact energy never the less. It is a reckless way to advance the use of UAVs.

Other airspace users with requirements to be operating in the Northumberland low level airspace include the Police helicopters (high workload and time critical), VFR traffic negotiating bad weather (high workload, low experience and marginal visibility) is merely restricted to 500 feet above person, vessel, vehicle or structure. Precisely where the NHS UAV is to be flying blind. Aircraft can be below this level for the purpose of take off and landing and so consider the impact upon fixed wing aircraft into farm strips, gliders landing away, hot air balloons that operate in the area. All of these aircraft have limited manoeuvring to avoid the drone. That is if they are able to spot the drone (constant bearing and low conspicuity or head on to a small cross section to view). I have twice requested from Apian the Risk Assessments for the proposed UAV operation. They have not supplied them thus far.

Whether risk is calculated by Event Risk Calculation or as a product of probability and severity of outcome the resulting risk score is unacceptable.

The next tier down would be still a high risk: the proximity of the approach traffic to Newcastle runway 25. Traffic on profile crosses the NT at 690 feet altitude. The proposed drone danger area very close to traffic that is on profile. The margins of a below profile aircraft on approach and an unpiloted drone look to overlap.

The proposal is to overfly firing ranges and field shoots. Whilst the ranges are fixed and generally away from the drop sites, overflight risks do need to be considered. My main concern is the combination of a shoot in a field with the drone close to a drop site and therefore below cruising altitude and closer to the guns. Goodwill might be lost if the drone is to disturb game events by flying the drone over locations of shooting (ie any field in Northumberland).

#### Failure to integrate UAVs:

UAVs will need to be integrated with all other users of airspace. This is patently not integration rather it is segregation. UAVs should be monitored and flown to see-and-avoid. Operators should be enforced accept their responsibility for air safety whilst sharing the airspace with other users. Regulators have a duty to ensure this.

The proposal treats UAV operators with bias. The Apian UAV may have free access across southern Northumberland but existing commercial drone operators will be affected (risk of collision, unnecessary added complexity due to the DA, likely increase to insurance premiums due to operating in a Danger Area.)

Denial of airspace to present users for meagre reasons:

My understanding is that there is a twice daily van delivery to all the sites at present. It is electric and quite "green". This delivery service could be readily scaled up at a lower cost and higher reliability than UAVs subject to more

restrictive weather limitations (wind speed, icing, turbulence). Northumberland does get more severe weather than London and the van gets through the wind and snow.

Will the drone be flown within any and all areas of the Danger Area? If not, why is airspace being denied to users when it is planned to be left unused? At the very least this should be a proposal for highly flexible use of airspace with Apian seeking to use only the airspace immediately around its UAV. What is the Required Navigational Performance of the UAV? Apian requires only the airspace to bound the error of its navigation and no more.

The rare time when an emergency spare part is required to be delivered will only be successful if there is a technician available locally to receive parts. I doubt that this aspect of the justification is warranted.

#### Nuisance:

Noise nuisance is not simply peak volume but variance. City noise levels are much higher than the rural environment of Northumberland. The peak volume of the drone is more likely to be noticed in farming areas here. The way noise changes is an important factor in noise nuisance. During an overflight, the volume will change and the pitch will change with Doppler effect. Insufficient detail has been given in the proposal to say that noise nuisance has been fully assessed for humans and animals.

There is also the visual raptor appearance that will disturb livestock (sheep in lamb, cows in calf, pheasant rearing). Spooking flocks by overflight is cruel and financially damaging to farmers. It is known that drones upset animals. Injury to stock frightened by the UAV suddenly overflying without warning (a field between tree lines) needs to be assessed. Speaking with farmers and horse riders, they have major concerns of safety whilst working close to frightened animals.

Northumberland is not a wasteland, it is a rural area with natural world factors to which urban business and administration staff are often blind. It would be far more suitable for this trial and Danger Area to be placed over a major city where noise levels are high, light aircraft tend not to overfly and there is a decided lack of natural world. You would still have the risk of airborne collision with air ambulance and police helicopters, the risk of ground damage and injury following a bird strike.

Yours sincerely,



# [Airspace] Objection to ACP-2023-015

1 message



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Yours sincerely,

### Aviation team at <u>airspace@apian.aero</u>

A feedback form is provided, and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name	
Email	
Representing	
Address (including postcode if possible)	

Feedback: The BMFA North East Area have a licence from the Defence Infrastructure Organisation to fly radio-controlled model aircraft from the airfield that forms part of Albemarle Barracks. The Google maps reference is 55.023875, -1.874582, and What3Words location ///keyboards.rescue.inherit The airfield lies within the Newcastle ATZ and we have an agreement with Newcastle ATC that allows us to operate models up to 20Kg maximum take off mass at height up to 400' AGL. Whilst Albemarle is not in one of the proposed trial danger areas it is within the Newcastle ATZ, we feel that you should be aware of our activities. Any operation of your UAVs within the ATZ could severely impact our operations from this site which is the only one in the North East Area which allows our members to operate from a tarmac runway and it is also a regular venue for local and National competitions. All flying from this site is conducted within visual line of sight of the pilot and is normally confined to weekends.



### Re: [Airspace] ACP-2023-015 Feedback Form

1 message

10 October 2023 at 10:04

#### Dear

Thank you so much for your email. We really appreciate you reaching out to us and providing us with information about your operations. We want to assure you that if our proposal is approved, we have no intention of restricting your activities and would like to work collaboratively with you to ensure we have a suitable and safe solution in place that works for all. We have experience of working with other aviation operators, including local UA VLOS operators, to allow safe integration within the same airspace from previous trials. We will be in touch if we have any questions.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Wed, 20 Sept 2023 at 23:11,

rote:

Please find attached a completed feedback form from the North East Area of the British Model Flying Association.

Kind Regards.

Sent from Mail for Windows

Aviation team at

A feedback form is provided, and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name	
Email	
Representing	
Address (including postcode if possible)	

Feedback: Newcastle Model Flying Association have operated from our site on Newcastle Town Moor for over 45 years, and model flying on the Town Moor has taken place for close to 100 years with the earliest records showing model flying in 1925. The location of the site is at Google Maps reference 54.988494, -1.618141 or What3Words ///dips.slate.snake

The site is just outside the Newcastle Airport FRZ and we operate with the agreement of Newcastle ATC to a maximum of 400 feet and with models up to and including 7.5Kg maximum take-off mass and have measures in place to deal with occasional overflight by the police and air ambulance helicopters. Although we are not within the area covered by the proposed trial danger area but are within the Newcastle ATZ our activities would be severely impacted by your proposals should your UAVs operate within the ATZ. We would hope that the proposal could be amended, or measures put in place to allow us to continue to operate as we have for the past 90 odd years.



### Re: [Airspace] ACP-2023-015 Feedback Form

1 message

11 October 2023 at 15:55

Dea

Thank you so much for your email. We really appreciate you reaching out to us and providing us with information about your operations. We want to assure you that if our proposal is approved, we have no intention of restricting your activities and would like to work collaboratively with you to ensure we have a suitable and safe solution in place that works for all. We have experience of working with other aviation operators, including local UA VLOS operators, to allow safe integration within the same airspace from previous trials. We will be in touch if we have any questions.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Wed, 20 Sept 2023 at 23:13 wrote:
Please find attached a completed feedback form from



# [Airspace] Proposed Apian Northumbria NHS Air Grid

1 message



21 September 2023 at 09:17

Dear sirs,

I object to this airspace change proposal in the strongest terms as the TDA design completely fails to adhere to the CAA requirement to minimise impact on other air users. It closes two grass airstrips, blocks the busy East Coast VFR coastal transit route under the Newcastle CTA, creates choke points that will result in a large increase in traffic seeking Newcastle zone transits/Spadeadam D510 crossings and is unreasonable in its vertical planning, extending to around 1500ft AGL in the busy Tyne Valley transit route.

#### Area B

The East coastline under the base of the 1500ft Newcastle CTA is a busy transit route for VFR GA traffic and also allows non-radio traffic to move freely. Area B (SFC-1300ft) effectively blocks this route and will force east coast traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head 4 miles out to sea, significantly increasing risk for these air users who are traditionally historic aircraft or basic microlights.

As someone who has flown my microlight along that coast several times in recent years, having to fly out to see several miles adds the requirement to fly with lifejacket and, in the winter months, a survival suit and adds a significant danger level to what should be a simple flight along our coastline.

#### Area C & D

When active, Area C closes the Hexham and Stanton airstrips that have operated for many years and are home to a variety of LAA, BMAA and historic aircraft.

The design uses a blunt approach of 600ft AGL above tallest known feature, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. The Tyne valley is a primary coast-to-coast transit route for both civil and military traffic in the North and the proposed 1750ft/2000ft AMSL TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast-to-coast access.

#### DACS

Apian claim "Due to the heights of the proposed TDA complex (600 ft AGL above the tallest known feature), a Danger Area Crossing Service (DACS) will not be provided.". A DACS would allow both Stanton and Hexham to operate whilst allowing the continued flow of the busy Coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. The onus should be on Apian to resolve rather than a disingenuous and misleading statement.

#### **TDA Activation**

During previous UAS operations on the Northumberland Coast, there has been no evidence that Apian cancelled TDA activation by fresh Notam when operations were suspended for weather or serviceability, often for days on end. Instead airspace remained blocked to other users despite it being unused for days. Apian should release airspace once it is clear operations will be suspended. In the interest of transparency, Airspace usage statistics (days/hours flown v days/hours Notamed) should be publicly available to both the GA community and the regulator.

#### Summary

The extensive nature of this TDA will severely and negatively impact other air users in Northern England. I believe this trial only becomes viable when certified Detect and Avoid Technology is available enabling co-existance rather than implementation via a TDA. By progressing the TDA option, the wider flying community is being hugely restricted and put at significant risk which is totally unacceptable.

#### Yours faithfully,



# Re: [Airspace] Proposed Apian Northumbria NHS Air Grid

1 message

9 October 2023 at 15:37



Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other, we completely understand that this is not always feasible. It is extremely challenging to gain data on the GA operations at uncertified aerodromes, and proves why the stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

Apian was founded by two NHS doctors, and all of our work is focused on providing improved healthcare to our patients and clinicians. We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. The airspace proposed is directly linked to the use case requirements which are outlined in Annex B.

Current regulations mean that we are required to apply for a TDA, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the Airspace Modernisation Strategy

Regarding NOTAMs in our previous trial, these were cancelled by the UAS operator directly when we did not anticipate flying. As per the NOTAM process, these were cancelled through the Airspace Regulation (Utilisation) Operations team at the CAA, who communicate them to the aviation industry. Cancellations of TDA usage were due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations were not seen in advance. This approach to TDA utilisation was taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator and are finalising details with the CAA of an improvement process, however if you have suggestions to improve the safe sharing of this information, please let us know and we can discuss them with the CAA.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Thu, 21 Sept 2023 at 09:17

wrote:

I object to this airspace change proposal in the strongest terms as the TDA design completely fails to adhere to the CAA requirement to minimise impact on other air users. It closes two grass airstrips, blocks the busy East Coast VFR coastal transit route under the Newcastle CTA, creates choke points that will result in a large increase in traffic seeking Newcastle zone transits/Spadeadam D510 crossings and is unreasonable in its vertical planning, extending to around 1500ft AGL in the busy Tyne Valley transit route.

#### Area B

The East coastline under the base of the 1500ft Newcastle CTA is a busy transit route for VFR GA traffic and also allows non-radio traffic to move freely. Area B (SFC-1300ft) effectively blocks this route and will force east coast traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head 4 miles out to sea, significantly increasing risk for these air users who are traditionally historic aircraft or basic microlights.

As someone who has flown my microlight along that coast several times in recent years, having to fly out to see several miles adds the requirement to fly with lifejacket and, in the winter months, a survival suit and adds a significant danger level to what should be a simple flight along our coastline.

#### Area C & D

When active, Area C closes the Hexham and Stanton airstrips that have operated for many years and are home to a variety of LAA, BMAA and historic aircraft.

The design uses a blunt approach of 600ft AGL above tallest known feature, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. The Tyne valley is a primary coast-to-coast transit route for both civil and military traffic in the North and the proposed 1750ft/2000ft AMSL TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast-to-coast access.

#### DACS

Apian claim "Due to the heights of the proposed TDA complex (600 ft AGL above the tallest known feature), a Danger Area Crossing Service (DACS) will not be provided.". A DACS would allow both Stanton and Hexham to operate whilst allowing the continued flow of the busy Coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. The onus should be on Apian to resolve rather than a disingenuous and misleading statement.

#### **TDA Activation**

During previous UAS operations on the Northumberland Coast, there has been no evidence that Apian cancelled TDA activation by fresh Notam when operations were suspended for weather or serviceability, often for days on end. Instead airspace remained blocked to other users despite it being unused for days. Apian should release airspace once it is clear operations will be suspended. In the interest of transparency, Airspace usage statistics (days/hours flown v days/hours Notamed) should be publicly available to both the GA community and the regulator.

#### Summary

The extensive nature of this TDA will severely and negatively impact other air users in Northern England. I believe this trial only becomes viable when certified Detect and Avoid Technology is available enabling co-existance rather than implementation via a TDA. By progressing the TDA option, the wider flying community is being hugely restricted and put at significant risk which is totally unacceptable.

Yours faithfully,





# [Airspace] Objection to ACP- 2023 -15

1 message

Sir/Madam,

I am the Farmer and pilot who resides at the address below and I wish to strongly object to the above proposal which will seriously affect my business. Below are the points already submitted by my brother **address** who operates our airstrip on behalf of the farm, I fully concur with all these points and submit them for your attention.

I refer to the recent application (ACP-2023-015) of a TDA for a period of six months by Apian in order to conduct another drone trail funded by SBRI, a government organisation ultimately paid for by the taxpayer. The proposal submitted by Apian envisages a large amount of real estate in terms of airspace in the Northumberland area. I wish to register my objection to this proposal.

In the first instance we have not been furnished with the detailed results of Apian's previous trial (ACP-2022-031). I believe that Apian were under a duty to provide data under CAP 1616 Airspace Change Process? This is surely a matter for airspace regulation by the CAA? We are being pushed into making a decision without the detailed findings made to Airspace Regulation by Apian after their first trail, where is this information? This information needs to be shared with all stakeholders by Airspace Regulation.

This proposed airspace is divided into several areas which give me a great deal of concern. My primary concern is safety! And secondly it will greatly affect our private airstrip which has been operating for well over 25 years. A similar situation to that of Hexham Airstrip which also is under threat. I believe that the proposal is unsafe to other airspace users and takes up an extraordinary amount of airspace for the proposed drone use over this period.

Under the present plan submitted two very important major aviation routes would be blocked to other users. Area 'B' which is the main north south corridor for transiting aircraft heading up or down the east coast to Scotland or England past the Newcastle Airport Control zone goes from ground level to 1300ft. Aircraft wishing to transit basically have their long-established transit route blocked. This is unworkable and in essence and reality aircraft will be forced out to sea to avoid this limitation, a distance of about 4 miles out to sea to be precise.

The consequences on the safety margin on this limitation could be fatal. For instance, a two stroke Flex-wing microlight sustaining an engine failure at this distance out to sea would be in danger of having to ditch into the water in the event of an engine failure and the pilot/passengers would be unlikely to survive. In short, this proposal is dangerous to other users and stakeholders.

The other consideration is use of the Hexham Gap. This is the corridor of airspace basically following the A69 road area across the Pennines. Again, I feel that there is a lack of local knowledge from Apian regarding this proposal. Areas C, D and E range from ground level to 1750ft, to 2300ft. Anyone with local knowledge knows that the cloud base can close right down over the hills in this area and funnels traffic into a narrow corridor up the Tyne Valley gap. Many aircraft sometimes have to hug the valley in order to cross the Pennines. These limitations will effectively close the gap for many users or worse, increase the probability of a mid-air collision if aircraft are forced to the south and north boundaries of this airspace if cloud-base funnels them into a limited area.

Surely as stated in Apain previous publications the optimum height for a drone is 400ft AGL. Clearly this is not being applied in this case. The width of the TDA is extensive and I am assuming this is due to the fact that Apain wish to deliver to a variety of locations which pose their own safety issues with regards to the public however is it really necessary to use such a large area when drones can follow strict and limited corridors and reduce the effect on other users. I trust that a full and comprehensive risk assessment has been carried out on all intended operating locations. Are these available for scrutiny?

In previous trials when the TDA was not operational Apian made no attempt to NOTAM this fact thereby keeping valuable airspace closed to other users for no reason whatsoever. This is an example of poor airspace management.

I am the farmer at Stanton Airstrip which has been in existence for over 25 years. The airstrip is home to several aircraft and pilots. It is situated at TDA.

The farm itself is only 215 acres which in farming terms is very small and has been farmed by the same family since 1880. In order to survive on such a small plot, the farm has had to diversify into other areas to make the business viable. The airstrip is a vital part of the business setup and if this proposal goes ahead then Stanton Airstrip as well as Hexham airstrip will be forced to close.

The existing pilots would be unlikely to return if forced away to another airfield after a 6-month period and this side of the business has been built up over many years. Both myself and my brother who is also a pilot would be forced to sell our aircraft. Indeed, the strip has been used in the past by other pilots for emergency landings due to weather on more than one occasion. Having taken legal advice we would therefore seek compensation from the CAA in the event of the airfield being forced to close by a third party for loss of present and future earnings.

We would also draw attention to the fact that CAP 1616 dictates that the trail should be no longer than 90 days unless there are extraordinary circumstances. At the time of writing I have not been informed of any extraordinary circumstances regarding this proposal.

In summary I do not think this proposal has fully appreciated the effect on safety and on other stakeholders in the area and has been ill thought out. I am not against the use of drones where there is an economic viability and necessity but from what I have learned this expensive project will not prove itself to be a viable one due to drone limitations and costs involved in comparison to existing volunteer drivers and riders, however it would be nice to see the detailed financial and operational costs so this can be fully scrutinised. Perhaps a freedom of information request may be the only vehicle under which this can be achieved.





# Re: [Airspace] Re: Objection to ACP- 2023 -15

1 message

13 October 2023 at 16:29

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided.

We have really appreciated the communication we have had with your brother regarding the airfield, and as explained to him we do not want to and won't close your airstrip. We apologise that this was not clear in our early conversations.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

We are currently in Stage 1 of the airspace change process, this allows us the opportunity to gain feedback from the wider aviation stakeholders on our proposal. It is not until this stakeholder engagement has been completed that we are able to have a complete view of operations in the area.

Stage 4b includes safety, operational and other assessments that may be required to support our submission. The stages for a trial airspace change can be found on the <u>CAAAirspace Change Portal</u> and details of what information needs to be provided can be found in <u>CAP1616</u>.

The UAS operator will also require Operational Authorisation from the CAA. During this application the CAA check that operations are compliant with regulations and they also evaluate the operational risk assessment completed by the UAS operator. The information required for the risk assessment is covered by <u>Article 11</u> of UK Regulation (EU) 2019/947 and information submitted to the CAA as part of the application process is explained in <u>CAP 722A</u>. Information submitted to the CAA for the Specific category application is not made public and this is in line with other application processes managed across the CAA's regulatory teams (crewed and uncrewed).

Apian is applying for a trial of which details can be found in the <u>Air Navigation Directions 2023</u> issued by the Government and <u>CAP1616 Part 1b 312</u>. This allows for a longer period of operating, for up to 6 months. The CAA has assessed that we meet the requirements and 6 months can be requested. Although the CAA has not made any decision on whether the TDA will be approved as we are not yet at that stage of the application.

Regarding NOTAMs of our previous trial. We can confirm Apian and our UAS operator always followed the correct protocol when it came to closing the TDA when not in use.

NOTAMs were cancelled by the UAS operator directly when we did not anticipate flying. As per the NOTAM process, these were cancelled through the Airspace Regulation (Utilisation) Operations team at the CAA, who communicate them to the aviation industry. Cancellations of TDA usage were due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations were not seen in advance. This approach to TDA utilisation was taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator and are finalising details with the CAA of an improvement process, however if you have suggestions to improve the safe sharing of this information, please let us know and we can discuss them with the CAA. Information about our previous trial including a report, can be found on the ACP portal here.

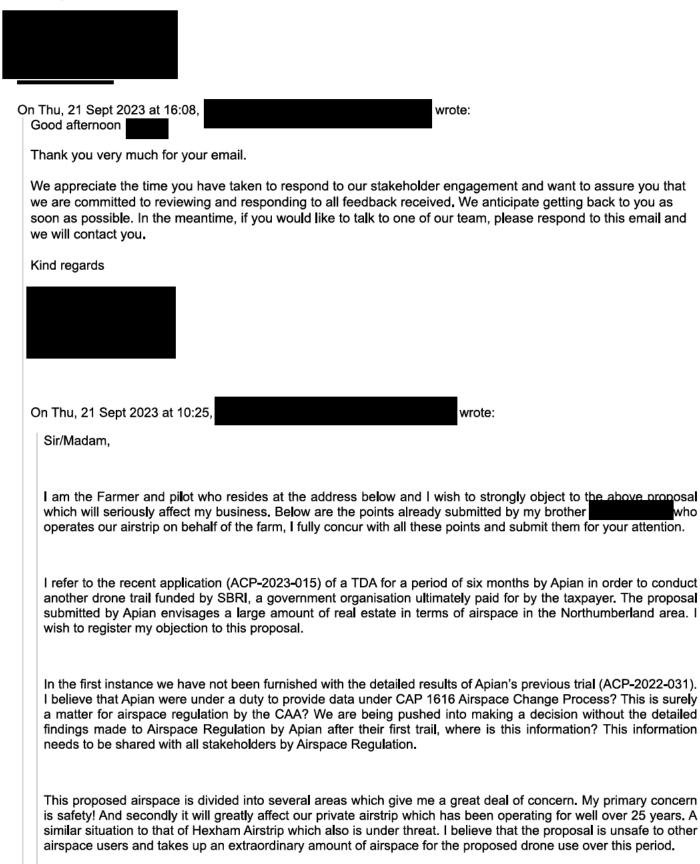
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# [Airspace] FW: Objection to ACP- 2023- 15

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# Re: [Airspace] FW: Objection to ACP- 2023- 15

1 message

13 October 2023 at 16:15

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better understanding of other airfields who were happy for us to visit. As a direct result of feedback from you and the GA community, we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

Our work is looking to make improvements and innovate on the great services and support the NHS currently provides. We are always looking ahead to the ever changing challenges the NHS faces, and help create the future of the healthcare service. This will ultimately provide better clinical care, release valuable staff time and improve the efficiency of care pathways. With the continued resource pressures the NHS faces, we believe that UAS can help to provide improved healthcare for the Northumberland community.

Whilst we are happy to discuss the financial implications of the project, it's important to emphasise that the research and development costs do not reflect the longer-term projection for the service costs. For example, <u>McKinsey & Company</u> forecast that costs per delivery will be between \$1-2 per package within the next 5-10 years. In addition, we will measure how a UAS-enabled centralisation model could positively impact cost savings, efficiencies and resilience for the wider healthcare service.

This trial aims to gather the data, and evidence whilst demonstrating how this service could become the blueprint and provide impact to other NHS Trusts. Our healthcare team would welcome a meeting with you to share details regarding the benefits Northumbria NHS hopes to gain from this trial, how we fit into the broader healthcare ecosystem and the further benefits this could bring to the region.

We look forward to hearing from you to schedule a meeting, in the meantime, if you have any further questions, please do not hesitate to contact us.

Kind regards,



On Thu, 21 Sept 2023 at 10:29

wrote:

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The consequences on the safety margin on this limitation could be fatal. For instance, a two stroke Flex-wing microlight sustaining an engine failure at this distance out to sea would be in danger of having to ditch into the water in the event of an engine failure and the pilot/passengers would be unlikely to survive. In short, this proposal is dangerous to other users and stakeholders.

apian.aero Mail - Re: [Airspace] FW: Objection to ACP- 2023- 15

The other consideration is use of the Hexham Gap. This is the corridor of airspace basically following the A69 road area across the Pennines, Again, I feel that there is a lack of local knowledge from Apian regarding this proposal. Areas C, D and E range from ground level to 1750ft, to 2300ft. Anyone with local knowledge knows that the cloud base can close right down over the hills in this area and funnels traffic into a narrow corridor up the Tyne Valley gap. Many aircraft sometimes have to hug the valley in order to cross the Pennines. These limitations will effectively close the gap for many users or worse, increase the probability of a mid-air collision if aircraft are forced to the south and north boundaries of this airspace if cloud-base funnels them into a limited area.

Surely as stated in Apain previous publications the optimum height for a drone is 400ft AGL. Clearly this is not being applied in this case. The width of the TDA is extensive and I am assuming this is due to the fact that Apain wish to deliver to a variety of locations which pose their own safety issues with regards to the public however is it really necessary to use such a large area when drones can follow strict and limited corridors and reduce the effect on other users. I trust that a full and comprehensive risk assessment has been carried out on all intended operating locations. Are these available for scrutiny?

In previous trials when the TDA was not operational Apian made no attempt to NOTAM this fact thereby keeping valuable airspace closed to other users for no reason whatsoever. This is an example of poor airspace management.

I operate Stanton Airstrip which has been in existence for over 25 years. The airstrip is home to several aircraft and pilots. It is situated at It falls within the area of the TDA.

The farm itself is only 215 acres which in farming terms is very small and has been farmed by the same family since 1880. In order to survive on such a small plot, the farm has had to diversify into other areas to make the business viable. The airstrip is a vital part of the business setup and if this proposal goes ahead then Stanton Airstrip as well as Hexham airstrip will be forced to close.

The existing pilots would be unlikely to return if forced away to another airfield after a 6-month period and this side of the business has been built up over many years. Both myself and my brother who is also a pilot would be forced to sell our aircraft. Indeed, the strip has been used in the past by other pilots for emergency landings due to weather on more than one occasion. Having taken legal advice we would therefore seek compensation from the CAA in the event of the airfield being forced to close by a third party for loss of present and future earnings.

We would also draw attention to the fact that CAP 1616 dictates that the trail should be no longer than 90 days unless there are extraordinary circumstances. At the time of writing I have not been informed of any extraordinary circumstances regarding this proposal.

In summary I do not think this proposal has fully appreciated the effect on safety and on other stakeholders in the area and has been ill thought out. I am not against the use of drones where there is an economic viability and necessity but from what I have learned this expensive project will not prove itself to be a viable one due to drone limitations and costs involved in comparison to existing volunteer drivers and riders, however it would be nice to see the detailed financial and operational costs so this can be fully scrutinised. Perhaps a freedom of information request may be the only vehicle under which this can be achieved.

Aviation team at

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name		
Email		
Representing		
Address (including postcode if possible)		

Feedback:

Whilst the supply of medical equipment is a very important issue with regards to speed, cost and the environment. Model flying in the UK will be taking yet another hit. The hobby is already in the decline with the cost of living, aging members, CAA legislation and the ever-expanding urban sprawl. What is ironic id the fact that the technology originally intended for our hobby has the potential to restrict what we do.

I do hope that some form of agreement can be reached by all parties so model flying can be continued to the same level in the UK.

For information our site is located 55.128580, - 1.733573

We are in controlled airspace of which we have a LOA with Newcastle Airport.

Regards



## **Re: [Airspace] Feedback Form**

1 message

13 October 2023 at 12:29

#### Dea

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We also really appreciate the information you have provided us about your operations.

We want to assure you that if our proposal is approved, we have no intention of restricting your activities and would like to work collaboratively with you to ensure we have a suitable and safe solution in place that works for all. We have experience of working with other aviation operators, including local UA VLOS operators, to allow safe integration within the same airspace from previous trials. We will be in touch if we have any questions.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Thu, 21 Sept 2023 at 14:07, Feedback for as requested

Regards



## [Airspace] Objection to Tyne Valley ACP

1 message

Dea

Please note my objection in the strongest possible way to your proposal for a TDA along the Tyne valley to the coast line and beyond.

It comes across as naive, with unnecessarily high vertical limits in an already congested area of airspace.

The east coast is a popular transit route avoiding controlled airspace and relieves pressure on the air traffic controller at Newcastle airport, this will increase their workload with constant transit requests. The only alternative would be to be pushed out to sea in single engine aircraft. Increasing risk to life of pilots.

To the west is the Tyne Valley low level transit route, which a useful transit area between established military danger areas and controlled airspace. This will push pilots into unacceptably low flying and close to terrain again endangering pilots.

This is a highly damaging proposal for the local flying community and will be detrimental to grass roots flyers.

We are still waiting for the result of your previous trial to be released even though you are duty bound to do so by CPA1616. Is it your intention to release the results of this trial? We watched this trial and on the many, many occasions you were grounded you failed to cancel the TDA and open up the airspace. You can see why the flying community are frustrated with your poorly considered approach to these trials.

I appreciate we need to share our airspace. However, an unequitable and unconsidered approach reinforces the resistance to progress. It would be a far more pragmatic approach to workshop with other airspace stakeholders for a viable solution. I feel you could also benefit from the local knowledge for beneficial routes and TDA airspace segregation.

I ask that this TDA is cancelled and reworked with the local flying community and please release the information of the first trial so we can see a second trial not blindly repeating the process and is justified.

Regards,



# Re: [Airspace] Objection to Tyne Valley ACP

1 message

13 October 2023 at 12:46

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Information about our previous trial including a report, can be found on the ACP portal <u>here</u>. Regarding closure of the TDA in our previous trial, these were cancelled by the UAS operator directly when we did not anticipate flying. As per the NOTAM process, these were cancelled through the Airspace Regulation (Utilisation) Operations team at the CAA, who communicate them to the aviation industry. Cancellations of TDA usage were due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations were not seen in advance. This approach to TDA utilisation was taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator and are finalising details with the CAA of an improvement process, however if you have suggestions to improve the safe sharing of this information, please let us know and we can discuss them with the CAA. We have raised the concerns highlighted to us by stakeholders with and are finalising details with the CAA of an improvement process.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Thu, 21 Sept 2023 at 14:58

rote:

Dear

Please note my objection in the strongest possible way to your proposal for a TDA along the Tyne valley to the coast line and beyond.

It comes across as naive, with unnecessarily high vertical limits in an already congested area of airspace.

The east coast is a popular transit route avoiding controlled airspace and relieves pressure on the air traffic controller at Newcastle airport, this will increase their workload with constant transit requests. The only alternative would be to be pushed out to sea in single engine aircraft. Increasing risk to life of pilots.

To the west is the Tyne Valley low level transit route, which a useful transit area between established military danger areas and controlled airspace. This will push pilots into unacceptably low flying and close to terrain again endangering pilots.

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I ask that this TDA is cancelled and reworked with the local flying community and please release the information of the first trial so we can see a second trial not blindly repeating the process and is justified.

Regards,





## [Airspace] drone trial tyne valley.

1 message

21 September 2023 at 15:19

sir,

late to the party here but just to add my name to the objectors to the nhs drone trial along the tyne valley. i am a ppl who lives in the tyne valley, flying from both carlisle and newcastle, and this qualifies me to comment. i do believe the way the consultation has been arranged is flawed with apian themselves being responsible for passing on feedback will present a skewed view of the proposals with many of the objections not being considered. furthermore there is already in place a system of voluntary blood bikes who perform this service free of charge! blood bikes also run cars so there is nothing the drones could do that cannot already be done, in all weathers, by the existing network.

this is a total waste of nhs money and should be consigned to the garbage before it is even out of the box.

regards,



## Re: [Airspace] drone trial tyne valley.

1 message

13 October 2023 at 16:33

Dea

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

A copy of all the stakeholder feedback we have received will be sent to the CAA as part of our submission. This feedback <u>will not</u> be adjusted by the sponsor and will be available for you to view on the ACP portal when we submit. The feedback will be redacted to not share any personal information.

It is important to understand that whilst other modes of transport provide an essential and critical service to the patients and clinicians within Northumbria, some are run entirely by the goodwill of volunteers. This means they are only able to offer a limited, but vital, service for emergency use during out-of-hours and are unable to support the scale of clinical needs from the NHS. A person in a van would be unsustainable and inefficient given the number of deliveries required.

This trial is not funded by the NHS.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Thu, 21 Sept 2023 at 15:20 sir, vrote:

late to the party here but just to add my name to the objectors to the nhs drone trial along the tyne valley. i am a ppl who lives in the tyne valley, flying from both carlisle and newcastle, and this qualifies me to comment. i do believe the way the consultation has been arranged is flawed with apian themselves being responsible for passing on feedback will present a skewed view of the proposals with many of the objections not being considered.

furthermore there is already in place a system of voluntary blood bikes who perform this service free of charge! blood bikes also run cars so there is nothing the drones could do that cannot already be done, in all weathers, by the existing network.

this is a total waste of nhs money and should be consigned to the garbage before it is even out of the box.



## [Airspace] Proposed airspace change

1 message

22 September 2023 at 09:18

I am writing to object to the proposed airspace change proposal in respect of ACP-2023-015

Whilst I recognise the need to develop new technology and to build a safety-inclusive infrastructure around it, the proposed area and vertical boundaries represent a serious risk to flight safety for the General Aviation community of which I am one.

I regularly fly north-south across the area which would be affected by the proposed TDA. I learned to fly at Newcastle and so I am very familiar with the terrain and use of that airspace.

It is ironic that the 600' buffer which the proposal includes provides protection for drone traffic, but the proposed vertical limit of the airspace in many area provides far less buffer between the top of the TDA and the lower limit of controlled airspace (for example in area A). And at the western side of the area there will be a very narrow gap between the top of the TDA and the likely cloudbase on many days for those flying VFR west and north from Newcastle, or to east or west of the Newcastle CTR if a zone crossing is unavailable.

I am not opposed to the idea of drone use of airspace. It would be a Luddite reaction to be so. But I am opposed to the idea that one single user can monopolise so much airspace to the exclusion and risk of all others. This is not a proportionate use of the airspace.

Rather than conduct a "land grab" on such a large volume of airspace, Apian and others need to improve their technology first, integrating it with whatever future electronic conspicuity measures may be needed for conflicting traffic, including my own. I accept that the GA community will need to be more electronically conspicuous if we are not to stifle innovation in the UAV sector. But the way to enhance that innovation while maintaining open access to airspace, is to get the conspicuity technology as fully developed as the UAV control technology and then implement it. Not one before the other.

yours sincerely



## Re: [Airspace] Proposed airspace change

1 message

Dear

12 October 2023 at 16:17

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. This trial forms the first phase of Apian's roadmap to integrated flights. We are closely monitoring the progress of the <u>Airspace Modernisation</u> <u>Strategy</u> and <u>electronic conspicuity regulation and policy development</u> in the UK as that will ultimately determine the technical requirements for integrated flights.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Fri, 22 Sept 2023 at 09:18,

vrote:

I am writing to object to the proposed airspace change proposal in respect of ACP-2023-015

Whilst I recognise the need to develop new technology and to build a safety-inclusive infrastructure around it, the proposed area and vertical boundaries represent a serious risk to flight safety for the General Aviation community of which I am one.

I regularly fly north-south across the area which would be affected by the proposed TDA. I learned to fly at Newcastle and so I am very familiar with the terrain and use of that airspace.

It is ironic that the 600' buffer which the proposal includes provides protection for drone traffic, but the proposed vertical limit of the airspace in many area provides far less buffer between the top of the TDA and the lower limit of controlled airspace (for example in area A). And at the western side of the area there will be a very narrow gap between the top of the TDA and the likely cloudbase on many days for those flying VFR west and north from Newcastle, or to east or west of the Newcastle CTR if a zone crossing is unavailable.

I am not opposed to the idea of drone use of airspace. It would be a Luddite reaction to be so. But I am opposed to the idea that one single user can monopolise so much airspace to the exclusion and risk of all others. This is not a proportionate use of the airspace.

Rather than conduct a "land grab" on such a large volume of airspace, Apian and others need to improve their

#### apian.aero Mail - Re: [Airspace] Proposed airspace change

technology first, integrating it with whatever future electronic conspicuity measures may be needed for conflicting traffic, including my own. I accept that the GA community will need to be more electronically conspicuous if we are not to stifle innovation in the UAV sector. But the way to enhance that innovation while maintaining open access to airspace, is to get the conspicuity technology as fully developed as the UAV control technology and then implement it. Not one before the other.

yours sincerely



# [Airspace] UAV Trial Plan Northumbria NHS Stage 2 ACP-2023-015

1 message

22 September 2023 at 12:34

Dear I

As a pilot operating from East Fortune and a Civil Air Support pilot covering East Lothian and Borders areas, I concur fully with the views below sent to you by my CAS observer and fellow pilot

Sincerely,



I fully appreciate and sympathise with the use of innovative and cost effective methods of delivering healthcare and its ancillaries in the Borders and Northumberland areas.

However, as a private pilot and taxpayer, I also object to the poorly designed application (in its current form), for airspace usage to trial UAV (Unmanned Aerial Vehicle) transits and deliveries in the vicinity of Newcastle to Haltwhistle for Northumbria NHS. It should be noted that UK airspace at all levels is busy and crowded, and lower level airspace carries its own specific risks to potential users.

I attach your proposal map to remind us of your proposed Temporary Danger Area.

Your proposal envisages using rail launched UAVs on BVLOS (Beyond Visual Line Of Sight) flights to 27 sites in Northumberland at approx. 400ft above ground level. These flights to be conducted 24/7 from mid-February to mid-August 2024 at any time?!

Unfortunately in this application it appears that you are claiming the exclusive use of 5 huge blocks of airspaces with heights up to 2,300ft above mean sea level rather than adopting narrow 'flight corridors' on sensibly pre-planned 'routes' at with ceilings of 600ft above ground level.

I have previously asked you to properly 'consult' appropriate stakeholders on your previous trials over the Berwickshire and Northumberland coast, and have yet to see the full report and conclusions on how successful or otherwise that recent trial was?

I therefore ask you to re-design your proposal to take proper account of other pre-existing airspace users, and in support of this request I offer the following more detailed material comments below.

- 1. The proposed Temporary Danger Area (TDA) will effectively close GA airstrips at both Loadman Farm and Stanton. These local sites (already at risk from post-Covid19 and revenue issues) may lose further revenue and be forced to close permanently.
- It will compromise and limit the aviation activities at RAF Spadeadam, Otterburn Camp, Currock Hill, Fishburn, Athey's Moor, Eshott, Milfield, Lempitlaw, Eccles Newton, Nether Huntlywood, Midlem, East Fortune, Kirkbride, Carlisle and others further afield.
- The UAVs used do not appear to carry sufficient 'detect and avoid' capabilities, and would require to be fitted with multiple 'electronic conspicuity' devices to enable

commercial aviation, Emergency Services a/c, GA (General Aviation) and military traffic to 'see' them electronically. You would have to fit all current forms of 'electronic conspicuity' to be as safe and inclusive as possible.

- 4. Lack of terrain following corridors at 600ft Above Ground Level. Although the proposed UAVs may operate at less than 400ft, you appear to have added 600ft onto the tallest feature in each TDA resulting in the TDAs becoming 1500ft AGL in many places. This 'blanket' approach causes you to seek approval for very large areas of Class G airspace unnecessarily.
- 5. Your proposed blocks of airspace vary from ~5 to ~11 Nautical Miles in width, which is a very big 'airspace grab'!?
- 6. You do not consider the needs of other airspace users with regard to meteorological and terrain constraints in regard to aviation safety.
- 7. You appear not to consider that there are aircraft 'out there' who carry neither radio or 'electronic conspicuity' and that is a normal for some, and this should be your 'lowest common denominator'!
- 8. Your use of the NOTAM system of alerting airspace users has not been very specific in previous trials, and I hope you would seek to minimise your active use of the TDAs regardless, much more rather than continuously 'blocking' the airspace.
- 9. You do not appear to consider providing a Danger Area Crossing Service (DACS)!?
- 10. Your proposal impacts on 2 military Low Flying Areas and an MOD (RAF) Area of Intense Aerial Activity.

## Area B:

The TDA will block the very busy coastal 'transit route' under the Newcastle Control Zone causing aircraft to fly much further out to sea and increasing flight risk (from Druridge Bay to Whitley Bay). This route is one of the main two that allow aircraft to easily and safely bypass Newcastle Control Zone without disturbing Air Traffic Control.

This area for VFR (Visual Flying Rules) GA traffic normally also enables non-radio traffic to move freely, and is critical for aircraft use in poor meteorological conditions eg low cloud etc. This also creates issues for those air users who are traditionally historic aircraft, open cockpit, or basic microlights.

Loss of this area would require east coast air traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is constantly short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head four miles out to sea, significantly increasing risk, especially where single engined aircraft are affected. The TDA prevent transits of the key Tyne Valley transit route near Stagshaw masts and Corbridge when the cloud base is around 2000ft.

## Area C:

When in use, Area C effectively shuts down the Loadman Farm and Stanton airstrips that have operated for years on a PPR (Prior Permission Required) basis, and are regularly used by LAA, BMAA and historic aircraft.

The proposal uses a 600ft AGL above tallest feature in area, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D, which makes much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL.

## Areas C and D:

The South Tyne Valley and Irthing Valley is a traditional E/W and W/E coast to coast transit route for civil and military traffic, and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. Haltwhistle is close to the 'high point' of this through route between the hills. Route choices for aviation, especially in low cloud, here are also limited by the RAF Spadeadam Danger Area to the north, and terrain features to the south.

## DACS (Danger Area Crossing Service):

You have dismissed providing a Danger Area Crossing Service (DACS).

A DACS would allow both Stanton and Loadman Farm airstrip to maintain their operations by 'de-confliction' with your trials, and would allow safe use of the busy coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. As it stands your proposal would endanger a/c on approach/departure and in training circuits at the above named two airfields, and those in transit east and west of Newcastle Airport. If you really want to gain control of these 5 large blocks of airspace, I consider you should provide a DACS for the duration in the same way as other more conventional Control Areas do already. The DACS should be biased towards providing safe passage for aircraft with persons on board as a priority.

## **Electronic Conspicuity:**

The UK Civil Aviation Authority is currently promoting aircraft usage of 'electronic conspicuity' devices, and although there is no single 'standard' as yet, there are 'front runners' in this field eg FLARM, PilotAware, ADSB, SkyEcho etc.

Apian and your UAV contractors should adopt and fit devices to enable their UAVs to be able to broadcast out, detect, 'see', and avoid other airspace users as a critical safety measure; one must remember that UAVs do not have the luxury of an 'on-board' pilot.

### To conclude:

The extensive nature of this poorly constructed TDA will negatively impact other airspace users especially in the North East of the UK. I do not understand why you have not created legitimate 'flight corridors' for your trials?

The 'blanket' approach to this TDA does not take account of any other existing airspace users, or terrain/geography, and meteorological requirements of other airspace users.

Apian's current application for this TDA package, restricts the wider flying community, putting both 'trial sponsors' and the aviation community at significant risk which is unacceptable. I believe this type of trial will only become safe when proven 'detect and avoid' technology is available and used in conjunction with 'electronic conspicuity' enabling co-existence rather than implementation via a TDA.



ACP2023-015FigB3.png 6773K



# Re: [Airspace] UAV Trial Plan Northumbria NHS Stage 2 ACP-2023-015

Diali	23 October 2023 at 14:5
On Fr	ri, 22 Sept 2023 at 12:35
	Dear
	As a pilot operating from East Fortune and a Civil Air Support pilot covering East Lothian and Borders areas, I concur fully with the views below sent to you by my CAS observer and fellow pilot
I	Sincerely,
1 Î Î	
	I fully appreciate and sympathise with the use of innovative and cost effective methods of delivering healthcare and its ancillaries in the Borders and Northumberland areas.
	However, as a private pilot and taxpayer, I also object to the poorly designed application (in its current form), for airspace usage to trial UAV (Unmanned Aerial Vehicle) transits and deliveries in the vicinity of Newcastle to Haltwhistle for Northumbria NHS. It should be noted that UK airspace at all levels is busy and crowded, and lower level airspace carries its own specific risks to potential users.
	I attach your proposal map to remind us of your proposed Temporary Danger Area.
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	Unfortunately in this application it appears that you are claiming the exclusive use of 5 huge blocks of airspaces with heights up to 2,300ft above mean sea level rather than adopting narrow 'flight corridors' on sensibly pre-planned 'routes' at with ceilings of 600ft above ground level.
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	<ol> <li>The proposed Temporary Danger Area (TDA) will effectively close GA airstrips at both Loadman Farm and Stanton. These local sites (already at risk from post-Covid19 and revenue issues) may lose further revenue and be forced to close permanently.</li> <li>It will compromise and limit the aviation activities at RAF Spadeadam, Otterburn Camp, Currock Hill, Fishburn, Athey's Moor, Eshott, Milfield, Lempitlaw, Eccles Newton, Nether Huntlywood, Midlem, East Fortune, Kirkbride, Carlisle and others further afield.</li> <li>The UAVs used do not appear to carry sufficient 'detect and avoid' capabilities, and would require to be fitted with multiple 'electronic conspicuity' devices to enable</li> </ol>

commercial aviation, Emergency Services a/c, GA (General Aviation) and military traffic to 'see' them electronically. You would have to fit all current forms of 'electronic conspicuity' to be as safe and inclusive as possible.

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Loss of this area would require east coast air traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is constantly short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head four miles out to sea, significantly increasing risk, especially where single engined aircraft are affected. The TDA prevent transits of the key Tyne Valley transit route near Stagshaw masts and Corbridge when the cloud base is around 2000ft.

## Area C:

When in use, Area C effectively shuts down the Loadman Farm and Stanton airstrips that have operated for years on a PPR (Prior Permission Required) basis, and are regularly used by LAA, BMAA and historic aircraft.

The proposal uses a 600ft AGL above tallest feature in area, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D, which makes much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL.

## Areas C and D:

The South Tyne Valley and Irthing Valley is a traditional E/W and W/E coast to coast transit route for civil and military traffic, and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. Haltwhistle is close to the 'high point' of this through route between the hills. Route choices for aviation, especially in low cloud, here are also limited by the RAF Spadeadam Danger Area to the north, and terrain features to the south.

## DACS (Danger Area Crossing Service):

You have dismissed providing a Danger Area Crossing Service (DACS).

A DACS would allow both Stanton and Loadman Farm airstrip to maintain their operations by 'de-confliction' with your trials, and would allow safe use of the busy coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. As it stands your proposal would endanger a/c on approach/departure and in training circuits at the above named two airfields, and those in transit east and west of Newcastle Airport. If you really want to gain control of these 5 large blocks of airspace, I consider you should provide a DACS for the duration in the same way as other more conventional Control Areas do already. The DACS should be biased towards providing safe passage for aircraft with persons on board as a priority.

### **Electronic Conspicuity:**

The UK Civil Aviation Authority is currently promoting aircraft usage of 'electronic conspicuity' devices, and although there is no single 'standard' as yet, there are 'front runners' in this field eg FLARM, PilotAware, ADSB, SkyEcho etc.

Apian and your UAV contractors should adopt and fit devices to enable their UAVs to be able to broadcast out, detect, 'see', and avoid other airspace users as a critical safety measure; one must remember that UAVs do not have the luxury of an 'on-board' pilot.

#### To conclude:

The extensive nature of this poorly constructed TDA will negatively impact other airspace users especially in the North East of the UK. I do not understand why you have not created legitimate 'flight corridors' for your trials?

The 'blanket' approach to this TDA does not take account of any other existing airspace users, or terrain/geography, and meteorological requirements of other airspace users. Apian's current application for this TDA package, restricts the wider flying community, putting both 'trial sponsors' and the aviation community at significant risk which is unacceptable. I believe this type of trial will only become safe when proven 'detect and avoid' technology is available and used in conjunction with 'electronic conspicuity' enabling co-existence rather than implementation via a TDA.

Dear Stakeholder,

## Request for support to <u>ACP-2023-015</u> Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

I am writing to you on behalf of Apian, a medical logistics startup founded by NHS doctors with support from the NHS Clinical Entrepreneur Programme. We work on behalf of the NHS to operationalise uncrewed air system (UAS) technology and research its impact on patient health outcomes and staff wellbeing.

Apian, in conjunction with the Northumbria Healthcare NHS Foundation Trust, is looking to conduct feasibility flights using UAS between hospitals, GP surgeries, care homes and pharmacies. We would like to trial a regular, on demand delivery service for the distribution of medical payloads such as, prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies, medical documentation, as well as emergency deliveries. These flights will allow us to research, validate and provide vital data to establish whether the use of UAS, in these clinical settings will lead to improved patient care.

You may have supported us on our previous project in Northumbria (<u>ACP 2022 031</u>), and we would like to thank you for the support and feedback you provided during and after the <u>project</u>. That feedback allowed us to gain an understanding of how we can better integrate UAS. Please see the summary and lessons learnt during that project <u>here</u>.

As part of our application for a trial TDA, we have identified you as a key stakeholder. We have attached our trial plan for our proposal which includes details of our trial TDA in Annex C. We have also included a feedback form which we kindly request you return to us before the end of our stakeholder engagement period, 22nd September 2023, and look forward to receiving your confirmation of support.

If you have any further questions or would like to discuss the project in further detail, please do not hesitate to contact me.

## Kind regards,

## How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the <u>CAA's Airspace Change Portal</u>. Feedback on the proposed trial TDA, or requests for further information should be sent to:

Aviation team at <u>airspace@apian.aero</u>

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name		
Email		
Representing		
Address (including postcode if possible)		
Feedback:		

# () apian

# Re: [Airspace] Re: ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

1 message

13 October 2023 at 16:21

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

We are evaluating DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace. There are a number of different factors we need to work through but from our experience as air traffic controllers we do completely understand the value of services such as DACS.

We have received information from local model flying clubs and UAS operators regarding their operations, and are working with them to ensure they can operate as normal throughout our proposed trial. We have successfully used procedures like this for other operations and will ensure the contact details for the TDA, if it is approved by the CAA, are included in the NOTAM for contact if required. Please do ask your members who operate within the area to contact us with further details of their operations, this will help with our refinement of our proposed TDA

The UAS operator for this trial will be equipped with ADS-B in to provide the UAS operator with a picture of air traffic. As you'll be familiar, operations in countries around the world have different regulatory frameworks which often mean different requirements for electronic conspicuity. We are working closely with our UAS operator to identify how EC will be used for this trial and how we progress for future flights. We're closely monitoring the progress of the <u>Airspace Modernisation Strategy</u> and <u>electronic conspicuity regulation and policy development</u> as that will ultimately determine the technical requirements for integrated flights.

We have received valuable information from the aviation community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

s <del></del>	
On Thu, 21 Sept 2023 at 16:33 Dear Apian,	/rote:
Please find attache	response to your request for feedback on your ACP 2023-015.
Kind Davada	
Kind Regards	



# Request for support to <u>ACP-2023-015</u>Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

I am writing to you on behalf of Apian, a medical logistics startup founded by NHS doctors with support from the NHS Clinical Entrepreneur Programme. We work on behalf of the NHS to operationalise uncrewed air system (UAS) technology and research its impact on patient health outcomes and staff wellbeing.

Apian, in conjunction with the Northumbria Healthcare NHS Foundation Trust, is looking to conduct feasibility flights using UAS between hospitals, GP surgeries, care homes and pharmacies. We would like to trial a regular, on-demand delivery service for the distribution of medical payloads such as, prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies, medical documentation, as well as emergency deliveries. These flights will allow us to research, validate and provide vital data to establish whether the use of UAS, in these clinical settings will lead to improved patient care.

You may have supported us on our previous project in Northumbria (<u>ACP-2022-031</u>), and we would like to thank you for the support and feedback you provided during and after the <u>project</u>. That feedback allowed us to gain an understanding of how we can better integrate UAS. Please see the summary and lessons learnt during that project <u>here</u>.

As part of our application for a trial TDA, we have identified you as a key stakeholder. We have attached our trial plan for our proposal which includes details of our trial TDA in Annex C. We have also included a feedback form which we kindly request you return to us before the end of our stakeholder engagement period, 22nd September 2023, and look forward to receiving your confirmation of support.

If you have any further questions or would like to discuss the project in further detail, please do not hesitate to contact me.

## Kind regards,



## How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the <u>CAA's Airspace Change Portal</u>. Feedback on the proposed trial TDA, or requests for further information should be sent to:

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Name	
Email	
Representing	
Address (including postcode if possible)	
Feedback:	



# [Airspace] Apian Northumbria NHS Air Grid Airspace change ID: ACP-2023-015 OBJECTION

1 message

21 September 2023 at 17:04

I object to the ACP as the TDA design unreasonably fails to minimise impact on other air users.

My reasons are captured perfectly by the fellow pilot are copied agin beloow:

already lodged with you but for convenience they

It closes two grass airstrips, blocks the busy East Coast VFR coastal transit route under the Newcastle CTA, creates choke points that will result in a large increase in traffic seeking Newcastle zone transits/Spadeadam D510 crossings and is unreasonable in its vertical planning, extending to around 1500ft AGL in the busy Tyne Valley transit route.

#### Area B

The East coastline under the base of the 1500ft Newcastle CTA is a busy transit route for VFR GA traffic and also allows non-radio traffic to move freely. Area B (SFC-1300ft) effectively blocks this route and will force east coast traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head 4 miles out to sea, significantly increasing risk for these air users who are traditionally historic aircraft or basic microlights.

#### Area C & D

When active, Area C closes the Hexham and Stanton airstrips that have operated for many years and are home to a variety of LAA, BMAA and historic aircraft.

The design uses a blunt approach of 600ft AGL above tallest known feature, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D which results in much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed 600ft AGL. The Tyne valley is a primary coast to coast transit route for both civil and military traffic in the North and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. This will severely restrict GA coast to coast access.

#### DACS

Apian claim "Due to the heights of the proposed TDA complex (600 ft AGL above the tallest known feature), a Danger Area Crossing Service (DACS) will not be provided.". A DACS would allow both Stanton and Hexham to operate whilst allowing the continued flow of the busy Coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA. The onus should be on Apian to resolve rather than a disingenuous and misleading statement.

#### **TDA** Activation

During previous UAS operations on the Northumberland Coast, I didn't see any evidence that Apian cancelled TDA activation by fresh Notam when operations were suspended for weather or serviceability, often for days on end. Instead airspace remained blocked to other users despite it being unused for days. Apian should release airspace once it is clear operations will be suspended. In the interest of transparency, Airspace usage statistics (days/hours flown v days/hours Notamed) should be publicly available to both the GA community and the regulator.

#### Summary

The extensive nature of this TDA will severely and negatively impact other air users in Northern England. I believe this trial only becomes viable when certified Detect and Avoid Technology is available enabling co-existance rather than implementation via a TDA. By progressing the TDA option, the wider flying community is being hugely restricted and put at significant risk which is totally unacceptable.





# Re: [Airspace] Apian Northumbria NHS Air Grid Airspace change ID: ACP-2023-015 OBJECTION

1 message

		12 October 2023 at 16:14
	-	
Dear		

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other, we completely understand that this is not always feasible. It is extremely challenging to gain data on the GA operations and uncertified aerodromes, and proves why the stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We will make adjustments as a result of feedback we have received during the stakeholder engagement.

We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

Apian was founded by two NHS doctors, and all of our work is focused on providing improved healthcare to our patients and clinicians. We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. The airspace proposed is directly linked to the use case requirements which are outlined in Annex B.

Current regulations mean that we are required to apply for a TDA, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. Our UAS operator intends to seek CAA guidance on compliantly deploying detect and avoid technology to remove the need for segregated airspace, in line with the <u>Airspace Modernisation Strategy</u>.

Regarding NOTAMs in our previous trial, these were cancelled by the UAS operator directly when we did not anticipate flying. As per the NOTAM process, these were cancelled through the Airspace Regulation (Utilisation) Operations team at the CAA, who communicate them to the aviation industry. Cancellations of TDA usage were due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations were not seen in advance. This approach to TDA utilisation was taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator and are finalising details with the CAA of an improvement process, however if you have suggestions to improve the safe sharing of this information, please let us know and we can discuss them with the CAA.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



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The extensive nature of this TDA will severely and negatively impact other air users in Northern England. I believe this trial only becomes viable when certified Detect and Avoid Technology is available enabling co-existance rather than implementation via a TDA. By progressing the TDA option, the wider flying community is being hugely restricted and put at significant risk which is totally unacceptable.



# [Airspace] Apian Northumbria NHS Air Grid Airspace Change Proposal ID: ACP-2023-015

1 message

21 September 2023 at 18:03



Dear Sir,

I am a private pilot, an aircraft owner and a member of the BMAA and LAA. I have flown often in the beautiful North East of England and often in the airspace affected by this ACP.

I object to the above referenced airspace change proposal because it fails to adhere to the CAA requirement to minimise the impact on other air users.

Any companies aiming to use drones in UK airspace should focus their efforts on developing certified detect and avoid technology that allows co-existence rather than requesting TDAs that make significant volumes of airspace unavailable to other airspace users for long periods.

I sincerely hope that this proposal will be refused.

Yours faithfully,





# Re: [Airspace] Apian Northumbria NHS Air Grid Airspace Change Proposal ID: ACP-2023-015

1 message

12 October 2023 at 16:07

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your point below.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



apian.aero Mail Por Mirspacel Apian Northumbria NHS Air Grid Airspace Change Proposal ID: ACP-2023-015 t 18:03, wrote:

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I sincerely hope that this proposal will be refused.

Yours faithfully,



Aviation team at

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name	
Email	
Representing	
Address (including postcode if possible)	

Feedback:

I am writing to you on behalf of Group-20, a local model flying club founded by model flyers for model flyers.

Group-20 Model Flying club has been operating for over 20 years on the current flying site and the clubs ethos is built on the care, support and well-being of our members, providing a facility whereby members can enjoy some relaxation, mental well-being and interaction not withstanding the enjoyment of a very engaging hobby involving mechanical, electrical and technical aspects of the sport including and notwithstanding the flying element of some fabulous models.

The sport is enjoyed by all ages, especially within Group-20, providing social interaction and a place to chat and engage with other members on all aspects of the hobby.

We would like to state at this time that Apian's trial in conjunction with the Northumbria Healthcare NHS Foundation Trust, to conduct feasibility flights between hospitals, GP surgeries, care homes and pharmacies, will most certainly negatively impact Group-20 and all members concerned by removing a facility that has been available for over 20 years and thus also removing the mental well-being of the members and their social interaction with other like minded individuals.

Whilst we acknowledge a trial of an on-demand delivery services for the distribution of medical payloads on face value may seem attractive we feel that this project leaves many elements unthought, untested and the security of such payloads at jeopardy whilst in transit between sites therefore would question if this is the correct method of delivery.

These flights will not only negatively affect the Group-20 model flying club but many other

flying clubs within the areas alongside many full size aircraft sites ultimately affecting many individuals mental health and well-being, businesses not to mention individual employment situations of persons involved in the flying fraternity in many situations.

Whilst we as a stakeholder, and I am sure everyone in the flying fraternity will support any advancement in technology and improved patient care, this project ultimately affects many individuals from the initial outset of the project and thus we would have to object to the project in its current form and request that it is reviewed further and additional consultation with the BMFA, LMA, CAA is conducted.

Many thanks to Asian for the opportunity for all involved in the flying fraternity to offer feedback on the project and we look forward to hearing further reviews in due course.



# Re: [Airspace] Feedback on drone trial from Group-20 Model Flying Club

12 October 2023 at 16:04

1 message

Dea

Thank you so much for your email and for reaching out to us as a model flying unit, it sounds like a great community that you have created.

We want to assure you that if our proposal is approved, we have no intention of restricting your activities and would like to work collaboratively with you to ensure we have a suitable and safe solution in place that works for all. We have been in communication with other model flying units who have been extremely helpful in providing us with how much space they would require to fly their aircraft. We would really appreciate it if you could provide us with more details about your operations, including location, heights and operating times.

In our previous trial we had experience of working with other aviation operators, including local UA VLOS operators, to allow safe integration within the same airspace.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Thu, 21 Sept 2023 at 18:23,

Dear

Please find attached our feedback form in relation to your proposed drone trial in conjunction with the Northumberland NHS trust.

We look forward to your comments on our feedback and further reviews in relation to your drone trial.

Many thanks for your input.





# [Airspace] Response to proposed TDA, RE: ACP-2023-015 trial

1 message

3:10

Good evening,

I have reviewed the details provided regarding the proposed TDA (ACP-2023-015), and I have decided to respond, as I am concerned that the impact on aviation in the local area and on aviation safety has not been adequately considered.

The TDA areas A-E cover over 550 square miles, and extend in some areas up to 2000' AGL. This will effectively exclude general aviation traffic from a huge area of northern England's airspace. Crossing the TDA North to South, or vice versa, will often be either impossible or dangerous, as it blocks current safe routes both to the East and to the West of the Newcastle CTA. Two airfields (Hexham and Stanton) will be closed down if the proposed TDA were to proceed.

If the UAVs to be used for deliveries are not capable of adhering to a narrow corridor below 400' AGL, then in my opinion the answer is not to simply seize miles and miles of airspace. If it is decided that a UAV delivery service truly is the best way to fulfil the delivery requirements, then a better solution should be sought for than the current proposal.

I do not see any real attempt in the proposal to minimise the airspace requested, or to limit the UAVs track or height AGL in any way. There also appear to be no plans to fit the UAVs with any form of Electronic Conspicuity devices. Given the relatively low cost and availability of ADS-B out devices, the intent to operate BVLOS UAVs without EC points to a lack of consideration for the safety of other airspace users.

In addition, the proposals do not include plans for a DACS. While such a service would not solve the problems with the proposal, it would at least mitigate some of them for some airspace users.

While the use of UAVs is being considered, it should also be pointed out that there are existing services which currently appear to fulfil these requirements, such as Northumbria Blood Bikes. Although the bikes cannot travel 'as the crow flies', they can deliver items in all weathers unlike UAVs, and are a fast, tried and tested service.

The current proposal as it stands represents an ill thought and rather clumsy airspace grab which will greatly impact a large number of airspace users. It flies in the face of the CAA's airspace modernisation plan, which proposes "greater integration rather than segregation". In addition, the proposed TDA will reduce safety and increase risk levels for aviators based in, or travelling through northern England. If approved in its current state, this proposal would set a worrying precedent and will undoubtedly lead to similar airspace grabs around the country, with huge swathes of our airspace becoming reserved for private use.

Although I have yet to be convinced that a UAV delivery service is the best plan for the area, I am not entirely against such an idea. If a new proposal were to be put forward with a smaller and more proportionate area, improved UAV technology (400' AGL limit, ADS-B, etc.), and a DACS, I would of

apian.aero Mail - [Airspace] Response to proposed TDA, RE: ACP-2023-015 trial

course consider that proposal with an open mind, and provide honest and constructive feedback, as I feel I have provided here.

Yours faithfully,





# Re: [Airspace] Response to proposed TDA, RE: ACP-2023-015 trial

1 message

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

This trial forms the first phase of Apian's roadmap to integrated flights. We are closely monitoring the progress of the <u>Airspace Modernisation Strategy</u> and <u>electronic conspicuity regulation and policy development</u> in the UK as that will ultimately determine the technical requirements for integrated flights.

We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. This trial builds on the previous trial by demonstrating other use cases that would bring valuable healthcare benefits for our patients and clinicians in the region. This UAS service will add additional capabilities and bring new benefits to existing ground NHS logistics services. It is important to understand that whilst other modes of transport provide an essential and critical service to the patients and clinicians within Northumbria, some are run entirely by the goodwill of volunteers. This means they are only able to offer a limited, but vital, service for emergency use during out-of-hours and are unable to support the scale of clinical needs from the NHS. A person in a van would be unsustainable and inefficient given the number of deliveries required.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Thu, 21 Sept 2023 at 23:10 Good evening, wrote:

I have reviewed the details provided regarding the proposed TDA (ACP-2023-015), and I have decided to respond, as I am concerned that the impact on aviation in the local area and on aviation safety has not been adequately considered.

The TDA areas A-E cover over 550 square miles, and extend in some areas up to 2000' AGL. This will effectively exclude general aviation traffic from a huge area of northern England's airspace. Crossing the TDA North to South, or vice versa, will often be either impossible or dangerous, as it blocks current safe routes both to the East and to the West of the Newcastle CTA. Two airfields (Hexham and Stanton) will be closed down if the proposed TDA were to proceed.

If the UAVs to be used for deliveries are not capable of adhering to a narrow corridor below 400' AGL, then in my opinion the answer is not to simply seize miles and miles of airspace. If it is decided that a UAV delivery service truly is the best way to fulfil the delivery requirements, then a better solution should be sought for than the current proposal.

I do not see any real attempt in the proposal to minimise the airspace requested, or to limit the UAVs track or height AGL in any way. There also appear to be no plans to fit the UAVs with any form of Electronic Conspicuity devices. Given the relatively low cost and availability of ADS-B out devices, the intent to operate BVLOS UAVs without EC points to a lack of consideration for the safety of other airspace users.

In addition, the proposals do not include plans for a DACS. While such a service would not solve the problems with the proposal, it would at least mitigate some of them for some airspace users.

While the use of UAVs is being considered, it should also be pointed out that there are existing services which currently appear to fulfil these requirements, such as Northumbria Blood Bikes. Although the bikes cannot travel 'as the crow flies', they can deliver items in all weathers unlike UAVs, and are a fast, tried and tested service.

The current proposal as it stands represents an ill thought and rather clumsy airspace grab which will greatly impact a large number of airspace users. It flies in the face of the CAA's airspace modernisation plan, which proposes "greater integration rather than segregation". In addition, the proposed TDA will reduce safety and increase risk levels for aviators based in, or travelling through northern England. If approved in its current state, this proposal would set a worrying precedent and will undoubtedly lead to similar airspace grabs around the country, with huge swathes of our airspace becoming reserved for private use.

Although I have yet to be convinced that a UAV delivery service is the best plan for the area, I am not entirely against such an idea. If a new proposal were to be put forward with a smaller and more proportionate area, improved UAV technology (400' AGL limit, ADS-B, etc.), and a DACS, I would of course consider that proposal with an open mind, and provide honest and constructive feedback, as I feel I have provided here.

Yours faithfully,



## [Airspace] ACP-2023-015 - feedback

1 message

22 September 2023 at 13:37



Please find below my comments on the proposed Temporary Danger Area described in ACP-2023-015.

I believe it is possible that a revised design can be achieved which enables the objectives of this trial, but minimises impact on other airspace users, and I'd welcome the opportunity to comment on any future revision of the design.

Kind Regards

#### Summary

I object to the design of the proposed Temporary Danger Area because of the disproportionate negative impact it would have on existing general aviation traffic. The proposed TDA complex obstructs light GA and may increase risk to the occupants of those aircraft. There is a requirement on airspace change sponsors to minimise the impact of their proposals on other airspace users, and that does not appear to have been achieved in this design.

#### Area B

Part of Area B lies above the East coast from the surface to altitude 1300 feet. However it also lies beneath the Newcastle CTA which has a base of altitude 1500 feet. This area is a busy route for North-South general aviation traffic. Confining this traffic to an altitude range of 200 feet will increase the risk of infringement of the Newcastle CTA and also create a risk of inadvertent descent into the proposed TDA. The Airspace and Safety Initiative frequently advises GA to 'Take 2' (ie allow a 200 feet vertical buffer from controlled airspace). This clearly is impossible when the vertical range available to GA is only 200 feet.

Traffic which currently transits this airspace may instead seek a transit of the Newcastle CTR (noting the presence of Proposed Area A) which will increase the workload of Newcastle controllers and may or may not be available. The only other alternative would be to head out to sea which is an increase in risk in single engine aircraft. The effect of the proposed TDA would therefore be to increase risk to the occupants of crewed aircraft in order to facilitate uncrewed aircraft which are unable to integrate with the current airspace.

#### Area C

Area C is large and the elevation of the terrain beneath varies significantly. By defining the vertical extent as 600 feet above the highest obstruction, a great deal of airspace is occupied unnecessarily. If Area C were to be divided into a number of smaller areas, each with their own vertical extent, it may be possible to design a less obstructive structure.

#### Justification of horizontal and vertical extent

The horizontal and vertical extent of any TDA required to support this operation should be justified with respect to the navigation performance of the UAS to be used. Point obstructions, which may be avoided by the UAS should not be used to justify vertical extent throughout a large area.

#### Provision of a Danger Area Crossing Service (DACS)

The position and intentions of the UAS will always be known to the remote pilot, and the provision of this information to other airspace users through a DACS could mitigate some of the obstruction caused by the proposed TDA. A Danger Area Activity Information Service (DAAIS) which is only able to advise whether the TDA is active but is unable to co-ordinate a crossing is not an adequate substitute. Provision of a DACS should be a condition of the proposed TDA. The statement in the Trial Plan that a DACS is not to be provided due to the height (600 feet AGL) of the proposed TDA is clearly misleading because of the variation in terrain elevation below the proposed Area C.

#### Data

To enable stakeholders to assess the effect of any TDA on all airspace users, the CAA should require the sponsor to record and publish data on activation and deactivation times, UAS flights within the TDA and crossings or flights within the TDA facilitated by DACS. The CAA should encourage other airspace users to report (probably via the FCS1522 process) any failure to facilitate a reasonable crossing of the proposed TDA.



## Re: [Airspace] ACP-2023-015 - feedback

1 message

12 October 2023 at 15:52

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We are also pleased to hear you are being open minded about possible improvements in our TDA design, this is something we are actively working on after receiving feedback from the GA community. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other, we completely understand that this is not always feasible. It is extremely challenging to gain data on the GA operations and uncertified aerodromes, and proves why the stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We will make adjustments as a result of their feedback.

We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

Apian was founded by two NHS doctors, and all of our work is focused on providing improved healthcare to our patients and clinicians. We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. The airspace proposed is directly linked to the use case requirements which are outlined in Annex B.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

Regarding NOTAMs in our previous trial, these were cancelled by the UAS operator directly when we did not anticipate flying. As per the NOTAM process, these were cancelled through the Airspace Regulation (Utilisation) Operations team at the CAA, who communicate them to the aviation industry. Cancellations of TDA usage were due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations were not seen in advance. This approach to TDA utilisation was taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator and are finalising details with the CAA of an improvement process, however if you have suggestions to improve the safe sharing of this information, please let us know and we can discuss them with the CAA.

As mentioned above, we have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

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Traffic which currently transits this airspace may instead seek a transit of the Newcastle CTR (noting the presence of Proposed Area A) which will increase the workload of Newcastle controllers and may or may not be available. The only other alternative would be to head out to sea which is an increase in risk in single engine aircraft. The effect of the proposed TDA would therefore be to increase risk to the occupants of crewed aircraft in order to facilitate uncrewed aircraft which are unable to integrate with the current airspace.

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### [Airspace] ACP-2023-015

1 message

22 September 2023 at 15:13

Dear Aviation team,

First, I welcome the use of drones for local infrastructure efficiencies. Any improvement in energy consumption, reducing climate change impact and economic costs, and increasing access to health services is something I would enjoy to see developed.

My concerns are with the integration of this into existing airspace. I speak as a drone operator in the construction industry, providing building surveys across the North East region. My work is seen as a benefit to reducing costs and increasing safety for operatives by eliminating unnecessary roof access surveys. By any measure, I still understand and support the prioritising of vital medical supplies over my own flights.

However, my reading into this project has left me feeling a disproportionate and potentially permanent restriction to my (and others) operations. The vast corridor of airspace taken up by this project seems excessive, the TDA, will be in place for 6 months, seven days a week, 24 hours a day, from SFC to 600ft. This category G Airspace on which many drone operators rely does not feel open to all anymore.

Operations for myself, though entirely within a small envelope, can range between 1-3 hours and up to 120 metres high and would certainly be restricted under your proposals. I am concerned that similar operations by others might fail to realise the wide reaching nature of the TDA, and near misses and any other encroachment may not be taken into account during your research period.

With similar trials happening across the country, this is a point of great potential and expansion in drone infrastructure, not just in NHS deliveries but in other forms of business and construction; and in my reading of 134BCAP 2533, I understand that segregation is the first step of a safe integration process. Airspace users however, have only so far seen an expansion in segregated airspace to their detriment, with no clear vision of the final outcome.

I hope you can consider reducing the impact of future operations both in duration and space wherever possible.

Many thanks



apian.aero Mail - [Airspace] ACP-2023-015



### Re: [Airspace] ACP-2023-015

1 message

12 October 2023 at 15:48

#### Dear

Thank you very much for responding with feedback to our proposal and reaching out to us as a VLOS operator. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

We want to assure you that if our proposal is approved, we have no intention of restricting your activities and would like to work collaboratively with you to ensure we have a suitable and safe solution in place that works for all. We have been in communication with other VLOS and model flying units who have been extremely helpful in providing us with details of their operations. We would really appreciate it if you could provide us with more details about your operations, including examples of location, heights and operating times. This will allow us to identify a potential deconfliction plan as part of our revision TDA.

As a direct result of the feedback we have received we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

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Many thanks





Please consider the environment before printing this e-mail.



# [Airspace] RE: ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

1 message

21 September 2023 at 14:12

Good Afternoon,

PSA for the MOD response to the ACP in the subject line. As discussed, there hopefully shouldn't be any new info in our reply, we have tried to expand on previous conversations and then record it formally for you in one place. Happy to provide any clarifications or further information as required.

The specifics on the LFEs.	mentioned in the response do	ocument is	of you require further

For Spadeadam, you already have a POC who can provide you more info on future exercises and other Spadeadam related questions reference emitters and C-UAS activity.

If you could copy in DAATM to any conversations which either POC I would be grateful.

Please do not hesitate to contact me if you require any further information.

Regards





22/09/2023, 16:26 apian.aero Mail - [Airspace] RE: ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial...

**Subject:** ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

Dear Stakeholder,

# Request for support to ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

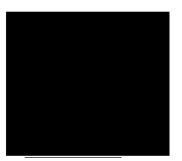
I am writing to you on behalf of Apian, a medical logistics startup founded by NHS doctors with support from the NHS Clinical Entrepreneur Programme. We work on behalf of the NHS to operationalise uncrewed air system (UAS) technology and research its impact on patient health outcomes and staff wellbeing.

Apian, in conjunction with the Northumbria Healthcare NHS Foundation Trust, is looking to conduct feasibility flights using UAS between hospitals, GP surgeries, care homes and pharmacies. We would like to trial a regular, on-demand delivery service for the distribution of medical payloads such as, prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies, medical documentation, as well as emergency deliveries. These flights will allow us to research, validate and provide vital data to establish whether the use of UAS, in these clinical settings will lead to improved patient care.

You may have supported us on our previous project in Northumbria (ACP-2022-031), and we would like to thank you for the support and feedback you provided during and after the project. That feedback allowed us to gain an understanding of how we can better integrate UAS. Please see the summary and lessons learnt during that project here.

As part of our application for a trial TDA, we have identified you as a key stakeholder. We have attached our trial plan for our proposal which includes details of our trial TDA in Annex C. We have also included a feedback form which we kindly request you return to us before the end of our stakeholder engagement period, 22nd September 2023, and look forward to receiving your confirmation of support.

If you have any further questions or would like to discuss the project in further detail, please do not hesitate to contact me.



#### How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the CAA's Airspace Change Portal. Feedback on the proposed trial TDA, or requests for further information should be sent to:

Aviation team at airspace@apian.aero



# Re: [Airspace] RE: ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

1 message

13 October 2023 at 16:19

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided.

We also appreciate your support and the time you have given us when discussing this proposal. The information you have provided is extremely helpful and will help us move forward with TDA adjustments. We believe, like our previous trial, we can work with the military to ensure vital training and operations can be continued as required.

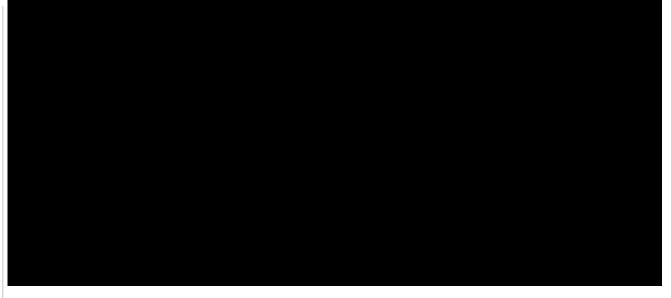
As well as your valuable information we have received feedback from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders including yourselves, which looks to address the feedback we have received.

We look forward to sharing this with you in the near future and will arrange a meeting to discuss these in more detail with you.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Thu, 21 Sept 2023 at 14:12 wrote: Good Afternoon, PSA for the MOD response to the ACP in the subject line. As discussed, there hopefully shouldn't be any new info in our reply, we have tried to expand on previous conversations and then record it formally for you in one place. Happy to provide any clarifications or further information as required. The specifics on the LFEs. For Spadeadam, you already have a POC who can provide you more info on future exercises and other Spadeadam related questions reference emitters and C-UAS activity. If you could copy in DAATM to any conversations which either POC I would be grateful. Please do not hesitate to contact me if you require any further information. Regards 13/10/2023, 16:19



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As part of our application for a trial TDA, we have identified you as a key stakeholder. We have attached our trial plan for our proposal which includes details of our trial TDA in Annex C. We have also included a feedback form which we kindly request you return to us before the end of our stakeholder engagement period, 22nd September 2023, and look forward to receiving your confirmation of support.

#### 13/10/2023, 16:19

apian.aero Mail - Re: [Airspace] RE: ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a ...

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Aviation team at airspace@apian.aero

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name	
Email	
Representing	
Address (including postcode if possible)	
Feedback:	

# 🔷 apian

#### [Airspace] UAV Trial Plan Northumbria NHS Stage 2 ACP-2023-015

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18 September 2023	
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Deal	

#### ACP-2023-015

#### (UAV Trial Plan Northumbria NHS Stage 2 ACP-2023-015)

My partner works in NHS Scotland here in the South of Scotland, so I fully appreciate and sympathise with the use of innovative and cost effective methods of delivering he ancillaries in the Borders and Northumberland areas.

However, as a private pilot and taxpayer, I object to your poorly designed application (in its current form), for airspace usage to trial UAV (Unmanned Aerial Vehicle) transits vicinity of Newcastle to Haltwhistle for Northumbria NHS. It should be noted that UK airspace at all levels is busy and crowded, and lower level airspace carries its own spe users.

I attach your proposal map to remind us of your proposed Temporary Danger Area.

Your proposal envisages using rail launched UAVs on BVLOS (Beyond Visual Line Of Sight) flights to 27 sites in Northumberland at approx. 400ft above ground level. The conducted 24/7 from mid-February to mid-August 2024 at any time?!

Unfortunately in this application it appears that you are claiming the exclusive use of 5 huge blocks of airspaces with heights up to 2,300ft above mean sea level rather than corridors' on sensibly pre-planned 'routes' at with ceilings of 600ft above ground level.

I have previously asked you to properly 'consult' appropriate stakeholders on your previous trials over the Berwickshire and Northumberland coast, and have yet to see the conclusions on how successful or otherwise that recent trial was?

I therefore ask you to re-design your proposal to take proper account of other pre-existing airspace users, and in support of this request I offer the following more detailed n below.

- 1. The proposed Temporary Danger Area (TDA) will effectively close GA airstrips at both Loadman Farm and Stanton. These local sites (already at risk from post-Covid may lose further revenue and be forced to close permanently.
- 2. It will compromise and limit the aviation activities at RAF Spadeadam, Otterburn Camp, Currock Hill, Fishburn, Athey's Moor, Eshott, Milfield, Lempitlaw, Eccles New Midlem, East Fortune, Kirkbride, Carlisle and others further afield.
- 3. The UAVs used do not appear to carry sufficient 'detect and avoid' capabilities, and would require to be fitted with multiple 'electronic conspicuity' devices to enable c Emergency Services a/c, GA (General Aviation) and military traffic to 'see' them electronically. You would have to fit all current forms of 'electronic conspicuity' to be a possible.
- 4. Lack of terrain following corridors at 600ft Above Ground Level. Although the proposed UAVs may operate at less than 400ft, you appear to have added 600ft onto th TDA resulting in the TDAs becoming 1500ft AGL in many places. This 'blanket' approach causes you to seek approval for very large areas of Class G airspace unner
- Your proposed blocks of airspace vary from ~5 to ~11 Nautical Miles in width, which is a very big 'airspace grab'!?
   You do not consider the needs of other airspace users with regard to meteorological and terrain constraints in regard to aviation safety.
- 7. You appear not to consider that there are aircraft 'out there' who carry neither radio or 'electronic conspicuity' and that is a normal for some, and this should be your ' denominator'!
- 8. Your use of the NOTAM system of alerting airspace users has not been very specific in previous trials, and I hope you would seek to minimise your active use of the more rather than continuously 'blocking' the airspace.
- 9. You do not appear to consider providing a Danger Area Crossing Service (DACS)!?
- 10. Your proposal impacts on 2 military Low Flying Areas and an MOD (RAF) Area of Intense Aerial Activity.

#### Area B:

The TDA will block the very busy coastal 'transit route' under the Newcastle Control Zone causing aircraft to fly much further out to sea and increasing flight risk (from Druri Bay). This route is one of the main two that allow aircraft to easily and safely bypass Newcastle Control Zone without disturbing Air Traffic Control.

This area for VFR (Visual Flying Rules) GA traffic normally also enables non-radio traffic to move freely, and is critical for aircraft use in poor meteorological conditions eg k creates issues for those air users who are traditionally historic aircraft, open cockpit, or basic microlights.

Loss of this area would require east coast air traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is constantly short-staffed and operatir The only option for non-radio traffic will be to head four miles out to sea, significantly increasing risk, especially where single engined aircraft are affected. The TDA prevent transits of the key Tyne Valley transit route near Stagshaw masts and Corbridge when the cloud base is around 2000ft.

#### Area C:

When in use, Area C effectively shuts down the Loadman Farm and Stanton airstrips that have operated for years on a PPR (Prior Permission Required) basis, and are rec BMAA and historic aircraft.

The proposal uses a 600ft AGL above tallest feature in area, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D, which makes much of the TDA being 1000ft-1500ft desired/claimed 600ft AGL.

#### Areas C and D:

The South Tyne Valley and Irthing Valley is a traditional E/W and W/E coast to coast transit route for civil and military traffic, and the proposed 1750ft/2000ft TDA base will AGL valley transits when the cloud base is low. Haltwhistle is close to the 'high point' of this through route between the hills. Route choices for aviation, especially in low clc by the RAF Spadeadam Danger Area to the north, and terrain features to the south.

#### DACS (Danger Area Crossing Service):

You have dismissed providing a Danger Area Crossing Service (DACS).

A DACS would allow both Stanton and Loadman Farm airstrip to maintain their operations by 'de-confliction' with your trials, and would allow safe use of the busy coastal a transit routes which can achieve 1000ft AGL within the majority of the TDA.

As it stands your proposal would endanger a/c on approach/departure and in training circuits at the above named two airfields, and those in transit east and west of Newca want to gain control of these 5 large blocks of airspace, I consider you should provide a DACS for the duration in the same way as other more conventional Control Areas c should be biased towards providing safe passage for aircraft with persons on board as a priority.

#### Electronic Conspicuity:

#### 25/09/2023, 13:32

#### apian aero Mail - [Airspace] UAV Trial Plan Northumbria NHS Stage 2 ACP-2023-015

The UK Civil Aviation Authority is currently promoting aircraft usage of 'electronic conspicuity' devices, and although there is no single 'standard' as yet, there are 'front runr

FLARM, PilotAware, ADSB, SkyEcho etc. Apian and your UAV contractors should adopt and fit devices to enable their UAVs to be able to broadcast out, detect, 'see', and avoid other airspace users as a critical saf remember that UAVs do not have the luxury of an 'on-board' pilot.

#### To conclude:

The extensive nature of this poorly constructed TDA will negatively impact other airspace users especially in the North East of the UK. I do not understand why you have no 'flight corridors' for your trials?

The 'blanket' approach to this TDA does not take account of any other existing airspace users, or terrain/geography, and meteorological requirements of other airspace use Apian's current application for this TDA package, restricts the wider flying community, putting both 'trial sponsors' and the aviation community at significant risk which is una I believe this type of trial will only become safe when proven 'detect and avoid' technology is available and used in conjunction with 'electronic conspicuity' enabling co-exis implementation via a TDA.



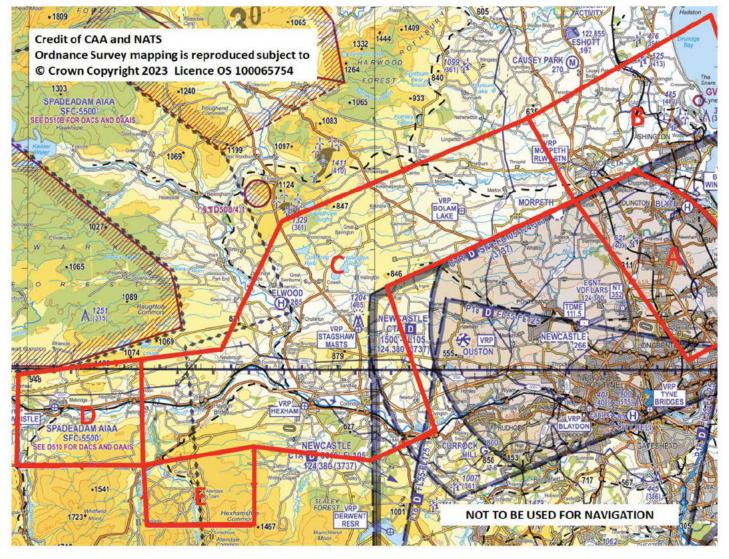


Figure B.3 Proposed Stage 2 TDA



# Re: [Airspace] UAV Trial Plan Northumbria NHS Stage 2 ACP-2023-015

1 message

13 October 2023 at 12:43

Dear

Thank you very much for responding with feedback to our proposal and for supporting innovation in the NHS. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations and uncertified airstrips, and proves why stakeholder engagement is an important part of the process.

We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

We do not want to limit operations at any airfield in the local area. We are in contact with some of the airfields you referenced and we will continue to ensure they are included in any future engagement material. Information provided by them will enable us to adjust our TDA design to take into account the feedback they have provided.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

As with our previous projects, we will ensure emergency services will have the appropriate procedures in place to ensure they have safe access to allow entry into the TDA at short notice. These will be assessed by the CAA as part of our submission.

As mentioned above, a TDA can be established to provide the appropriate safety mitigation required to conduct BVLOS operations. This includes separation from those electing to operate without either a radio or electronic conspicuity or both. Although, as previous air traffic controllers we strongly recommend that these individuals reconsider adding or upgrading this equipment in their aircraft, for their safety and others.

Regarding NOTAMs in our previous trial, these were cancelled by the UAS operator directly when we did not anticipate flying. As per the NOTAM process, these were cancelled through the Airspace Regulation (Utilisation) Operations team at the CAA, who communicate them to the aviation industry. Cancellations of TDA usage were due to daily limitations (e.g. weather, medical deliveries complete) therefore cancellations were not seen in advance. This approach to TDA utilisation was taken to complete as many deliveries and capture as much data for the NHS as possible. We have already raised the concerns highlighted to us by stakeholders with the regulator and are finalising details with the CAA of an improvement process, however if you have suggestions to improve the safe sharing of this information, please let us know and we can discuss them with the CAA.

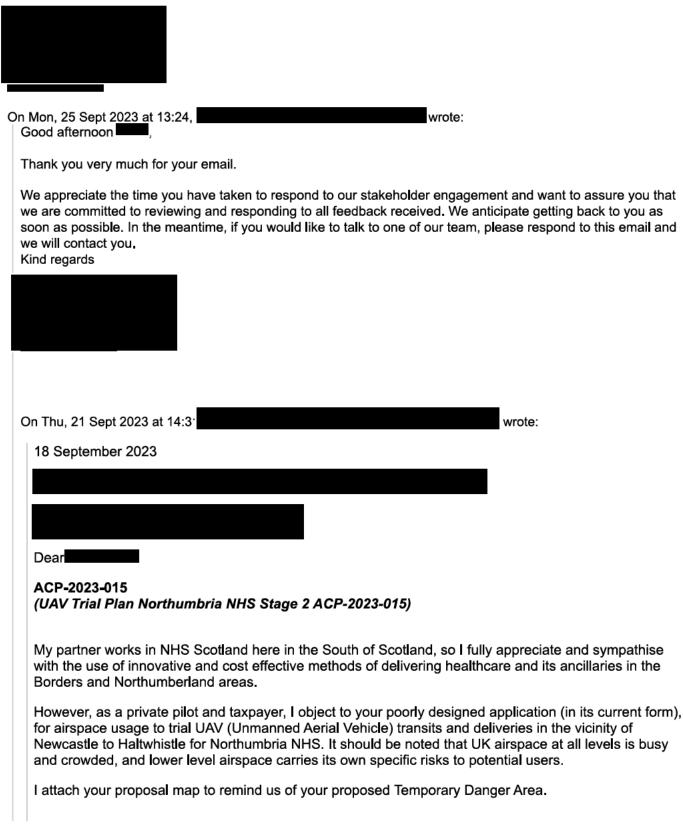
We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace.

We are in contact with the military and we are aware of the low flying areas you mention. We will continue to communicate with the military regarding our trial.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



Your proposal envisages using rail launched UAVs on BVLOS (Beyond Visual Line Of Sight) flights to 27 sites in Northumberland at approx. 400ft above ground level. These flights to be conducted 24/7 from mid-February to mid-August 2024 at any time?!

Unfortunately in this application it appears that you are claiming the exclusive use of 5 huge blocks of airspaces with heights up to 2,300ft above mean sea level rather than adopting narrow 'flight corridors' on sensibly pre-planned 'routes' at with ceilings of 600ft above ground level.

I have previously asked you to properly 'consult' appropriate stakeholders on your previous trials over the Berwickshire and Northumberland coast, and have yet to see the full report and conclusions on how successful or otherwise that recent trial was?

I therefore ask you to re-design your proposal to take proper account of other pre-existing airspace users, and in support of this request I offer the following more detailed material comments below.

- 1. The proposed Temporary Danger Area (TDA) will effectively close GA airstrips at both Loadman Farm and Stanton. These local sites (already at risk from post-Covid19 and revenue issues) may lose further revenue and be forced to close permanently.
- 2. It will compromise and limit the aviation activities at RAF Spadeadam, Otterburn Camp, Currock Hill, Fishburn, Athey's Moor, Eshott, Milfield, Lempitlaw, Eccles Newton, Nether Huntlywood, Midlem, East Fortune, Kirkbride, Carlisle and others further afield.
- 3. The UAVs used do not appear to carry sufficient 'detect and avoid' capabilities, and would require to be fitted with multiple 'electronic conspicuity' devices to enable commercial aviation, Emergency Services a/c, GA (General Aviation) and military traffic to 'see' them electronically. You would have to fit all current forms of 'electronic conspicuity' to be as safe and inclusive as possible.
- 4. Lack of terrain following corridors at 600ft Above Ground Level. Although the proposed UAVs may operate at less than 400ft, you appear to have added 600ft onto the tallest feature in each TDA resulting in the TDAs becoming 1500ft AGL in many places. This 'blanket' approach causes you to seek approval for very large areas of Class G airspace unnecessarily.
- 5. Your proposed blocks of airspace vary from ~5 to ~11 Nautical Miles in width, which is a very big 'airspace grab'!?
- 6. You do not consider the needs of other airspace users with regard to meteorological and terrain constraints in regard to aviation safety.
- 7. You appear not to consider that there are aircraft 'out there' who carry neither radio or 'electronic conspicuity' and that is a normal for some, and this should be your 'lowest common denominator'!
- 8. Your use of the NOTAM system of alerting airspace users has not been very specific in previous trials, and I hope you would seek to minimise your active use of the TDAs regardless, much more rather than continuously 'blocking' the airspace.
- 9. You do not appear to consider providing a Danger Area Crossing Service (DACS)!?
- 10. Your proposal impacts on 2 military Low Flying Areas and an MOD (RAF) Area of Intense Aerial Activity.

#### Area B:

The TDA will block the very busy coastal 'transit route' under the Newcastle Control Zone causing aircraft to fly much further out to sea and increasing flight risk (from Druridge Bay to Whitley Bay). This route is one of the main two that allow aircraft to easily and safely bypass Newcastle Control Zone without disturbing Air Traffic Control.

This area for VFR (Visual Flying Rules) GA traffic normally also enables non-radio traffic to move freely, and is critical for aircraft use in poor meteorological conditions eg low cloud etc. This also creates issues for those air users who are traditionally historic aircraft, open cockpit, or basic microlights.

Loss of this area would require east coast air traffic to seek a formal zone transit with Newcastle ATC at a time when Newcastle ATC is constantly short-staffed and operating with reduced hours. The only option for non-radio traffic will be to head four miles out to sea, significantly increasing risk, especially where single engined aircraft are affected.

The TDA prevent transits of the key Tyne Valley transit route near Stagshaw masts and Corbridge when the cloud base is around 2000ft.

#### Area C:

When in use, Area C effectively shuts down the Loadman Farm and Stanton airstrips that have operated for years on a PPR (Prior Permission Required) basis, and are regularly used by LAA, BMAA and historic aircraft.

The proposal uses a 600ft AGL above tallest feature in area, giving 1750ft AMSL in Area C and 2000ft AMSL in Area D, which makes much of the TDA being 1000ft-1500ft AGL rather than the desired/claimed

600ft AGL.

#### Areas C and D:

The South Tyne Valley and Irthing Valley is a traditional E/W and W/E coast to coast transit route for civil and military traffic, and the proposed 1750ft/2000ft TDA base will prevent 500ft-1000ft AGL valley transits when the cloud base is low. Haltwhistle is close to the 'high point' of this through route between the hills. Route choices for aviation, especially in low cloud, here are also limited by the RAF Spadeadam Danger Area to the north, and terrain features to the south.

#### DACS (Danger Area Crossing Service):

You have dismissed providing a Danger Area Crossing Service (DACS).

A DACS would allow both Stanton and Loadman Farm airstrip to maintain their operations by 'deconfliction' with your trials, and would allow safe use of the busy coastal and Tyne Valley VFR transit routes which can achieve 1000ft AGL within the majority of the TDA.

As it stands your proposal would endanger a/c on approach/departure and in training circuits at the above named two airfields, and those in transit east and west of Newcastle Airport. If you really want to gain control of these 5 large blocks of airspace, I consider you should provide a DACS for the duration in the same way as other more conventional Control Areas do already. The DACS should be biased towards providing safe passage for aircraft with persons on board as a priority.

#### Electronic Conspicuity:

The UK Civil Aviation Authority is currently promoting aircraft usage of 'electronic conspicuity' devices, and although there is no single 'standard' as yet, there are 'front runners' in this field eg FLARM, PilotAware, ADSB, SkyEcho etc.

Apian and your UAV contractors should adopt and fit devices to enable their UAVs to be able to broadcast out, detect, 'see', and avoid other airspace users as a critical safety measure; one must remember that UAVs do not have the luxury of an 'on-board' pilot.

#### To conclude:

The extensive nature of this poorly constructed TDA will negatively impact other airspace users especially in the North East of the UK. I do not understand why you have not created legitimate 'flight corridors' for your trials?

The 'blanket' approach to this TDA does not take account of any other existing airspace users, or terrain/geography, and meteorological requirements of other airspace users.

Apian's current application for this TDA package, restricts the wider flying community, putting both 'trial sponsors' and the aviation community at significant risk which is unacceptable.

I believe this type of trial will only become safe when proven 'detect and avoid' technology is available and used in conjunction with 'electronic conspicuity' enabling co-existence rather than implementation via a TDA.





## [Airspace] Proposed TDA Northumberland

1 message

22 September 2023 at 19:36

Dear sir,

I wish to raise objections to this proposal.

I fly from Rufforth near York. We regularly fly up to Northumberland and beyond.

The TDA, in particular areas A and B, when activated would provide a considerable obstacle, requiring either coasting out to sea (unsafe) or putting extra pressure on Newcastle ATC (who are already having to close down for periods due to staff shortages) to seek approval for a zone transit. This transit is not, of course, guaranteed to be given.

Whilst you say that this restriction would be limited to 600 feet above ground level, realistically this restriction would extend to 2000 ft above sea level in some areas, due to high ground. In an area where low cloud is often a hazard to safe aviation, this would present real problems to aircraft in the area.

This is an ill thought out proposal that does not take into account the needs or safety of other airspace users.

Regards



### **Re:** [Airspace] Proposed TDA Northumberland

1 message

12 October 2023 at 15:44

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Fri, 22 Sept 2023 at 19:36 Dear sir,

wrote:

I wish to raise objections to this proposal.

I fly from Rufforth near York. We regularly fly up to Northumberland and beyond.

The TDA, in particular areas A and B, when activated would provide a considerable obstacle, requiring either coasting out to sea (unsafe) or putting extra pressure on Newcastle ATC (who are already having to close down for periods due to staff shortages) to seek approval for a zone transit. This transit is not, of course, guaranteed to be given.

Whilst you say that this restriction would be limited to 600 feet above ground level, realistically this restriction would extend to 2000 ft above sea level in some areas, due to high ground. In an area where low cloud is often a hazard to safe aviation, this would present real problems to aircraft in the area.

This is an ill thought out proposal that does not take into account the needs or safety of other airspace users.

Regards



# [Airspace] Apian Northumbria NHS Air Grid Airspace change ID: ACP-2023-015

22 September 2023 at 23:03

Dear Sir / Madam

I am writing with regard to the proposed Temporary Danger Zone to be established in Northumberland under the above Airspace change proposal.

I am concerned that this proposal will significantly and adversely affect the GA community in Northumberland because of the location and the large volume of airspace, and will not yield any additional benefit / knowledge over the previous trials run by Apian in Northumberland and Solent.

-the size and height of the TDA, effectively prohibiting GA traffic from using the north-south gap between the Spadeadam danger area and Newcastle airport, and the north-south route to the east of the airport will significantly increase the complexity of the airspace in this area, leading to increased workload and potentially increasing risk for GA, as well as forcing GA over the sea in order to achieve a north-south transit.

-the proposed TDA will also significantly affect operations from Hexham airfield, effectively closing operations. -Apian have used previous trials to demonstrate delivery of medical devices etc in a segregated airspace. Any further trials undertaken in segregated airspace will not add further useful information about the ability of drones to operate, as it will not be under realistic traffic conditions as the CAA BVLOS roadmap is to integrate drones into nonsegregated airspace.

-Realistic traffic conditions are necessary in order to undertake real world testing of the paradigm, compared against existing methods of transport, before considering clinical introduction.

-It is difficult to see a role for the just in time delivery discussed in the proposal in the medical setting, except perhaps in very specific examples – in order to start operations or procedures, the devices / implants have to be available to the healthcare team before the procedure commences – otherwise the procedure will not be started. In the emergency setting, it is difficult to see a role for devices delivered "just in time" – the devices have to be immediately available for use at the point of care.

-Until the trial has been undertaken under realistic conditions, involving other traffic, real world transfer times / successes will not be known. Only when these are known and understood, can the role of the drones be considered for use in clinical practice.

In order to advance and test the paradigm of drone delivery, whether it be for the NHS, or for other (commercial) organisations, Apian (and other such companies) need to work with the CAA to introduce BVLOS drones into real world unsegregated airspace, through use of see and avoid / electronic conspicuity technology.





## Re: [Airspace] Apian Northumbria NHS Air Grid Airspace change ID: ACP-2023-015

1 message

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						1	3 Octob	er 2023 a	at 12:39
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Deai	1								

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial. We are in contact with both Hexham and Stanton Airstrips, who continue to be extremely helpful in sharing information about their operations. We are making adjustments as a result of feedback we have received during the stakeholder engagement.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

Apian is a healthcare company which was founded by two NHS doctors, and all of our work is focused on providing improved healthcare to our patients and clinicians. We will happily support a meeting with you to share details regarding the benefits Northumbria NHS hopes to gain from this trial, how we fit into the broader healthcare ecosystem and the further benefits this could bring to the region.

We are working directly with the Northumbria Healthcare NHS Foundation Trust, to provide an on-demand delivery service in the most rural NHS Trust in England. This trial builds on the previous trial by demonstrating other use cases that would bring valuable healthcare benefits for our patients and clinicians in the region. This UAS service will add additional capabilities and bring new benefits to existing ground NHS logistics services.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Mon, 25 Sept 2023 at 10:12, Thank you very much for your email.

wrote:

vrote:

We appreciate the time you have taken to respond to our stakeholder engagement and want to assure you that we are committed to reviewing and responding to all feedback received. We anticipate getting back to you as soon as possible. In the meantime, if you would like to talk to one of our team, please respond to this email and we will contact you.



On Fri, 22 Sept 2023 at 23:03, Dear Sir / Madam

I am writing with regard to the proposed Temporary Danger Zone to be established in Northumberland under the above Airspace change proposal.

I am concerned that this proposal will significantly and adversely affect the GA community in Northumberland because of the location and the large volume of airspace, and will not yield any additional benefit / knowledge over the previous trials run by Apian in Northumberland and Solent.

-the size and height of the TDA, effectively prohibiting GA traffic from using the north-south gap between the Spadeadam danger area and Newcastle airport, and the north-south route to the east of the airport will significantly increase the complexity of the airspace in this area, leading to increased workload and potentially increasing risk for GA, as well as forcing GA over the sea in order to achieve a north-south transit. -the proposed TDA will also significantly affect operations from Hexham airfield, effectively closing operations. -Apian have used previous trials to demonstrate delivery of medical devices etc in a segregated airspace. Any further trials undertaken in segregated airspace will not add further useful information about the ability of drones to operate, as it will not be under realistic traffic conditions as the CAA BVLOS roadmap is to integrate drones into non-segregated airspace.

-Realistic traffic conditions are necessary in order to undertake real world testing of the paradigm, compared against existing methods of transport, before considering clinical introduction.

-It is difficult to see a role for the just in time delivery discussed in the proposal in the medical setting, except perhaps in very specific examples – in order to start operations or procedures, the devices / implants have to be available to the healthcare team before the procedure commences – otherwise the procedure will not be started. In the emergency setting, it is difficult to see a role for devices delivered "just in time" – the devices have to be immediately available for use at the point of care.

-Until the trial has been undertaken under realistic conditions, involving other traffic, real world transfer times / successes will not be known. Only when these are known and understood, can the role of the drones be considered for use in clinical practice.

In order to advance and test the paradigm of drone delivery, whether it be for the NHS, or for other (commercial) organisations, Apian (and other such companies) need to work with the CAA to introduce BVLOS drones into real world unsegregated airspace, through use of see and avoid / electronic conspicuity technology.



#### 22<sup>nd</sup> September 2023



#### ACP-2023-015

I am a Private Pilot based in the south east of Scotland. I have been flying for over fifteen years and in this time have attained just under one thousand hours experience, flying open cockpit aircraft in a significant variety of weather conditions both in the UK and in France.

From my base near Edinburgh, I regularly fly in Northumberland and the area around Newcastle, in which the proposed drone trial is to take place, including many transits through the area between airfields in Scotland and Northumberland and others further south in England or onward to / from the continent.

My principal concern with the proposal as currently presented revolves around the danger which the additional restrictions - in what is at present uncontrolled Class G airspace - will create for pilots like myself, who will be excluded and forced into the remaining airspace thereby concentrating GA traffic into the much smaller areas which remain available. This will be especially dangerous in the event of low cloud or other sub-optimal weather conditions, which greatly reduces the risk of controlled flight into terrain or the alternative of being forced upwards by the TDAs into cloud. This is particularly significant in terms of the proposed upper heights of the various TDAs as proposed.

I have refrained from commenting in any detail on Area A as this is entirely within the Newcastle CTR, except to say that as it lies across one of the standard 'Transit Routes' for GA aircraft wishing (or requiring) to transit north to south (or vice versa) through the Newcastle Zone, this will inevitably restrict such transits to between 1000ft and the normal upper limit of 2000ft AMSL - or even lower in the event of low cloudbase, thus compressing all transiting traffic into a very narrow vertical band with a significant increase in workload for Newcastle ATC and greater risk of mid-air collision.

In the case of Area B, the proposed TDA effectively completely precludes the use of this standard route to pass Newcastle by flying below the eastern edge of the Newcastle CTA. Trying to transit in the remaining 200 ft of 'free airspace' between the top of the proposed TDA and the CTA above would almost certainly result in unintended encroachment into the Newcastle CTA, the TDA or both.

Area C as proposed completely straddles both the standard north/south route to the west of Newcastle CTA <u>and</u> the standard east/west route from north east of Newcastle to the west coast. I have flown both of these routes many times in both clear and overcast conditions and can categorically verify that if the cloudbase in the area is low, the proposed upper limit of the TDA **will completely preclude transit via these routes**. The same objection applies to an even

greater extent to Areas D and E due to the even higher ground in these areas, which already restricts the potential for crossing below cloud.

Area C, also appears to cover the airstrips at Stanton and Hexham, making them both completely inaccessible during periods when this zone is in operation, which as well as a significant inconvenience, also presents a significant additional danger to GA traffic due to the lack of alternative landing sites in the area in the case of an emergency.

In closing, it seems to me that in establishing these proposals, little thought (if any) has been given to the safety, needs and convenience of other airspace users in what is currently Class G uncontrolled airspace. I would therefore urge you to reconsider considerably limiting both the lateral and vertical extent of the proposed TDAs if you intend to proceed with this proposal.

Yours faithfully





## Re: [Airspace] ACP-2023-015 Consultation Response

1 message

13 October 2023 at 12:57

rote:



Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

Kind regards,



On Fri, 22 Sept 2023 at 17:40, Please find attached my response to your airspace change proposal as defined above.

Yours sincerely



# [Airspace] Re. https://airspacechange.caa.co.uk/PublicProposalArea?pID=546

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From				
Name				
Indille				
Email:				
Representing.	,	,		
		281		
Address:			3	

22 September 2023 at 19:50

Feedback:

Your proposal is dangerous to GA, as it forces aircraft into either distant over water routes, or narrow vertical bands.

Without a crossing service, it is selfish and impractical, particularly where the terrain isn't flat.

Your proposal only considers your requirements, with no regard for other traffic.

The best solution would be to equip your aerial systems with see and avoid technology, which you won't be able to do unless you develop it from the start.

This is an excellent opportunity for you to lead the market, by being a cooperative company which has embraced the realities of future airspace requirements, but not with your current proposition.



#### Re: [Airspace] Re. https://airspacechange.caa.co.uk/PublicProposalArea?pID=546 1 message



13 October 2023 at 12:52

#### Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you.

Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the Airspace Modernisation Strategy and trial learnings can support development of CAA policies and Government regulation to enable integration.

The UAS operator for this trial will be equipped with ADS-B in to provide the UAS operator with a picture of air traffic. We will continue to re-evaluate the DACS and DAAIS requirements based on feedback from the aviation community and refinement of the airspace. This trial forms the first phase of Apian's roadmap to integrated flights. We are closely monitoring the progress of the Airspace Modernisation Strategy and electronic conspicuity regulation and policy development in the UK as that will ultimately determine the technical requirements for integrated flights.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



C	On Fri, 22 Sept 2023 at 19:50 wrote: From
	Name:
	Email: Representing:
	Address
	Feedback:
	Your proposal is dangerous to GA, as it forces aircraft into either distant over water routes, or narrow vertical bands.
	Without a crossing service, it is selfish and impractical, particularly where the terrain isn't flat.

apian.aero Mail - Re: [Airspace] Re. https://airspacechange.caa.co.uk/PublicProposalArea?pID=546

Your proposal only considers your requirements, with no regard for other traffic.

The best solution would be to equip your aerial systems with see and avoid technology, which you won't be able to do unless you develop it from the start.

This is an excellent opportunity for you to lead the market, by being a cooperative company which has embraced the realities of future airspace requirements, but not with your current proposition.

# () apian

# [Airspace] Fwd: ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

1 message

22 September 2023 at 18:35

#### Sent from Outlook for iOS



I have been talking to one of our members, and a gather you were wondering if we had received information about the proposed project above.

We received details of the feasibility flights, temporary TDA and feedback form along with the subsequent invitation to a meeting which I circulated to members on 31st July 2023

It being a fairly localised issue, it was the intention that individual members affected would make their own representations and indeed John is one who has responded.

Not being personally affected I skimmed through the trial plan but failed to see any proposed dates when this trial would take place. It would be handy to pass this information on to members in the area. If you have any further information for consultees I would be pleased to received it

Kind Regards





# [Airspace] Re: ACP-2023-015 Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

1 message



25 September 2023 at 12:45

Good afternoon /

Thank you so much for your email, and I am pleased to know the information has been received. We have received some valuable feedback from the GA community, and because of this feedback we will take some time to review the TDA and reevaluate it. We look forward to sharing this with you in the near future.

Kind regards



On Fri, 22 Sent 2023 at 16:35, F

and I gather you were wondering if we had received

information about the proposed project above. We received details of the feasibility flights, temporary TDA and feedback form along with the subsequent invitation to a meeting which I circulated to members on 31st July 2023

It being a fairly localised issue, it was the intention that individual members affected would make their own representations and indeed the site one who has responded. Not being personally affected I skimmed through the trial plan but failed to see any proposed dates when this trial

Not being personally affected I skimmed through the trial plan but failed to see any proposed dates when this trial would take place. It would be handy to pass this information on to members in the area. If you have any further information for consultees I would be pleased to received it

Kind Regards

I have been talking to one of our members,

2 attachments

#### How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the <u>CAA's Airspace Change Portal</u>. Feedback on the proposed trial TDA, or requests for further information should be sent to:

Aviation team at <u>airspace@apian.aero</u>

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name Email Representing Address (including postcode if possible) Feedback: Our flying club site (W3W: III trails. backs. asserts) lies close to the proposed TDA where we operate model aircroft from the surface up within VLOS We will require further engagement to ensure the site is not impacted by the proposal or measures put in place to permit continued operation of our flying site if the TDA course into all of our flying site if TDA comes into affect



### Re: [Airspace] Apian TDA

1 message

13 October 2023 at 12:49

Dear

Thank you so much for your email and identifying yourself as a stakeholder. We really appreciate you reaching out and providing us with a location for your model flying.

We want to assure you that if our proposal is approved, we have no intention of restricting your activities and would like to work collaboratively with you to ensure we have a suitable and safe solution in place that works for all. We have experience of working with other aviation operators, including local UA VLOS operators, to allow safe integration within the same airspace from previous trials. We would be really grateful if you could provide us with some more information regarding your operations, specifically the area of operations in relation to the flying club site, as well as operating hours.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders. We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Fri, 22 Sept 2023 at 20:14, Dear Apian Please find attached our feedback on the proposed TDA for Northumbria Healthcare NHS FT feasibility flights.



# [Airspace] ACP-2023-015 Comments from a pilot resident close to the proposed zone.

1 message

20 September 2023 at 11:04

Please see the attached .jpg for my comments form, hand-written.

I would make a further observation, and it's this: while your proposed operating Drone Zone may have been drawn up in consultation with EGNT ATC, it does not seem to cover the instances of a clearance being available for a Special VFR clearance in or out of NCL ATZ; which would ordinarily be made available but for the "boundary wall" being imposed to the west, the north and the east. I have used such clearances myself, in the knowledge of local weather conditions being Local, and that an improvement would be found once clear of the coast on the way out to north or south.

Besides, why not make this airspace reservation conditional upon your contacting ATC and request activation of the Drone Zone, in sectors East, North or West as appropriate? Given that you would always get at least five minutes' notice from your medical or surgical colleagues that your own services would be needed, a simple phone call to ATC supervisor on watch at NCL could then allow civil and military manned traffic adequate notice to avoid the necessary portion of airspace. And have it active for a maximum of one block of15 minutes in any hour, then drop your Iron Curtain to the rest of airspace users.

In doing so, I hope that the implementation you are hoping for will always include in NOTAMs words to the effect that pilots should always carry an extra 15 minutes' worth of fuel at least, for the enforced re-routings that your trial is going to impose. I can vouch that cloudbase forecasting for Northumbria is not always of the best; and in good faith a pilot could set off on a North-South trip, expecting to be able to transit over the top of your Drone Zone if it is going to be active, can arrive near this area to find the cloudbase is lower than expected and he or she is thus forced to take a big detour round its margins.

I can see why you chose to carry out trials offering services of blood or medication delivery to the NHS, as it raises the moral righteousness well above that expected of, say, Amazoom (deliberate!) seeking to deliver a piece of jewellery for a night out "because the customer wants it Now ! "

Now see my attachment and please include it in the submission of comments to the CAA department handling your application (would it be delivered by drone, by surface mail, or electronically ??)



# ACP-2023-015

#### How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the <u>CAA's Airspace Change Portal</u>. Feedback on the proposed trial TDA, or requests for further information should be sent to:

Aviation team at

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name	
Email	
Representing	
Address (including postcode if possible)	

Feedback: 1'm a retified professional pilot (1970-2003); C.A.A. can confirm this I've also flown General Aviation types for about 20 years up to 2018. I'm a North Typeside resident living one mile inland from Typemouth's Long Sands beach, so well-placed to see the amount of G.A. traffic transitting the VFR coastal romte. Your Airspace Grab propisal of ACP-2023-015 is excessive, crude in its implementation, and potentially hazardous. It needs to be slimmed down both horizontally and vertically; and it seems to seek IFR protection for a VFR vehicle. Your drone operation needs more "eyes in the sky" to enable it to fit in, to see and-avoid. I OBJECT.



# Re: [Airspace] ACP-2023-015 Comments from a pilot resident close to the proposed zone.

1 message

13 October 2023 at 12:03

#### Dea

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

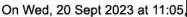
Current regulations mean that we are required to apply for a TDA in order to operate this type of service, however, we would like to emphasise that we do not see this as a long-term solution and are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

Unfortunately, it is currently not possible to activate/deactivate with 5 mins notice. One challenge is how this would be communicated to other air users as the NOTAM system would not be sufficient for real-time communication of the drone's position. However, by creating TDA sections, we are trying to be as flexible as possible with how the airspace is used.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



Please see the attached jpg for my comments form, hand-written.

I would make a further observation, and it's this: while your proposed operating Drone Zone may have been drawn up in consultation with EGNT ATC, it does not seem to cover the instances of a clearance being available for a Special VFR clearance in or out of NCL ATZ; which would ordinarily be made available but for the "boundary wall" being imposed to the west, the north and the east. I have used such clearances myself, in the knowledge of local weather conditions being Local, and that an improvement would be found once clear of the coast on the way out to north or south.

wrote:

Besides, why not make this airspace reservation conditional upon your contacting ATC and request activation of the Drone Zone, in sectors East, North or West as appropriate? Given that you would always get at least five minutes' notice from your medical or surgical colleagues that your own services would be needed, a simple phone call to ATC supervisor on watch at NCL could then allow civil and military manned traffic adequate notice to avoid

the necessary portion of airspace. And have it active for a maximum of one block of 15 minutes in any hour, then drop your Iron Curtain to the rest of airspace users.

In doing so, I hope that the implementation you are hoping for will always include in NOTAMs words to the effect that pilots should always carry an extra 15 minutes' worth of fuel at least, for the enforced re-routings that your trial is going to impose. I can vouch that cloudbase forecasting for Northumbria is not always of the best; and in good faith a pilot could set off on a North-South trip, expecting to be able to transit over the top of your Drone Zone if it is going to be active, can arrive near this area to find the cloudbase is lower than expected and he or she is thus forced to take a big detour round its margins.

I can see why you chose to carry out trials offering services of blood or medication delivery to the NHS, as it raises the moral righteousness well above that expected of, say, Amazoom (deliberate!) seeking to deliver a piece of jewellery for a night out "because the customer wants it Now ! "

Now see my attachment and please include it in the submission of comments to the CAA department handling your application (would it be delivered by drone, by surface mail, or electronically ??)



# [Airspace] Re: Apian Feedback Event Notes - 24th August

าสแ	25 September 2023 at 13:28
On Thu, 21 Sept 2023 at 10:15,	wrote:
Good morning thank you for account of the discussions that took pla	sharing the meeting notes. From memory they appear to be an accurate ace.
	om Blyth Valley Radio Model Club asking for an Exclusion Zone to allow us buld like to make a couple of additional comments.
	o in TDA area A so is likely to be active 24/7 throughout the 6 month trial. This Tone so important to prevent total closure of the Club.
	and B could be 1 mile inland from the coast that would eliminate our p the popular VFR route up and down the coast used by so many pleasure additional danger of flying over the sea.
On 19/09/2023 14:07,	wrote:
Good afternoon,	
August 2023. As an attendee, w	from our feedback event held at Wansbeck Hospital on the 24th ve would appreciate your review before we share with the CAA and have any comments, suggestions or queries, please could you Sept 2023.
	ank you for attending the session and providing us with feedback, we regarding updates on our proposal as a result of your feedback.
Thank you Kind regards	





### [Airspace] Re: Apian Feedback Event Notes - 24th August

1 message



25 September 2023 at 13:13

Good afternoor

Thank you so much for this information.

We have received a huge amount of valuable feedback from the aviation community, and because of this we are now taking time to review the TDA and reevaluate it. We look forward to sharing this with you in the near future. In the meantime please do let us know if you have any further questions.

Kind regards

On Thu, 21 Sept 2023 at 10:15

wrote:

Good morning thank you for sharing the meeting notes. From memory they appear to be an accurate account of the discussions that took place.

You have already received feedback from a sking for an Exclusion Zone to allow us to fly when TDA area A is active but would like to make a couple of additional comments.

1. The Hub at Seaton Delaval is also in TDA area A so is likely to be active 24/7 throughout the 6 month trial. This makes our application for an Exclusion Zone so important to prevent total closure of the Club.

2. If the eastern boundary of areas A and B could be 1 mile inland from the coast that would eliminate our problem completely and would open up the popular VFR route up and down the coast used by so many pleasure flights and historical aircraft without the additional danger of flying over the sea.

Regards

On 19/09/2023 14:07

Good afternoon,

Attached are the meeting notes from our feedback event held at Wansbeck Hospital on the 24th August 2023. As an attendee, we would appreciate your review before we share with the CAA and upload to the ACP portal. If you have any comments, suggestions or queries, please could you provide them to us by the 26th Sept 2023.

Once again, we would like to thank you for attending the session and providing us with feedback, we will be in contact with you soon regarding updates on our proposal as a result of your feedback.

Thank you Kind regards

Dear Stakeholder,

### Request for support to <u>ACP-2023-015</u> Northumbria Healthcare NHS Foundation Trust feasibility flights within a trial Temporary Danger Area (TDA).

I am writing to you on behalf of Apian, a medical logistics startup founded by NHS doctors with support from the NHS Clinical Entrepreneur Programme. We work on behalf of the NHS to operationalise uncrewed air system (UAS) technology and research its impact on patient health outcomes and staff wellbeing.

Apian, in conjunction with the Northumbria Healthcare NHS Foundation Trust, is looking to conduct feasibility flights using UAS between hospitals, GP surgeries, care homes and pharmacies. We would like to trial a regular, on demand delivery service for the distribution of medical payloads such as, prescription medication, medical implants, medical electronics, blood packs, medical and consumable supplies, medical documentation, as well as emergency deliveries. These flights will allow us to research, validate and provide vital data to establish whether the use of UAS, in these clinical settings will lead to improved patient care.

You may have supported us on our previous project in Northumbria (<u>ACP 2022 031</u>), and we would like to thank you for the support and feedback you provided during and after the <u>project</u>. That feedback allowed us to gain an understanding of how we can better integrate UAS. Please see the summary and lessons learnt during that project <u>here</u>.

As part of our application for a trial TDA, we have identified you as a key stakeholder. We have attached our trial plan for our proposal which includes details of our trial TDA in Annex C. We have also included a feedback form which we kindly request you return to us before the end of our stakeholder engagement period, 22nd September 2023, and look forward to receiving your confirmation of support.

If you have any further questions or would like to discuss the project in further detail, please do not hesitate to contact me.

#### How to provide feedback

Apian welcomes comments and feedback from all interested parties. All comments received regarding this proposal will be taken into consideration before a final design is submitted to the CAA. All the details of this airspace change proposal are available on the <u>CAA's Airspace Change Portal</u>. Feedback on the proposed trial TDA, or requests for further information should be sent to:

Aviation team at

A feedback form is provided and a word document is attached to the email containing this material for your use if you wish.

Responses regarding the proposed trial TDA submission must be received by 22nd September 2023.

Name		
Email		
Representing		
Address (including postcode if possible)		

Feedback:

We operate at a site within Gosforth racecourse, OS map ref 256712 at max altitude of 200 ft.



#### Re: [Airspace] Nemac feed back.

1 message

13 October 2023 at 12:22

Dea

Thank you very much for responding to our feedback and informing us of your location.

We would really appreciate it if you could give us some more information about your operations so we can work with you to ensure your operations continue as normal. We are currently working with VLOS and model flying sites to ensure they can continue operations and are confident we can work on a suitable mitigation which allows both operations to continue if our proposal is approved by the CAA.

We have received valuable information from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.





### [Airspace] ACP-2023-015

1 message

24 September 2023 at 09:02

Hello there

I am not in agreement with your proposal to create a TDA on two fronts:

1. It completely fails to adhere to the CAA requirement to minimise impact on other air users. It closes airstrips, blocks the busy East Coast VFR coastal transit route under the Newcastle CTA, creates choke points that will result in a large increase in traffic seeking Newcastle zone transits and is unreasonable in its vertical planning.

2. You should consider the impact and benefit of moving elsewhere. There is another already more suitable area of the United Kingdom which could be used for your drone trials. Namely, the zones around Aberporth (EGFA) in West Wales. These are already extensively used for drone testing and shared have controlled airspace already allocated. This would surely be a much better use of your time and money and integrate with existing drones.

Yours



### Re: [Airspace] ACP-2023-015

1 message

13 October 2023 at 12:18

	2010 Co.				
	 -				
-					
Dear					
Deal					

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

As previous air traffic controllers we have knowledge of and appreciate the restrictions other airspace users might face when flying, and getting a perspective from people who fly in the local area and are familiar with the airspace is extremely important. This feedback will help us continue the airspace change process, by taking into consideration the information we have received to develop a more refined airspace.

As you highlight, there are permanent danger areas across the UK that can be used for drone testing but we wanted to clarify why these areas aren't appropriate for our trial. There are two areas to cover; the healthcare use case and trialling drone technology and operations.

- Apian was founded by two NHS doctors, and all of our work is focused on providing improved healthcare to
  our patients and clinicians. We are working directly with the Northumbria Healthcare NHS Foundation Trust,
  to provide an on-demand delivery service in the most rural NHS Trust in England. The airspace proposed is
  directly linked to the use case requirements which are outlined in Annex B. To demonstrate the benefit to the
  NHS, it must be directly connected into the NHS.
- Danger areas are routinely used to test drones that can't safely be flown in other locations. This could be for a number of reasons such as they're still in the research and development phase and the UAS technology is not demonstrably safe enough for flight elsewhere. However, this is not required for our UAS operator, as they are well beyond the test and trial phase and have been safely flying the aircraft in locations around the world. This proposed trial is to conduct feasibility flights using drones between hospitals in Northumbria and for distribution of medical payloads. We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements, to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

We have received valuable information like yours, from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Sun, 24 Sept 2023 at 09:03 Hello there

vrote:

I am not in agreement with your proposal to create a TDA on two fronts:

#### apian.aero Mail - Re: [Airspace] ACP-2023-015

1. It completely fails to adhere to the CAA requirement to minimise impact on other air users. It closes airstrips, blocks the busy East Coast VFR coastal transit route under the Newcastle CTA, creates choke points that will result in a large increase in traffic seeking Newcastle zone transits and is unreasonable in its vertical planning.

2. You should consider the impact and benefit of moving elsewhere. There is another already more suitable area of the United Kingdom which could be used for your drone trials. Namely, the zones around Aberporth (EGFA) in West Wales. These are already extensively used for drone testing and shared have controlled airspace already allocated. This would surely be a much better use of your time and money and integrate with existing drones.

Yours





# [Airspace] Re: Apian trial TDA - ACP-2023-015

1 message

19 September 2023 at 14:12

Hi **Hing a lovely break.** 

Thank you so much for the information, really helpful. I am familiar with most of these operators, but will check all have been covered in our engagement. Really appreciate that. I'll be in contact if we have any further questions.



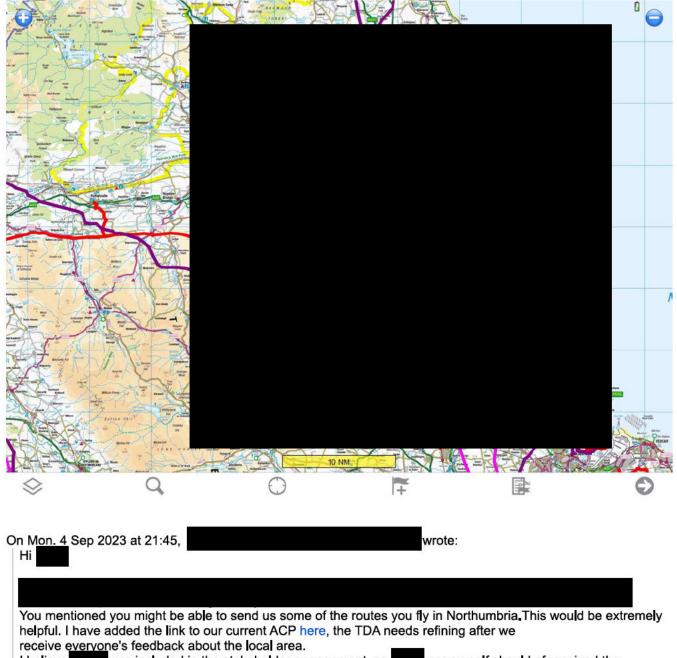
On Tue. 19 Sept 2023 at 13:36,

wrote:

Hi Sorry for the delay in getting back to you I have been on leave for the last two weeks so just catching up, I have attached a screenshot of the pipelines we survey around the Newcastle Area, these belong to National Gas Transmission, and Northern Gas Networks, there will be others but these are the ones we are responsible for flying.

It would be worth notifying National Grid Electricity, Western Power Distribution, Heliair, PDG Helicopters and GB Helicopters, as these are companies I know use Helicopters in support of utility companies.

Hope this helps !



I believe was included in the stakeholder engagement, so **and a** or yourself should of received the paperwork for leaving feedback. If not, let me know and I can send it again.

It was great to meet you and Paul.

Kind regards





# [Airspace] Re: Apian trial TDA - ACP-2023-015

1 message

19 September 2023 at 14:12

Hi**ng and a lovely break.** 

Thank you so much for the information, really helpful. I am familiar with most of these operators, but will check all have been covered in our engagement. Really appreciate that. I'll be in contact if we have any further questions.

Kind regards

On Tue 19 Sent 2023 at 13:36

wrote:

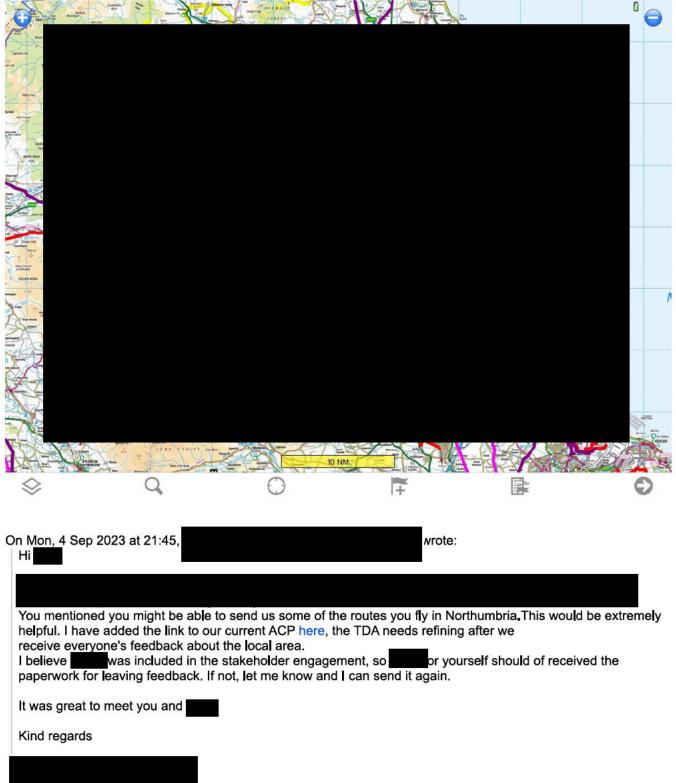
Hi orry for the delay in getting back to you I have been on leave for the last two weeks so just catching up, I have attached a screenshot

#### flying.

It would be worth notifying National Grid Electricity, Western Power Distribution, Heliair, PDG Helicopters and GB Helicopters, as these are companies I know use Helicopters in support of utility companies.

Hope this helps !

apian.aero Mail - [Airspace] Re: Apian trial TDA - ACP-2023-015







To Whom It May Concern,

#### RE: Trial Plan Northumbia Stage 2 ACP-2023-015

It has been brought to the attention of Carlisle Lake District Airport (CLDA) that a Drone Trial is currently under proposal for Northumberland. CLDA has reviewed the proposal document and understands that the trial will be conducted between 400ft AGL and 2,000ft AGL, in restricted airspace between Tynemouth and Haltwhistle

The proposal raises concerns over the impact the trial will have on the Airport should the proposal be permitted.

CLDA regularly accepts visiting aircraft from the North-East, including aircraft from Newcastle International Airport, Teeside International Airport, Eshott Airfield, Fishburn Airfield and Currock Hill. All of which route through the Tyne Valley.

The Tyne Valley is also used by visiting aircraft from Central and Eastern Scotland and the South of England who use this route when their routes over the Scottish Border hills and the Lake District National Park are shrouded in cloud.

Due to the location of CLDA, the temperate is often cloudy. However, the provision of the Tyne Valley allows visiting aircraft to fly VFR under an overcast cloud-base that is normally between 1,200ft and 2,000ft. Should the proposed restricted airspace be implemented, this route will no longer be an alternative for visiting aircraft.

Under the proposal, CLDA based-residents will be impacted due to departure to the East being restricted. When cloud base is 2,000ft or below, CLDA based-residents depart to the East of the Airport.

Businesses located at CLDA rely on visiting aircraft for their custom. These include Northumbria Maintenance, who services and maintains aircraft from the North of England and Southern Scotland. The Solway Aviation Museum, also based on site at CLDA, receives footfall from non-based residents at the Airport.

After assessing the impact the proposal on CLDA, the Airport concludes that the connotations will be negative to the nature of its business and the businesses on CLDA. Therefore, the stance of the airport is to oppose the proposal.

Yours sincerely,



# Re: [Airspace] FW: [External] Drone Proposal

1 message

13 October 2023 at 12:13

Dear

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided. We would be more than happy to meet and discuss this with you, but in the meantime, we have addressed your points below.

Having reviewed our distribution list we can confirm Carlisle Airport was included in the stakeholder engagement and will ensure you are included in all future stakeholder engagement regarding any of our operations in the area.

As previous air traffic controllers we have knowledge of and appreciate the restrictions you might face when flying, and getting a perspective from a pilot who flies in the local area is extremely important. Your feedback will help us continue the airspace change process by taking into consideration the feedback we have received to develop a more refined airspace.

Thank you for raising your concerns for businesses that use Carlisle Airport as a base. We can assure you we don't want to affect any businesses with our proposal.

We have received valuable information like yours, and from the GA community regarding flying routes used frequently in Northumberland. As a direct result of this feedback we will now undertake a period of review before communicating a revised TDA with stakeholders.

We will include you in this communication and look forward to sharing this with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.



On Thu, 5 Oct 2023 at 14:57,

wrote:

Thank you very much for your email.

We appreciate the time you have taken to respond to our stakeholder engagement and want to assure you that we are committed to reviewing and responding to all feedback received. We anticipate getting back to you as soon as possible. In the meantime, if you would like to talk to one of our team, please respond to this email and we will contact you.





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contact the sender and then delete this email. This e-mail and/or any replies to it, together with any attachments, may be intercepted, copied or monitored by us.

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# Fwd: [Airspace] Drone Trial Response

1 message



26 September 2023 at 21:28

Kino reoams,



Dear

Thank you for your email.

am hoping that you have been overwhelmed with feedback.

There is no need to apologise. I am happy that you do not want to close any airfields and I am sure that it will be possible to come to a solution that is agreeable. However you do say that we should be able to share the airspace but that is not legally or safely possible with the technology you intend to use. The best compromise that we can come to is segregated airspace until the drone can see and avoid. The problem as I see it is the segregated area needs to be much smaller in respect of a corridor that the drone stays in and a height that it does not exceed. Yes I understand that this is what you have proposed but the dimensions are excessive to the point of making all other airspace users unsafe.

I think that your best way forward is to have discussions with the CAA lower airspace people and find out how narrow a corridor they will accept because it is very important that the East Coast and South Tyne routes are open in all weather.

Please could you let me know if you make any progress and then we can discuss any changes you want to make.

I hope that we have a chance to meet again and I think I should have a chat with a representative from your zipline team if possible.

Best regards.



Sent from Mail for Windows



Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided.

Firstly, we would like to thank you for your continued engagement throughout this process. We have very much appreciated you sharing your experience of flying within the region.

As discussed in our very first conversations with you before the stakeholder engagement period opened, we do not intend to close any airstips or close local businesses. We apologise that this was not communicated better in the material published and have taken this as something we must do better in future.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial.

After many productive discussions with yourself, we feel we fully understand your concerns. We will now undertake a period of review before communicating a revised TDA with stakeholders, which we look forward to sharing with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

#### Kind regards

On Sat, 16 Sept 2023 at 10:0! wrote: Dear Apian. Please find attached page twenty of your trial plan with my feedback response. Best regards.



# Re: [Airspace] Drone Trial Response

1 message



13 October 2023 at 12:08

In my previous email I explained that the proposed TDA you reference is being re-evaluated so the dimensions you talk about are for our previous proposed TDA. As soon as we have our revised TDA, we will share this with you and stakeholders for further feedback.

As stated previously, we do not believe a TDA is a sustainable long-term solution.

We are working in collaboration with the CAA to support the development of integrated airspace that allows equitable use for all airspace users. This work involves a range of areas from detect and avoid operational and technical requirements, to procedures and equipment for BVLOS flights in controlled and uncontrolled airspace. At each point, Apian will ensure trial objectives align with the <u>Airspace Modernisation Strategy</u> and trial learnings can support development of CAA policies and Government regulation to enable integration.

We will be in contact with you in the near future with the updated proposal.



Dear wrote: Dear Thank you for your email.

I am hoping that you have been overwhelmed with feedback.

There is no need to apologise. I am happy that you do not want to close any airfields and I am sure that it will be possible to come to a solution that is agreeable. However you do say that we should be able to share the airspace but that is not legally or safely possible with the technology you intend to use. The best compromise that we can come to is segregated airspace until the drone can see and avoid. The problem as I see it is the segregated area needs to be much smaller in respect of a corridor that the drone stays in and a height that it does not exceed. Yes I understand that this is what you have proposed but the dimensions are excessive to the point of making all other airspace users unsafe.

I think that your best way forward is to have discussions with the CAA lower airspace people and find out how narrow a corridor they will accept because it is very important that the East Coast and South Tyne routes are open in all weather.

Please could you let me know if you make any progress and then we can discuss any changes you want to make.

#### 13/10/2023, 12:08

#### apian.aero Mail - Re: [Airspace] Drone Trial Response

I hope that we have a chance to meet again and I think I should have a chat with a representative from your zipline team if possible.

Best regards.

Sent from Mail for Windows

Good afternoon **and a great weekend**.

Thank you very much for responding with feedback to our proposal. We appreciate the time it has taken to read the material and the constructive feedback you have provided.

Firstly, we would like to thank you for your continued engagement throughout this process. We have very much appreciated you sharing your experience of flying within the region.

As discussed in our very first conversations with you before the stakeholder engagement period opened, we do not intend to close any airstips or close local businesses. We apologise that this was not communicated better in the material published and have taken this as something we must do better in future.

Our intention is to work with the local GA community, including any local airfields or airstrips, to explore the possibility of operations working alongside each other. We, like the CAA and as I'm sure you do, believe that being able to share the airspace is ultimately the best solution for all stakeholders and this is a step along that path. It is extremely challenging to gain data on GA operations, and proves why stakeholder engagement is an important part of the process.

We have previously successfully demonstrated working in close proximity to microgliding and gliding clubs, and believe we could work with both Airstrips and the broader GA community to achieve the same in this trial.

After many productive discussions with yourself, we feel we fully understand your concerns. We will now undertake a period of review before communicating a revised TDA with stakeholders, which we look forward to sharing with you in the near future.

If you have any further questions or would like to schedule a meeting with either our healthcare or aviation team, please do not hesitate to contact us.

#### Kind regards

On Sat, 16 Sept 2023 at 10:05

Dear

wrote: