

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Scottish Aero Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 18 September 2023 16:28:09

Dear [REDACTED]

Thank you for your quick response. We understand where your question is coming from and have discussed the topic a lot with several GA representatives who responded during the main engagement period. We were keen to resolve the concerns raised by GA and ensure VFR traffic can continue to operate safely.

RPAS operate at ~400 ft AGL, but a buffer is required, so the TDA cannot be at 400 exactly. Ground level in B3-B4 can be 200-300 feet, so to keep similar buffer – 900 ft AMSL TDA ceiling is required.

You raise an important point regarding airspace available for VFR traffic to manoeuvre safely. That is part of the reason why we also include the requirement to operate only when cloud base is at 1500 ft or above.

Hope the information provided is useful and we will be happy to answer any additional questions you might have on that. Meanwhile also feel free to advise of any possible impacts that you foresee now or that might arise in the future with respect to the 3 key topics raised in this engagement update.

Best wishes,

[REDACTED]

From: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
Subject: Re: Scottish Aero Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello,

I have compared your proposed routings with OS maps of the area. I can understand a proposed ceiling of 700ft in area A4 as you may be overflying high ground at the north end of Holy Island, before reaching Arran.

However, you seem to have then used this as a baseline for all of the other areas. This would explain why you have some segments at 900ft as they have points approaching 200ft above sea level (so 700ft plus 200ft).

Why can't all segments apart from A4 have a baseline of 400ft, with those currently marked as 900ft being set to 600ft AMSL (400ft plus 200ft). Or, better still, if you routed around Holy

Island, Sector A4 could remain at 400ft ceiling also. That would give you 400AGL everywhere which is the height we might expect drones to operate. VFR traffic would normally be above 500ft AGL (although not mandated) to remain clear of people, vessels, structures etc.

VFR traffic transiting north-south west of Prestwick and remaining outside of controlled airspace need to remain below 1500ft. Adopting the CAA-recommended 200ft/2 mile buffer from controlled airspace means VFR traffic would be below 1300ft.

A drone ceiling of 700ft only leaves 600ft for VFR traffic to manoeuvre in. If your drone ceiling was reduced to 400ft in Sectors A2 and A3 VFR traffic would have 900ft to manoeuvre in - a 50% larger volume of airspace.

Regards...

Scottish Aero Club/LAA Strathtay Strut

> On 18 Sep 2023, at 14:39, Caelus Airspace <caelus2airspace@traxinternational.co.uk> wrote:
>

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 24 May 2023 23:09:43
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

Dear [REDACTED]

My name is Alex and I have received your details from some colleagues at Prestwick Airport. I initially reached out to the general email address CCed, however, though it might be helpful if I try and use the contact given to me to approach you directly. Please kindly see the original email sent below and the PDF attachment.

Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Date: Tuesday, 23 May 2023 at 13:57
To: [REDACTED]
Subject: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well. I called earlier today regarding my enquiry and as agreed just sending through additional information related to it.

My name is Alex and I represent the Future Flight Challenge Project [CAELUS2*](#). The purpose of this email is to invite you to an official engagement as per CAP1616 process with Prestwick Flight Centre as one of our proposals for BVLOS RPAS flight is in Ayrshire & Arran and requires segregated airspace that will be in immediate proximity of Prestwick and even cross the CTR. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

[REDACTED]

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 23 May 2023 13:57:50
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

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From: [REDACTED]
To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: Re: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 19 September 2023 15:40:12
Attachments: [N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear Alex and Lucy

Thank you for your update.

With regard to paragraph A it's our preference that the trial is conducted as early as possible in the January-July window in order to minimise the impact to the Flight Centre's flying operations which tend to slow considerably over the winter months.

With regard to paragraph C, provision of a DACS/DAAIS is essential to minimise impact on our operations if the trial is beyond February when our flying picks up significantly. However, experience with Prestwick ATC is such that I have concerns over their ability to offer such a service with all that implies for our operation.

Might I also interject on behalf of Scotia Seaplanes where I am also Head of Training. Our operation hitherto has been seasonal but with the potential availability of a second aeroplane might transition to year-round, ie including January and February. Our operating minima are less than those of the Flight Centre due to the nature of our activities, and close to yours. The potential for disruption to our clients is greater as they tend to come from afar on week-long courses, rather than locals who train once or twice per month who can reschedule easily. Our route to our principal operating area (Loch Doon) is on track close to Ayr hospital with all that implies for disruption. I would like to ascertain what mechanism for compensation you might envisage should disruption occur to these short-term, high-value, high net-worth individuals.

Regards,

[REDACTED]

On 18 Sep 2023, at 16:44, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear Stakeholder,

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We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACs).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACs to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email (caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 24 May 2023 at 23:09

To: [REDACTED]

[REDACTED]

Subject: FW: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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Date: Tuesday, 23 May 2023 at 13:57

To: [REDACTED]

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Dear Prestwick Flight Centre Team,

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Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

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Cc: [REDACTED]
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Attachments: [N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

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Alex and Lucy on behalf of CAELUS

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Date: Tuesday, 23 May 2023 at 13:57

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From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 21 September 2023 10:41:06

[REDACTED]

Thank you for taking the time to provide such a detailed response. We note that you would wish your preference for the trial to be conducted as early as possible within the Jan – Jul window proposed and understand that this would minimise any impact given that your flying operations tend to be less during the winter months. We also note that you feel that a DACS/DAAIS provision is essential should the trial extend beyond Feb when you see an increase in your flying.

With regards to your comments about Prestwick ATS we are keen to understand what limitation you feel there is regarding their ability to provide such a service so that we can ensure that they are addressed within our collaboration with them.

We acknowledge the additional stakeholder that you are replying on behalf of - Scotia Seaplanes. We appreciate that you mention that your operating minima is lower – and if you would share your operating minima to better understand any potential impact we would be grateful. We would like to highlight that our proposal suggests operation when cloudbase is 1500ft or higher. That is done deliberately to allow VFR traffic safely transit above the TDA. So, given that – we see it as a reasonable expectation that most airspace users will be able to safely avoid the TDA by flying above it or outside of its lateral dimensions.

I would note that the principal operating area seems quite far from the proposed TDA. Yet, you mention possible flight close to the Ayr hospital. To be clear, please share a SkyDemon/KML example flight track so that we may understand your concerns with our proposed TDA.

We are embarking upon stakeholder engagement to arrive at solutions to mitigate impact to a range of airspace users and look to accommodate, where possible, fair and equitable use of airspace to all. We have been reaching agreements with those who need priority, at particular times/instances, such as the blue light and security services. We have also found areas of compromise forthcoming when looking at training areas. We are directed by CAP 1616 to treat all our GA stakeholders in a fair and equitable manner and we are keen to work with you to mitigate potential impact to operations within Class G airspace.

Kind regards,
Alex and Lucy
On Behalf of CAELUS2

From: [REDACTED]
Date: Tuesday, 19 September 2023 at 15:40
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

Subject: Re: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you for your update.

With regard to paragraph A it's our preference that the trial is conducted as early as possible in the January-July window in order to minimise the impact to the Flight Centre's flying operations which tend to slow considerably over the winter months.

With regard to paragraph C, provision of a DACS/DAAIS is essential to minimise impact on our operations if the trial is beyond February when our flying picks up significantly. However, experience with Prestwick ATC is such that I have concerns over their ability to offer such a service with all that implies for our operation.

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Regards,

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[REDACTED]

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<caelus2airspace@traxinternational.co.uk> wrote:

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Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 24 May 2023 at 23:09

To: [REDACTED]
[REDACTED]

Subject: FW: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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From: Caelus Airspace
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Flight Centre engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 20 September 2023 14:53:14

From: [REDACTED]
Date: Tuesday, 19 September 2023 at 15:40
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
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We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,
Alex
On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 24 May 2023 23:10:53
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

Dear [REDACTED]

My name is Alex and I have received your details from some colleagues at Prestwick Airport. I initially reached out to the general email address CCed, however, though it might be helpful if I try and use the contact given to me to approach you directly. Please kindly see the original email sent below and the PDF attachment.

Kind regards,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Date: Tuesday, 23 May 2023 at 14:06
To: [REDACTED]
Subject: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear Prestwick Flying Club Team,

I hope this email finds you well. I called earlier today regarding my enquiry, but could not get through, so sending through the information over email.

My name is Alex and I represent the Future Flight Challenge Project [CAELUS2](#)*. The purpose of this email is to invite you to an official engagement as per CAP1616 process with Prestwick Flying Club as one of our proposals for BVLOS RPAS flight is in Ayrshire & Arran and requires segregated airspace that will be in immediate proximity of Prestwick and even cross the CTR. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 23 May 2023 14:06:07
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

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From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 12 June 2023 11:11:15

Dear [REDACTED]

Thank you very much for kindly getting back to us and we are definitely happy to assist as much as we can. Please see my responses to your current questions below:

1. We will be speaking to Prestwick tomorrow June 13th and it was on our radar to confirm if they are able to provide DACS.
 - a. So, the answer is that “potentially YES, but not confirmed or agreed yet”.
 - b. I also have to note that given feedback from some of other GA users, who brought up potential issues of being too close to the TDA in case of poor weather, we are considering to implement weather limitations to our operations. For example, it could be a matter of running our operations only if the cloud base is 1500 feet or above, so that other airspace users could safely transit above the TDA. There is, however, a potential risk that we wont be able to fly as much as we need to, so that decision is not yet set in stone.
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We look forward to hearing from you and your team.

Best wishes,
Alex

From: [REDACTED]
Date: Saturday, 10 June 2023 at 21:18
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi Alex,

Thanks you for the email and details about the proposed airspace change.

Our club holds its monthly committee meeting on the 2nd Tuesday of the month, and I'd like to discuss the proposal with the committee at the next meeting which is this Tuesday (13th), and

respond by the end of next week (16th).

In the meantime I do have a few questions:

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3. While this phase of the trial involves separation with existing traffic, how will this be used to demonstrate safe operation in an integrated environment?

Regards,

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From: [REDACTED]
To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 28 June 2023 07:56:03

Hi Alex,

Thanks for the reply. I just wanted to ask if the discussions with Prestwick ATC have taken place, and what the latest plan is for the TDA during bad weather conditions?

You mention below about potentially suspending drone flights if the cloudbase is below a certain altitude, however would the TDA be deactivated at the same time to permit aircraft to fly low if required to enter/exit the zone? Or will there be a DACS available?

Regards,

[REDACTED]

On Mon, 12 Jun 2023, 11:11 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

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We look forward to hearing from you and your team.

Best wishes,

Alex

From: [REDACTED]
Date: Saturday, 10 June 2023 at 21:18
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Regards,

[REDACTED]

[REDACTED]

Prestwick Flying Club

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From: Caelus Airspace
To: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 28 June 2023 12:10:27

Dear [REDACTED]

Lovely to hear from you again. As we made a number of hopefully positive adjustments to our proposal – we should be sending the revised information very soon with complete details to all stakeholders.

Nevertheless, happy to answer your questions here:

1. Prestwick are optimistic and happy to explore DACS provision to support the project. This approach is particularly key to the emergency services. Once we have clarification as to the provision of service for the TDA we will update you accordingly. If a DACS cannot be provided, and this may occur for a number of reasons, then a DAIS from London Information would be provided.
2. Cloud base of 1500 feet as per Prestwick METAR is what we will be looking at for the minimum weather requirements to operate. After looking at history for past 3 Octobers – that happens around 75% of the time. Nevertheless, we were told that nearby weather can be quite different from that at Prestwick, so having DACS available is still very important and we are doing our best efforts on that front.
3. If the weather was good and suddenly deteriorated and we have to stop operations – we will inform AR Ops asking to deactivate the NOTAM, however that might take some time to take effect, therefore it would be a good idea to call the phone number on the NOTAM before departure and/or get the latest information from DACS.

Hope this is helpful? Please let me know if you have any more questions

Best wishes,
Alex

From: [REDACTED]
Date: Wednesday, 28 June 2023 at 07:56
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Cc:
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To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 28 June 2023 12:10:28

Dear [REDACTED]

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 18 September 2023 14:43:19
Attachments: [N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 28 June 2023 at 12:10

To: [REDACTED]

[REDACTED]

Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Lovely to hear from you again. As we made a number of hopefully positive adjustments to our proposal – we should be sending the revised information very soon with complete details to all stakeholders.

Nevertheless, happy to answer your questions here:

1. Prestwick are optimistic and happy to explore DACS provision to support the project. This approach is particularly key to the emergency services. Once we have clarification as to the provision of service for the TDA we will update you accordingly. If a DACS cannot be provided, and this may occur for a number of reasons, then a DAIS from London Information would be provided.
2. Cloud base of 1500 feet as per Prestwick METAR is what we will be looking at for the minimum weather requirements to operate. After looking at history for past 3 Octobers – that happens around 75% of the time. Nevertheless, we were told that nearby weather can be quite different from that at Prestwick, so having DACS available is still very important and we are doing our best efforts on that front.
3. If the weather was good and suddenly deteriorated and we have to stop operations – we will inform AR Ops asking to deactivate the NOTAM, however that might take some time to take effect, therefore it would be a good idea to call the phone number on the NOTAM before departure and/or get the latest information from DACS.

Hope this is helpful? Please let me know if you have any more questions

Best wishes,

Alex

From: [REDACTED]

Date: Wednesday, 28 June 2023 at 07:56

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi Alex,

Thanks for the reply. I just wanted to ask if the discussions with Prestwick ATC have taken place,

and what the latest plan is for the TDA during bad weather conditions?

You mention below about potentially suspending drone flights if the cloudbase is below a certain altitude, however would the TDA be deactivated at the same time to permit aircraft to fly low if required to enter/exit the zone? Or will there be a DACS available?

Regards,



On Mon, 12 Jun 2023, 11:11 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

Dear 

Thank you very much for kindly getting back to us and we are definitely happy to assist as much as we can. Please see my responses to your current questions below:

1. We will be speaking to Prestwick tomorrow June 13th and it was on our radar to confirm if they are able to provide DACS.
 - a. So, the answer is that “potentially YES, but not confirmed or agreed yet”.
 - b. I also have to note that given feedback from some of other GA users, who brought up potential issues of being too close to the TDA in case of poor weather, we are considering to implement weather limitations to our operations. For example, it could be a matter of running our operations only if the cloud base is 1500 feet or above, so that other airspace users could safely transit above the TDA. There is, however, a potential risk that we wont be able to fly as much as we need to, so that decision is not yet set in stone.
2. We will bring up it in our conversations with Prestwick and see what they say. Somebody else mentioned SVFR operations to us, so we appreciate it is an important topic.
3. There is an element of testing relevant procedures, but also the key idea is that the trial creates a mimic of integrated airspace within a TDA to gather evidence towards removing the TDA for full operational deployment. In the ideal world, we would like to have briefed ,involved and procedurally separated traffic operating inside the TDA, but CAA have been previously against such requests, so we might be looking at simulated traffic or traffic operating above the TDA as if it is inside the TDA.

We look forward to hearing from you and your team.

Best wishes,
Alex



Date: Saturday, 10 June 2023 at 21:18

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi Alex,

Thanks you for the email and details about the proposed airspace change.

Our club holds its monthly committee meeting on the 2nd Tuesday of the month, and I'd like to discuss the proposal with the committee at the next meeting which is this Tuesday (13th), and respond by the end of next week (16th).

In the meantime I do have a few questions:

1. If aircraft need to enter or exit the Prestwick CTR via the Doonfoot, Dalrymple or Irvine VRPs (our main entry and exit points from the prestwick zone) beneath low cloud (which is not uncommon at that time of year), will Prestwick ATC be able to co-ordinate and provide a Danger Area Crossing Service?
2. Have there been any discussions with Prestwick ATC about operations when Special VFR clearances may be issued during the day, and when they limit the number of aircraft that operate in the CTR (or will drone operations be suspended in certain weather conditions?)
3. While this phase of the trail involves separation with existing traffic, how will this be used to demonstrate safe operation in an integrated environment?

Regards,

[REDACTED]
[REDACTED]
[REDACTED]

On Tue, 23 May 2023 at 14:06, Caelus Airspace <caelus2airspace@traxinternational.co.uk> wrote:

Dear Prestwick Flying Club Team,

I hope this email finds you well. I called earlier today regarding my enquiry, but could not get through, so sending through the information over email.

My name is Alex and I represent the Future Flight Challenge Project [CAELUS2*](#). The purpose of this email is to invite you to an official engagement as per CAP1616 process with Prestwick Flying Club as one of our proposals for BVLOS RPAS flight is in Ayrshire & Arran and requires segregated airspace that will be in immediate proximity of Prestwick and even cross the CTR. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from

the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

From: [REDACTED]
To: [Caelus Airspace](mailto:caelus2airspace@traxinternational.co.uk)
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 10 June 2023 21:18:22

Hi Alex,

Thanks you for the email and details about the proposed airspace change.

Our club holds its monthly committee meeting on the 2nd Tuesday of the month, and I'd like to discuss the proposal with the committee at the next meeting which is this Tuesday (13th), and respond by the end of next week (16th).

In the meantime I do have a few questions:

1. If aircraft need to enter or exit the Prestwick CTR via the Doonfoot, Dalrymple or Irvine VRPs (our main entry and exit points from the preswick zone) beneath low cloud (which is not uncommon at that time of year), will Prestwick ATC be able to co-ordinate and provide a Danger Area Crossing Service?
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3. While this phase of the trail involves separation with existing traffic, how will this be used to demonstrate safe operation in an integrated environment?

Regards,

[REDACTED]

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My name is Alex and I represent the Future Flight Challenge Project [CAELUS2](#)*. The purpose of this email is to invite you to an official engagement as per CAP1616 process with Prestwick Flying Club as one of our proposals for BVLOS RPAS flight is in Ayrshire & Arran and requires segregated airspace that will be in immediate proximity of Prestwick and even cross the CTR. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 27 September 2023 10:33:55

Hello,

We would like to kindly follow up re our request for engagement below. Please note the deadline of this Sunday October 1st if you would like to submit a response.

Best wishes,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Date: Monday, 18 September 2023 at 14:43

To: [REDACTED]
[REDACTED]

Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACs).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 28 June 2023 at 12:10

To: [REDACTED]

[REDACTED]

Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Lovely to hear from you again. As we made a number of hopefully positive adjustments to our proposal – we should be sending the revised information very soon with complete details to all stakeholders.

Nevertheless, happy to answer your questions here:

1. Prestwick are optimistic and happy to explore DACS provision to support the project. This approach is particularly key to the emergency services. Once we have clarification as to the provision of service for the TDA we will update you accordingly. If a DACS cannot be provided, and this may occur for a number of reasons, then a DAIS from London Information would be provided.
2. Cloud base of 1500 feet as per Prestwick METAR is what we will be looking at for the minimum weather requirements to operate. After looking at history for past 3 Octobers – that happens around 75% of the time. Nevertheless, we were told that nearby weather can be quite different from that at Prestwick, so having DACS available is still very important and we are doing our best efforts on that front.
3. If the weather was good and suddenly deteriorated and we have to stop operations – we will inform AR Ops asking to deactivate the NOTAM, however that might take some time to take effect, therefore it would be a good idea to call the phone number on the NOTAM before departure and/or get the latest information from DACS.

Hope this is helpful? Please let me know if you have any more questions

Best wishes,
Alex

From: [REDACTED]
Date: Wednesday, 28 June 2023 at 07:56
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi Alex,

Thanks for the reply. I just wanted to ask if the discussions with Prestwick ATC have taken place, and what the latest plan is for the TDA during bad weather conditions?

You mention below about potentially suspending drone flights if the cloudbase is below a certain altitude, however would the TDA be deactivated at the same time to permit aircraft to fly low if required to enter/exit the zone? Or will there be a DACS available?

Regards,

[REDACTED]

On Mon, 12 Jun 2023, 11:11 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

Dear [REDACTED]

Thank you very much for kindly getting back to us and we are definitely happy to assist as much as we can. Please see my responses to your current questions below:

1. We will be speaking to Prestwick tomorrow June 13th and it was on our radar to confirm if they are able to provide DACS.
 - a. So, the answer is that “potentially YES, but not confirmed or agreed yet”.
 - b. I also have to note that given feedback from some of other GA users, who brought up potential issues of being too close to the TDA in case of poor weather, we are considering to implement weather limitations to our operations. For example, it could be a matter of running our operations only if the cloud base is 1500 feet or above, so that other airspace users could safely transit above the TDA. There is, however, a potential risk that we wont be able to fly as much as we need to, so that decision is not yet set in stone.
2. We will bring up it in our conversations with Prestwick and see what they say. Somebody else mentioned SVFR operations to us, so we appreciate it is an important topic.
3. There is an element of testing relevant procedures, but also the key idea is that the trial

creates a mimic of integrated airspace within a TDA to gather evidence towards removing the TDA for full operational deployment. In the ideal world, we would like to have briefed ,involved and procedurally separated traffic operating inside the TDA, but CAA have been previously against such requests, so we might be looking at simulated traffic or traffic operating above the TDA as if it is inside the TDA.

We look forward to hearing from you and your team.

Best wishes,
Alex

From: [REDACTED]
Date: Saturday, 10 June 2023 at 21:18
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: Re: Prestwick Flying Club engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi Alex,

Thanks you for the email and details about the proposed airspace change.

Our club holds its monthly committee meeting on the 2nd Tuesday of the month, and I'd like to discuss the proposal with the committee at the next meeting which is this Tuesday (13th), and respond by the end of next week (16th).

In the meantime I do have a few questions:

1. If aircraft need to enter or exit the Prestwick CTR via the Doonfoot, Dalrymple or Irvine VRPs (our main entry and exit points from the preswick zone) beneath low cloud (which is not uncommon at that time of year), will Prestwick ATC be able to co-ordinate and provide a Danger Area Crossing Service?
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3. While this phase of the trail involves separation with existing traffic, how will this be used to demonstrate safe operation in an integrated environment?

Regards,

[REDACTED]
[REDACTED]
[REDACTED]

On Tue, 23 May 2023 at 14:06, Caelus Airspace <caelus2airspace@traxinternational.co.uk>

wrote:

Dear Prestwick Flying Club Team,

I hope this email finds you well. I called earlier today regarding my enquiry, but could not get through, so sending through the information over email.

My name is Alex and I represent the Future Flight Challenge Project [CAELUS2](#)*. The purpose of this email is to invite you to an official engagement as per CAP1616 process with Prestwick Flying Club as one of our proposals for BVLOS RPAS flight is in Ayrshire & Arran and requires segregated airspace that will be in immediate proximity of Prestwick and even cross the CTR. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

From: [REDACTED]
To: [Caelus Airspace](#)
Subject: Re: Baird Airstrip, BUTE.
Date: 31 May 2023 19:25:55

Hello Alex, I have begun my notes and questions and have compiled a short document with 11 specific questions or points. I am on holiday in Ireland for the rest of the week. I will finalise my comments at the weekend and send you the document on Monday if that is ok with you.

I will be in touch on Monday.

Best regards

[REDACTED]

On Wed, 31 May 2023, 19:16 Caelus Airspace,
<caelus2airspace@traxinternational.co.uk> wrote:

Thank you very much! Really glad we found you, Ross, and thank you so much for agreeing to assist. We look forward to receiving your initial feedback/questions.

Best wishes,

Alex

From: [REDACTED]
Date: Sunday, 28 May 2023 at 17:44
To: [REDACTED]
Subject: Re: Baird Airstrip, BUTE.

Hello [REDACTED]

I would be happy to be the representative for Bute Airfield.

I have already sent emails to both Fiona and Alex last week so I think we are all on the same page now.

I have the consulting document from Caelus and will review over the next week.

Best regards

[REDACTED]

On Sat, 27 May 2023, 12:32 [REDACTED]

Hi Alex - with regard to your enquiry to the Mount Stuart Office (to [REDACTED]
[REDACTED] 24/5/2023,

my apologies for the delay in responding to your enquiry which [REDACTED] passed on
to me. viz below.

I, of late, after many years, have retired from activities at the Baird Airstrip
at BUTE.

Fortunately a fellow pilot is now dealing with such.

He is [REDACTED]
[REDACTED]

I have copied [REDACTED] on your enquiry, and he will respond to you.

Regards,
[REDACTED]

= **From:** Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Wednesday, May 24, 2023 9:25 AM

To: [REDACTED]

Subject: [External] Enquiry about a contact for Bute Airfield

Hello,

My name is Alex and I was recommended by my colleagues to contact you as you might be aware of somebody who is in charge of the Bute airstrip? Is that true by any chance? The reason I am asking as my company is part of a drone project that is working with the NHS in Ayrshire and Arran area and we are required to engage with aviation stakeholders in the area since our operations might have impact on local users and we want to make it is minimised

Thank you very much in advance for any relevant information or advice!

Best wishes,

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal
Date: 03 July 2023 14:59:49

Thank you! Noted

From: [REDACTED]
Date: Monday, 3 July 2023 at 13:04
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
[REDACTED]
Subject: Re: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal

Hello Alex, I would appreciate being kept informed of the other Scottish drone trials you are coordinating.

If I can offer some useful GA pilot insight, I will certainly be happy to do so.

Best regards

[REDACTED]

On Mon, 3 Jul 2023, 12:24 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

Dear [REDACTED]

Thank you very much for your kind and clear response. That's all been noted and we remain at your disposal if you ever need to contact us. Further updates will also still be available on the ACP portal.

We would note that as this project runs till April 2024 – we will not consider TMZ or ECMZ applications within that time frame for sure.

We are, however, happy to continue talking to you re our other applications in vicinity of Edinburgh and Aberdeen-Inverness. Not sure if that is of interest for Bute pilots geographically, but the insights received from you so far been very helpful and if you think you could assist – please feel free to let us know.

Kind regards,
Alex

From: [REDACTED]
Date: Saturday, 1 July 2023 at 17:23
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: S [REDACTED]
[REDACTED]
Subject: Re: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal

Hello Alex, many thanks for your email with the updated N2 TDA proposal.

I have reviewed the attachment and note that all our primary concerns have been addressed. I therefore have no objections to this proposal.

I also note the longer term aims of the Caelus national deployment will require further flight trials, possibly involving ECMZ or TMZ areas and would appreciate being included in consultation with such future plans as they may influence GA pilots in the Bute area.

If I can be of any help meanwhile, please let me know.

Best regards



On Fri, 30 Jun 2023, 11:37 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

Dear Stakeholder,

You are receiving this email because you were previously engaged regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal [ACP-2022-103](#) planned as part of CAELUS2 Future Flight Challenge project. The flight route this pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our [original proposal](#) based on feedback received over the past weeks. Changes mostly relate to location of the Ayr–Crosshouse route, TDA segmentation, AMSL ceiling of the TDA segments and implementing weather restrictions to increase the airspace available to support the safe transit of all airspace users above the TDA.

We would really appreciate if you could review the revised key aspects of the proposed operations described in this pack and get back to us by **Wednesday July 5th 2023** with any final thoughts and comments on the proposal. Please respond in the original thread you already have with caelus2airspace@traxinternational.co.uk rather than to this email. All information will be also regularly updated on the UK CAA [portal](#).

Kindly note, that further engagement activities will be undertaken to formalise the procedures, so that airspace users that might require access to the TDA will be able to get it quickly and efficiently. Most such procedures, however, will be covered by a letter of agreement between CAELUS2 and Prestwick Airport.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

From: [REDACTED]
To: Caelus Airspace
Cc: [REDACTED]
Subject: Re: CAELUS drones proposal Baird Airstrip, BUTE response
Date: 06 June 2023 18:32:11

Hello Alex, I am available any time Monday, Wednesday and Thursday of next week.

Best regards

[REDACTED]

On Tue, 6 Jun 2023, 18:04 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

De [REDACTED]

Thank you very much for such an incredibly detailed and clearly compiled document. I believe that to cover all the points it would be most efficient if we attempt to do up to 1.5h conference call. Would you be able to please suggest a couple of options before your holidays ? I will do my best to bring in suitable members of the team for one of the proposed times.

Best wishes,

Alex

PS

CAELUS colleagues, please kindly see the PDF from Ross attached with this email. There are many valuable points and your support with this will be hugely appreciated.

From: [REDACTED]
Date: Monday, 5 June 2023 at 22:17
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: CAELUS drones proposal Baird Airstrip, BUTE response

Hello Alex, many thanks for the opportunity to provide timely feedback on the Caelus drones proposal and its potential impact on Bute Airfield.

Please find attached, my response.

I appreciate there are a number of technical points raised in this response so I would be very

happy to discuss these with you and your team, and elaborate further on a call, if that would help.

As I have stated earlier, I am not generally against drones. I have, however, found this proposal quite a challenge for local pilots and hope that the attached document goes some way to seeking a solution we can all live with.

I am on holiday from 17th June for a week but I am generally available weekdays.

Best regards



On Wed, 31 May 2023, 19:34 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

Sounds very organised! Really appreciate that Ross and hope you have a great time off. Looking forward to hearing from you next week.

Best wishes,

Alex

From: 
Date: Wednesday, 31 May 2023 at 19:25
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Subject: Re: Baird Airstrip, BUTE.

Hello Alex, I have begun my notes and questions and have compiled a short document with 11 specific questions or points. I am on holiday in Ireland for the rest of the week. I will finalise my comments at the weekend and send you the document on Monday if that is ok with you.

I will be in touch on Monday.

Best regards



On Wed, 31 May 2023, 19:16 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

Thank you very much! Really glad we found you, Ross, and thank you so much for agreeing to assist. We look forward to receiving your initial feedback/questions.

Best wishes,

Alex

From: [REDACTED]
Date: Sunday, 28 May 2023 at 17:44
To: [REDACTED]
Cc: Caelus Airspace <caelus2airspace@traxinternational.co.uk>, [REDACTED]
Subject: Re: Baird Airstrip, BUTE.

Hello [REDACTED]

I would be happy to be the representative for Bute Airfield.

I have already sent emails to both Fiona and Alex last week so I think we are all on the same page now.

I have the consulting document from Caelus and will review over the next week.

Best regards



On Sat, 27 May 2023, 12:32 [REDACTED]

Hi Alex - with regard to your enquiry to the Mount Stuart Office (to [REDACTED])
[REDACTED] 24/5/2023,

my apologies for the delay in responding to your enquiry which [REDACTED]
passed on to me. viz below.

I, of late, after many years, have retired from activities at the Baird
Airstrip at BUTE.

Fortunately a fellow pilot is now dealing with such.

[REDACTED]

I have copied [REDACTED] on your enquiry, and he will respond to you.

Regards,

S [REDACTED]

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Sent: Wednesday, May 24, 2023 9:25 AM

To: [REDACTED]

Subject: [External] Enquiry about a contact for Bute Airfield

Hello,

My name is Alex and I was recommended by my colleagues to contact you as you might be aware of somebody who is in charge of the Bute airstrip? Is that true by any chance? The reason I am asking as my company is part of a drone project that is working with the NHS in Ayrshire and Arran area and we are required to engage with aviation stakeholders in the area since our operations might have impact on local users and we want to make it is minimised

Thank you very much in advance for any relevant information or advice!

Best wishes,

Alex

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: CAELUS2 ACP-2022-103 Stakeholder Update (Bute)
Date: 19 September 2023 17:00:12

Thank you for reminder, Ross! Yes, we have of course reached out to William and have a clear idea now re how we can deconflict operations strategically and not to have impact on his farm. Just hoping he will respond to us, but if not – will call him.

Thanks again! Very kind of you.

Best wishes,
Alex

From: [REDACTED]
Date: Tuesday, 19 September 2023 at 16:46
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Subject: Re: CAELUS2 ACP-2022-103 Stakeholder Update (Bute)

Further to my previous email a note.

The farmstrip close to Kilwinning, owned by William Long, is now in the centre of the drone corridor.

The DACS will therefore be important for any take-off or landing at this farmstrip if this coincides with an active TDA.

Typically, the farmstrip is infrequently used during the winter months but the need for a DACS could be a more significant factor from April onwards, should the trial extend beyond March.

[REDACTED]
[REDACTED]
[REDACTED]

On Tue, Sep 19, 2023 at 7:51 AM [REDACTED]

I have no issues with the revised plan.

GA traffic in January through March is expected to be significantly less than average due to expected low cloud base and poor weather.

Good news on the DACS, this is an important safety element.

Best regards

[REDACTED]
[REDACTED]

On Mon, 18 Sep 2023, 14:40 Caelus Airspace, <caelus2airspace@traxinternational.co.uk>

wrote:

Dear 

You are receiving this email because you were previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email (caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: [REDACTED]
To: Caelus Airspace
Cc: [REDACTED]
Subject: Re: CAELUS2 Engagement (Bute airfield rep) re BVLOS Rpas flights in Ayrshire and Arm
Date: 27 June 2023 13:11:59

Hello Alex, the farmer's name is [REDACTED]

Best regards
Ross

On Mon, Jun 26, 2023 at 10:51 PM Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear [REDACTED]

Thank you very much and apologies for not acknowledging your response earlier. That's all been noted on our end and to date we did not hear anything from the Farm Strip operator. However, we attempted to contact an aircraft owner that seems to fly from the strip, who presumably is the same person. Thank you very much once again and hope you had a lovely holiday. You and other stakeholders should be receiving a revised proposal version soon.

Best wishes,

Alex

From: [REDACTED]
Date: Friday, 16 June 2023 at 15:24
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]

Subject: Re: CAELUS2 Engagement (Bute airfield rep) re BVLOS Rpas flights in Ayrshire and Arm

Many thanks for the opportunity to make my points to the team.

The notes are mostly accurate, with a few comments below.

1. Not all pilots are experienced. Strathaven trainee pilots often use Bute as a navigation exercise for a land-away.

2. I think there is some confusion about the stated CAELUS aims for trusting drone and traffic integration with the implementation where traffic segregation is considered the primary risk mitigation. I think a method of detect and avoid should be the primary risk mitigation and traffic segregation the secondary mitigation. This would have the effect of ensuring drones have maximum capability to avoid other airspace users which is clearly not the case. As such, integrated traffic is very far away and cannot be proven from the trial, especially when it is running in the autumn with considerably reduced GA traffic due to weather and daylight hours.

3. I understand TMZ is not considered for N2, but it is an option for the future of drone integration and should be brought into the outcomes of the evaluation.

4. I will contact the farmstrip owner and provide CAELUS contact details so he can decide if he wishes to make contact.

5. I am very hopeful the option for TDA C to move to the blue track is agreed.

6. A DACS would be very beneficial even though it may be rarely used. At the least the local farmstrip needs such a service.

Many thanks again for the call

[REDACTED]

[REDACTED]

[REDACTED]

On Wed, 7 Jun 2023, 16:50 Caelus Airspace, <caelus2airspace@traxinternational.co.uk> wrote:

Dear all,

Thanks to very detailed and informative pack compiled by Ross it has been agreed that we should meet and try to address the issues raised and where applicable – consider adaptations to our proposal. Please see the PDF attached. I understand there are clashes for some of CAELUS2 reps, so please join when able. Please accept/decline/forward the invite as appropriate.

Best wishes,

Alex

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From: [REDACTED]
To: [Caelus Airspace](mailto:caelus2airspace@traxinternational.co.uk)
Subject: RE: Enquiry about a contact for Bute Airfield
Date: 24 May 2023 15:54:44
Attachments: [image001.png](#)
[image002.png](#)

Hi Alex,

I've passed your email enquiry to the person who heads the voluntary pilots group and asked him to make contact with you, if not already done.

Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: Wednesday, May 24, 2023 1:25 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: [External] Re: Enquiry about a contact for Bute Airfield

Dear [REDACTED]

Thank you very much for your reply. I would like to be in touch with the pilots, who tend to use it. I have previously contacted a hotel nearby and was advised that the most common visitors re from Strahaven and I have details for them. However, I am not sure to what extent that information is accurate and complete, so anything information you have would be very helpful.

Best wishes,
Alex

From: [REDACTED]
Date: Wednesday, 24 May 2023 at 11:56
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: RE: Enquiry about a contact for Bute Airfield

Hi Alex,

Thank you for making contact with Mount Stuart Trust regarding the Bute Airfield.

The Trust owns the land the airstrip is located on and it is maintained by a group of pilots who use it on a regular basis. It's unmanned and offers no facilities.

In terms of operational engagement with aviation stakeholders is it the group of pilots you wish to contact or the Trust as landowner?

Kind regards,

Fiona.



Business & Community Liaison Officer

Mount Stuart Trust

Mount Stuart | Isle of Bute | PA20 9LR



<https://www.historichouses.org/vote-for-garden-of-the-year-2023/>

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From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Wednesday, May 24, 2023 9:25 AM

To: [REDACTED]

Subject: [External] Enquiry about a contact for Bute Airfield

Hello,

My name is Alex and I was recommended by my colleagues to contact you as you might be aware of somebody who is in charge of the Bute airstrip? Is that true by any chance? The reason I am asking as my company is part of a drone project that is working with the NHS in Ayrshire and Arran area and we are required to engage with aviation stakeholders in the area since our operations might have impact on local users and we want to make it is minimised

Thank you very much in advance for any relevant information or advice!

Best wishes,

Alex

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From: [REDACTED]
To: [Caelus Airspace](mailto:caelus2airspace@traxinternational.co.uk)
Subject: Re: Strathaven & Bute Airfields: engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 24 May 2023 22:50:56

Many thanks for the pdf doc Alex.
I will contact Fiona tomorrow as I am fairly sure I am the person she is thinking of.

Best regards

[REDACTED]

On Wed, 24 May 2023, 22:39 Caelus Airspace,
<caelus2airspace@traxinternational.co.uk> wrote:

Dear [REDACTED]

Thank you very much for your very thoughtful, detailed and clear introduction. We have been in touch with Fiona Hardie from the estate, who suggested that a suitable rep will be in touch with us soon. I understand that you originally became aware of this matter through Colin from Strathaven airfield. Ultimately, we will be happy to engage with you, but I am just letting you know that we might need to cooperate with the other person as well, should [REDACTED] have in mind somebody else.

Please kindly see the PDF briefing pack attached. We would be very keen to understand what impact that proposal might have on the users of Bute airfield and if you have any ideas re how such impact can be mitigated further if there is such a need? As mentioned – we will try to answer simple questions over email, but can also arrange a dedicated online call if required.

Many thanks once again!

Kind regards,

Alex

PS

Thank you very much for the intro, Colin

From: [REDACTED]
Date: Wednesday, 24 May 2023 at 21:53
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: Re: Strathaven & Bute Airfields: engagement re CAELUS2 BVLOS RPAS

proposal in Ayrshire & Arran area

Hello Alex,

I recieved this email from [REDACTED] Bute Airfield involvement in the Caelus project for local airspace impact from the use of drones.

I am the main contact for pilots using Bute Airfield and coordinate with the owners, Mount Stuart Estates.

I am an NPPL pilot, through the BMAA, with an aircraft based at Strathaven Airfield, I also have a drone licence for flying small model aircraft. I also worked in the past as Engineering Manager for Trig Avionics, which designs and manufacture transponders for aircraft so I feel I have a lot to offer your group. I am now retired so not looking for any consulting role but do wish to be able to contribute in a positive way to successful integration of all types of aviation.

I am offering my services to help resolve any questions on drone use related to Bute Airfield.

I have already registered with the Caelus Web site as a pilot.

Please let me know how I can be of help.

Best regards

[REDACTED]

[REDACTED]

On Wed, 24 May 2023, 21:03 [REDACTED] wrote:

Yes, [REDACTED] Happy to be that person.

[REDACTED]

On Wed, 24 May 2023, 20:28 [REDACTED] wrote:

Hi [REDACTED]

Do you want to be the Bute chap?

Very best wishes,



Leave a review on [TripAdvisor](#) or [Google](#) - 5* is nice!

www.strathavenairfield.co.uk

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Directors: C

----- Forwarded message -----

From: **Caelus Airspace** <caelus2airspace@traxinternational.co.uk>

Date: Tue, 23 May 2023 at 17:57

Subject: Strathaven & Bute Airfields: engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

To:

Dear

I hope this email finds you well. As you probably remember from our recent interactions – my name is Alex and I represent the Future Flight Challenge Project [CAELUS2](#)*.

Thank you very much for reaching out to us earlier and suggesting that you and your members might be affected by potential segregated airspace for UAV flights that our project is planning, so you would like to be engaged on our official proposals.

The purpose of this email is to invite you to an official engagement as per CAP1616 process. One of our proposals for BVLOS RPAS flight is in Ayrshire & Arran and requires segregated airspace that will be in immediate proximity of Prestwick. Please see the attached PDF for details.

I would also note that even though you initially spoke to us on behalf of Strathaven Airfield, I was told by a hotel owner near Bute that Strathaven people are also looking after the Bute strip, so wanted to check if that is correct and if you or somebody you know might be so kind to represent them?

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

PS

You have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this [Dropbox link](#) by 1st week of June and/or you receive a personal email response.

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: GAMA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 18 September 2023 14:36:18
Attachments: [N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear [REDACTED]

Thank you very much for your time the other day to discuss details of DACS provision for our route. This email is a more general update for all stakeholders re our changes. You are aware of most of them by now, but still would be helpful if you could review. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACCS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACCS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Tuesday, 23 May 2023 at 19:11

To: [REDACTED]

Subject: GAMA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well. As you probably remember from our recent interactions – my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. The purpose of this email is to invite you to an official engagement as per CAP1616 process re one of our proposals for BVLOS RPAS flight in Ayrshire & Arran, which as you most likely remember requires segregated airspace that will be in immediate proximity of Prestwick. Please see the attached PDF for details.

We are committed to minimising any possible impact on relevant stakeholders and are particularly careful about making sure that emergency services get all the priority access that they require. Your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

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PS

GAMA have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions and emailed to us after have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this Dropbox link by 1st week of June and/or you receive a personal email response.

From: [Alexey Alexeev](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran
Date: 28 September 2023 15:14:31
Attachments: [image464726.png](#)

Dear [REDACTED]

Thank you very much for kindly agreeing to meet us yesterday. I am glad we had the opportunity to clarify your needs and concerns. We understand that most concern was about flights that happen between Arran and mainland.

We have confirmed on our end that the RPAS will remain on the ground whenever any helicopter is known to be either at Crosshouse or Ayr. As helicopter landing site on Arran is outside of the TDA we will not have similar restriction, but we will definitely have mechanism to get out of your way by Returning to base whenever needed as described in documentation shared earlier.

It would still be helpful for us to try deconflict strategically whenever possible if you had the possibility to advise PIK by phone or over VHF of your intended routing and expected times before returning (if known).

We will be reaching out to you later with more formal version of our DACS proposal after we finalise all relevant points with PIK and we will also have an LoA as a final formal step.

Hope this is helpful for you and please do not hesitate to reach out whenever needed.

Best wishes,
Alex

From: [REDACTED]
Date: Tuesday, 26 September 2023 at 17:05
To: [REDACTED]
Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Hello [REDACTED]

My apologies for not getting back to you with a time.

I am free tomorrow (Wednesday) between 1pm and 2pm if you are.

Regards

[REDACTED]

Gama Aviation 

[REDACTED]

[REDACTED]

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Company Number: 07264678
Registered in England
Registered Office: 1st Floor 25 Templer Avenue, Farnborough, Hampshire, England, GU14 6FE, GB
VAT Registration Number: GB 100 1634 85

From: Alexey Alexeev <alexey@traxinternational.co.uk>

Sent: 26 September 2023 15:34

To: [REDACTED]

Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Dear [REDACTED]

Hope you are well Any chance you have any news re your availability?

Best wishes,

Alex

From: Alexey Alexeev <alexey@traxinternational.co.uk>

Date: Thursday, 21 September 2023 at 09:14

To: [REDACTED]

Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Hi [REDACTED]

Thank you for clarifying and absolutely agree that sometimes it could be more efficient just to double check. I can be available anytime today-tomorrow even at short notice. Any chance that could work for you? Feel free to text me on [REDACTED] needed. Otherwise please advise of your next availability.

Many thanks,

From: [REDACTED]

Date: Wednesday, 20 September 2023 at 18:42

To: [REDACTED]

Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Hello [REDACTED]

My initial impression was that the TDA was going to overlap our landing area on Arran. As there is a reasonable distance between the two, and with good communication, we won't need the restriction on the drone being grounded when we are on task..

I suggest we have a catch up over Teams/Zoom to discuss the proposed procedures to ensure that we both

have the same understanding of them.

Regards

[Redacted]



[Redacted]

[Redacted]

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VAT Registration Number: GB 100 1634 85

From: [Redacted]

Sent: 18 September 2023 10:04

To: [Redacted]

Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Thanks a lot, [Redacted] that's very detailed and helpful.

I understand it is localised clouds that sometimes can form very quickly in coastal areas that of most concern, so if we have robust met check procedure that will minimise such occurrences – that should be helpful.

Only thing slightly unclear for me is how to move forward with respect to being on the ground while you are on task. It appears that the landing site you shared is indeed 1.2NM away from the nearest point of the TDA, so well outside of it and as per your comment – should cloud base be not an issue, then transit above the proposed TDA could be possible. As mentioned previously – it is in our draft procedure to remain on the ground whenever a helicopter is known to be at departure or destination, however as Arran site specifically is outside of the TDA was wondering if that might be feasible not to impose such a restriction?

Please let me know if you have any ideas on that or if there nuances why this is important that we are just unaware. Thanks a lot once again and looking forward to hearing from you.

Kind regards,

[Redacted]

From: [Redacted]

Date: Saturday, 16 September 2023 at 13:58

To: [Redacted]

[Redacted]

Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Hello [Redacted]

The answers to your questions in red below:

Please let me know if you need more information.

Regards

[Redacted]

Gama Aviation 

[Redacted]

[Redacted]

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Registered Office: 1st Floor 25 Templar Avenue, Farnborough, Hampshire, England, GU14 6FE, GB
VAT Registration Number: GB 100 1634 85

From: [Redacted]

Sent: 15 September 2023 16:25

To: [Redacted]

Subject: Re: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Thank you very much for reviewing it and getting back to us so quickly Ian and Brett!

All seems mostly clear and relatively straightforward except the comment highlighted in yellow, so hope you wont mind claryfing a few bits on that:

1. You mentioned "flying through complete route". Could you confirm if you mean just the lateral direction of

your flight or that normally on such a routing your aircraft will be at or below 700 feet? During a recent review of stakeholder feedback we proposed to only operate when cloud base is at least 1500, so that emergency services and recreational GA could safely fly VFR above the TDA, but we did not realise that low level transits in the area could be a normal procedure. Any comment or details on that would be of huge help. I did mean the lateral direction. We are generally above 700ft, however there are times when localised cloud along the coast, especially between West Kilbride and Crosshouse, can force us to descend lower. If the cloud base is above 1500ft for the whole route, there will normally be transiting 1000ft and above.

2. As per examples from the presentation – Drone will remain on the ground if a helicopter is currently on the ground at either departure or destination points which are within the TDA. Whenever a helicopter is airborne already and access is required to a segment of the TDA – then RP will act as per workflow to get out of the way as quickly as possible i.e. that is why we are arranging DACS in the first place. Is that helpful at all or not really? I am just cautious that the statement re drone being on the ground whenever Gama aircraft is on the task is quite broad and I want to be sure that is properly understood on our side. The reference to "on task", was just to apply to tasks when we are at Arran. Our general turn around time at Arran is 20-30 mins, but could occasionally be an hour or two depending on the task. The same applies for Crosshouse and Ayr hospitals
3. Understood that Prestiwick cant be reached over VHF from ground level at Arran. Please excuse my ignorance of your processes, but hypothetically would your typical mission from Arran to mainland allow time-wise to check the Drone status by phone with PIK tower? Affirm, calling by phone prior to lift would be possible
4. Are you able to share exact location for Arran landing sites that you use? Knockenkelly from my search broadly appears to be ~1.5Nm from the closest point of the TDA, so made me wonder if there is conflict between an aircraft departing Arran and the TDA or if on a typical mission there could be sufficient space for a helicopter to accelerate and climb above 700 feet i.e. not actually need to enter the TDA? The coordinates for Knockenkelly are 55°29,97'N 005°05.62'W. Normally there would be time to get above 700ft before approaching the TDA. Localised low cloud on occasion may influence this.
5. All noted that we should look more broadly at operators and callsigns who will always have priority. Understood it is not always CAT-A.

Thank you very much for your help once again. I wish I could write back a shorter email, but really would like to be sure that we don't have any misunderstandings and accommodate for all the needs in all scenarios.

Best wishes,



From: [Redacted]

Date: Friday, 15 September 2023 at 15:33

To: [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Subject: RE: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

All,

I passed the below on to Brett Hesketh (cc'd), who is our Glasgow (Helimed 5) Base Manager. I mentioned my concerns being as follows:

- that we could be in direct conflict as could be flying as low as 500ft if the cloud cover and/or freezing level dictated it
- that the procedure and scenarios were only for aircraft crossing their route, but I highlighted that we could

be flying along their route if we were going to/from Knockenkelly, so they need to account for that

- that the DACS process only allows for CAT A flights, but we won't always be CAT A going to Knockenkelly (correct me if I am wrong), so we would need to be able to divert them for any Helimed of Rescue flights

He confirmed his agreement with all of them, but did confirm as the Bristow team advised, that we can fly above freezing level by not in cloud or precipitation. He also added the following additional information:

- The project need to know that flights to Arran are a daily sometimes (multiple) occurrence. We would likely be flying through their complete route from West Kilbride to Knockenkelly and then from Knockenkelly to Crosshouse or Ayr hospital. We also cross the route to and from Campbeltown.
- We can stay in contact with Prestwick tower to know the status of the drone, but we will need the drone to be on the ground when we are on a task. We can't reach Prestwick Tower when on the ground at Knockenkelly so normally get airborne before calling.
- We are not always on an Alpha call sign, but would need priority over the drone when on an air ambulance tasking as well as a HEMS flight.
- We generally will have time to phone Skyports before getting airborne on an air ambulance flight. With a bit of planning I don't see any problems with them operating on the proposed routes. The fact that we will all be in contact with Prestwick tower, means we can have a fairly good idea of where everyone is.

With regards to point 2) in the email from Alexey, as I think we discussed at the session, we should ensure the wording covers all Helimed, Rescue and Police call signs, not just Gama or Bristow as Babcock operate Helimed 76, 79 and Police (I think Police 51 callsign?).

Thanks,



Gama Aviation 



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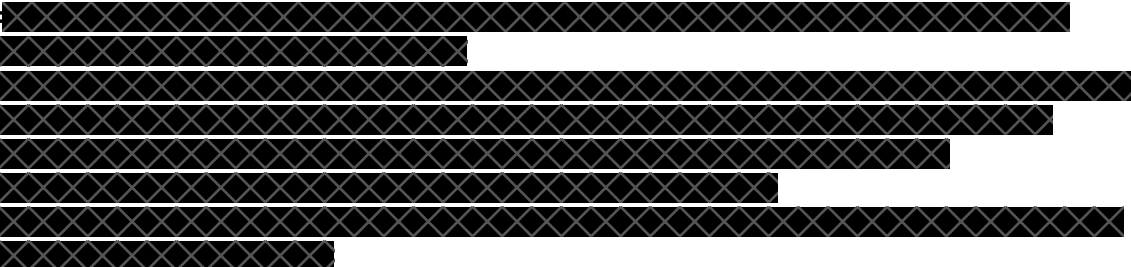
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Gama Aviation PLC
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Registered Office: 1st Floor 25 Templer Avenue, Farnborough, Hampshire, England, GU14 6FE, GB
VAT Registration Number: GB 100 1634 85

From: 

Sent: Friday, September 15, 2023 12:30 PM

To: 

Subject: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Thank you so much everybody for attending the meeting today. We have presented our initial proposal for the DACS process and the following concerns were raised:

1) Freezing level issue – as GAMA might be operating down to 500 feet. CAELUS will discuss the matter internally, but it could be possible that that matter is not a problem if we adhere to our weather limits i.e. operating only when cloud base is at 1500 feet or above, so VFR transit above the TDA could be done outside of visible moisture. We will, however, await to hear from @ian.mcgill@gamaaviation.com what his and his team thoughts are on the topic and will look to work out a solution.

2) Phraseology: GAMA and Bristow operations might be CAT B and still urgently require access to areas within the TDA. We just need to make sure that whatever our agreement is in the end – that is broad enough to account for all situations. For example it can be “Bristow/GAMA aircraft or any CAT A flight”. But again, the exact wordings will be officially finalised through LoAs and/or TOI of Prestwick.

3) It is possible that a flight along the TDA route might be required rather than crossing of an individual segment. We will look into that matter, but it is likely that the way forward will partially depend on 1) above.

Thanks so much once again for everyone’s time and I attach the presentation for you reference. Please kindly do get to us re any news or comments once discussed with you teams.

Kind regards,



From: caelus2airspace@traxinternational.co.uk

When: 11:30 - 12:15 15 September 2023

Subject: Review of the DACS proposal for project CAELUS2 BVLOS RPAS flights in the vicinity of Arran

Location: Microsoft Teams Meeting

Dear all,

Following up from our earlier email this invite is to discuss our suggestions on how DACS could operate and gather any feedback and thoughts.

Best wishes,



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From: [REDACTED]
To: [Caelus Airspace](#)
Subject: Re: CAUTION: External email - Re: SCAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 26 May 2023 10:04:13
Attachments: [image0f23e0.PNG](#)
[imageff47e5.PNG](#)
[image709d8b.PNG](#)
[image0e45ed.PNG](#)

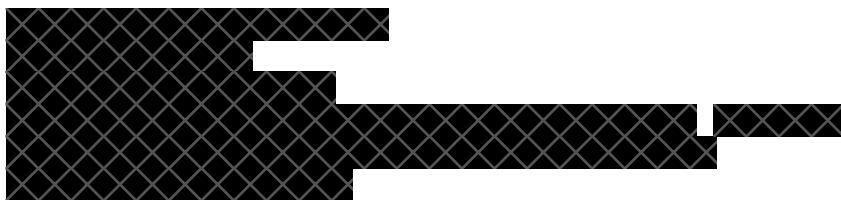
Morning [REDACTED]

I'm more than happy if you want to keep sending the information to SCAA as well to keep them informed. They just end up forwarding it to us as the aviation provider.

Enjoy your leave

Regards

[REDACTED]



babcockTM



From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: 25 May 2023 21:33:36
To: [REDACTED]
Subject: Re: CAUTION: External email - Re: SCAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you, Pete! The materials would be the same for SCAA (PDF attached). Ideally we would like to brief them, but also to have a dialogue and get their opinion/understand their needs and if needed to modify the proposal. What do you think is the best way to do it?

Thank you also re your comment for GLA-GJH. I am on leave next few days, but my colleague [REDACTED] should have been in touch with a meeting proposal, so hope that would work out soon as we have quite a large group to try get together.

Vest wishes,

[REDACTED]

From: [REDACTED]

Date: Thursday, 25 May 2023 at 14:14

To: [REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: CAUTION: External email - Re: SCAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Good afternoon Alex,

Thanks for getting in contact. I'm happy if you just want to send information across to me and I can brief SCAA as required once decisions have been made.

On a separate issue. I had a meeting with SAS and Police Scotland regarding the proposed trial in Glasgow to Golden Jubilee. I believe Shaun Marshall or Allan Shields will be in contact to arrange a meeting with the relevant stakeholder to finalise deconfliction planning for Police and Air Ambulance tasking.

Kindest regards

[REDACTED]

[REDACTED]

babcockTM

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 24 May 2023 12:13:19

To: [REDACTED]

[REDACTED]

Subject: CAUTION: External email - Re: SCAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I was given your names by my colleagues from AGS and NATS. Initially I reached out to SCAA getinvolved address, but may be it could be a quicker solution to approach both of you directly. Hope you don't mind?

Please kindly see the original email below and attachment included in this email.

Best wishes,



PS

Also, I understand I have been in touch with Peter already as a Babcock representative, but we initially have SCAA and Babcock as two separate stakeholders... Ultimately we would be happy to keep it that way or merge it into one conversation if you suggest so.

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Tuesday, 23 May 2023 at 19:17

To: 

Subject: SCAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear SCAA Team,

I hope this email finds you well. My name is Alex and I represent the Future Flight Challenge Project CAELUS2*. The purpose of this email is to invite SCAA to an official engagement as per CAPI616 process re one of our proposals for BVLOS RPAS flight in Ayrshire & Arran, which requires segregated airspace that will be in immediate proximity of Prestwick. Please see the attached PDF for details.

We are committed to minimising any possible impact on relevant stakeholders and are particularly careful about making sure that emergency services get all the priority access that they require. Your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,



On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

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From: [REDACTED]
To: [Caelus Airspace](#)
Subject: Unable to attend
Date: 15 September 2023 10:30:07
Attachments: [image85162f.PNG](#)
[imagee2cf77.PNG](#)

Good morning,

Please accept my apologies as I won't be able to attend the 1130 meeting, as I have to go to Kirkwall on an air ambulance job.

My main issue for the meeting is that there must be robust access through the area for air ambulance missions, whether that is only launching in weather that allows us to fly over the restricted airspace or a crossing service. Please could you send me any information coming out of your presentation.

Regards

[REDACTED]

[REDACTED]

babcockTM

[REDACTED]

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Bristow engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 23 May 2023 19:25:21
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

Dear [REDACTED]

I hope this email finds you well. As you most likely remember – my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. Thank you very much for your kind cooperation earlier on the matters related to GLA-GJH route. However, the purpose of this email is to invite Bristow to an official engagement as per CAP1616 process re our other proposal for BVLOS RPAS flight in Ayrshire & Arran, which requires segregated airspace that will be in immediate proximity of Prestwick. Please see the attached PDF for details.

As always, we are committed to minimising any possible impact on relevant stakeholders and are particularly careful about making sure that emergency services get all the priority access that they require. Your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: ACP -2022-103 - Prestwick SAR Base
Date: 18 September 2023 16:14:00

Thanks a lot! As always hugely appreciated

From: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

Hi [REDACTED]

Please see below:

- A) January is fine.
- B) No comments
- C) Acknowledged

Regards

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

On 18 Sep 2023, at 14:35, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

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Dear [REDACTED]

Thank you very much for your time the other day to discuss details of DACS provision for our route. This email is a more general update for all stakeholders re our changes. You are aware of most of them by now, but still would be helpful if you could review. The flight route the attached

pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACs).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACs to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email (caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,

[Redacted signature]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Tuesday, 4 July 2023 at 16:52

To: [Redacted recipient]

[Redacted recipient]

[Redacted recipient]

Cc: [Redacted]
[Redacted]
[Redacted]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

Thank you very much, Jon! It is helpful and promising to hear your opinion sounding optimistic.

For the time being we will be concentrating our efforts on sorting out the procedures with Prestwick Airport. In theory, that should suffice and you will be able to communicate with them via the VHF in the usual way and get access if required through DACS. The information on activity will be promogulated via AIC and NOTAM at least 24h.

In practice, if you think some aspects you rather formalise in an LoA, or say require a flight schedule in advance – please let us know and Skyports ([@Samson Wong](#)) should be able to support. As always we remain at your disposal for any questions.

Best wishes,

[Redacted]

From: [Redacted]

Date: Tuesday, 4 July 2023 at 15:12

To: [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Subject: RE: ACP -2022-103 - Prestwick SAR Base

Afternoon Alex,

From the resubmitted plans, neither Lloyd or myself can see any major issues looming. As always, communication is key and we look forward to being able to assist as this project continues.

Kind Regards,

[Redacted]

[Redacted]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 04 July 2023 12:43

To: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

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Dear [REDACTED]

Thank you very much for your support so far and hope both of you are doing well. We sent a revised version of our proposal last Friday (also attached), which is a bit more concise and concentrates on key changes. Most were requested by Prestwick, but also had some positive response from our Stakeholders.

We spoke to Prestwick just today and they sounded optimistic re the way we are moving forward with the revised proposal, but asked us to make sure we get a confirmation from you that it is still a working solution for how you operate?

In short – we have now more segments and all apart from one of them is 700 ft AMSL, plus we will limit weather operations to 1500 ft if clouds are more than FEW reported by Prestwick METAR, which should allow safe VFR transit above the TDA.

We are continuing work with Prestwick re DACS as well and are quite optimistic that it should be available.

Only thing to note is that due operational restrictions and needs of the UAV operator it seems unlikely that the remote pilot will have direct VHF comms. We are working on mitigations though, which will ensure that ATC have clear real-time visibility of where the RPAS is located and still have capability to communicate and issue requests if required to the Remote Pilot over direct landline call, which should be a matter of 10-15 seconds.

We would really appreciate if you could share your thoughts on the matter over email or we are happy to schedule a call at your earliest convenience. For quick clarifications please also feel free to just ring my personal number 07564172993.

Best wishes,
Alex

From: [REDACTED]

Date: Wednesday, 7 June 2023 at 23:04

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]
[REDACTED]
[REDACTED]

[Redacted]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

I don't see any issues with them joining in the 1600 call Alex. They have subtly different operations to us so some of the issues we have will not be relevant, but some certainly will.

Kind regards,

[Redacted]

[Redacted]

On 7 Jun 2023, at 16:31, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

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Thanks a lot, [Redacted] hat's been noted and invite forwarded already.

If I may ask a request as well please? We will be trying to schedule a meeting Babcock soon too, so wanted to ask if you see any benefit/issues if we propose to them to join the 16:00 call?

Best wishes,

[Redacted]

From: [Redacted]

Date: Wednesday, 7 June 2023 at 16:20

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

Hi Alex,

Could I please have an invite to your meeting with the airport if allowed? I was at the Airport Ops briefing today, and feel it should be something we send a virtual delegate to. As previously stated, Lloyd is chairing our internal Flight Safety Day at the same time, but I'm hoping this will mean our subsequent meeting at 1600 will need to recover less ground - and I will have some background on the Airports point of view. Please be aware that I am on shift that afternoon, so if a call comes in I will have to leave abruptly or not log in at all. Lloyd will be available at 1600 regardless however.

Kind regards,

[Redacted]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Monday, June 5, 2023 6:29:18 PM

To: [Redacted]

[Redacted]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

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Dear [Redacted]

Thank you for your quick response. We will check with the key colleagues and let you know as soon as possible. Meanwhile, are you able to suggest a backup option just in case?

Best wishes,
Alex

From: [Redacted]

Date: Monday, 5 June 2023 at 17:44

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

How about from 1600 onwards? That is the time our Flight Safety day finishes and Lloyd and I will be in work and free.

Kind regards?

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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On 5 Jun 2023, at 16:14, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

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Dear [REDACTED]

That also sounds like a good plan. Would you be able to give a couple options from your side and we will make it work? For me personally 13th 2-4pm is the time that wont work, but outside of that period is fine and I should be quite flexible during other days of that week.

Kind regards,

[REDACTED]

From: [REDACTED]
[REDACTED]
Date: Monday, 5 June 2023 at 08:17
To: Caelus Airspace
<caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]

[REDACTED]

Subject: Re: ACP -2022-103 - Prestwick SAR Base

Morning [REDACTED]

It would be difficult for our side to all get together before the 13th. How about we connect virtually on the 13th post your meeting with the airport, and then look at a face to face meeting after that time when we all have a bit more of a handle on the potential issues that may need to be sorted.

Let me know your thoughts,

Kind regards,

[REDACTED]

[REDACTED]

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On 1 Jun 2023, at 17:51, Caelus Airspace
<caelus2airspace@traxinternational.co.uk>
wrote:

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Dear [REDACTED]

That's very kind and thoughtful offer from your side.

I have to note that the Prestwick meeting on 13th will be held virtually as we are based all over the UK and will be looking for a wide group of representatives to attend.

For the same reason, I would suggest a virtual initial meeting with yourselves, so that we could get as many SMEs from our side as we can. That being said, seeing you in person on 13th is not completely off the table as a trip to Scotland has been on our radar for some time.





To sum up:

1. If possible, it would be ideal to have a first virtual meeting at some point next week
2. Depending on how it goes we might need to schedule another one or there is a chance of me coming by in person on the 13th, but the restriction there would be that physically it will only be me and I might still need to invite some of the colleagues to join online.

Please let me know what you think.

Kind regards,



From: 

Date: Thursday, 1 June 2023 at 13:55
To: Caelus Airspace
<caelus2airspace@traxinternational.co.uk>
Cc: 

Subject: RE: ACP -2022-103 - Prestwick SAR Base

Good afternoon 

We have a base Flight Safety Day planned on Tuesday 13th of June. It is due to finish by 1600, the same time as your meeting with the airport should finish. Would it work for you if we hosted you at the SAR Base on completion of your meeting with the airport? It would give us the opportunity to meet face to face to discuss how we can achieve all goals with minimum disruption!

Kind Regards,

[Redacted]

[Redacted]

Confidence in flight. Worldwide.

From: Caelus Airspace
<caelus2airspace@traxinternational.co.uk>
Sent: 31 May 2023 18:59
To: [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
Subject: Re: ACP -2022-103 - Prestwick SAR Base

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear [Redacted]

Thank you very much for your quick,

detailed and as always helpful response. It is a pleasure to communicate with you. I believe you were included as a contact in my original outbound email, but I have also noted your comment re Craig, so now have your, Jonathan's and Robert's details noted.

We fully appreciate that the proposed operation is more complex and understandably will raise more questions, which we are happy to discuss. We understand that your operations may start with little to no warning and that unrestricted access is typically required to a fairly wide area.

To address the points raised:

1. Segregation of the airspace is the primary deconflicting method that is currently available to us. I.e. CAA view typically is that no other aircraft can be allowed in the defined TDA alongside an airborne BVLOS RPAS. The aircraft has ADSB-IN and automatic algorithms that will force the RPAS to go into a loiter mode or land, but that is an additional layer of mitigation and cannot be 100% relied on as obviously there could be aircraft operating that don't have ADSB-OUT.
2. My Skyports colleagues [REDACTED] [REDACTED] will correct me if I am wrong, but if my memory serves me right the aircraft will have red and green nav lights as well as a bright strobe. Unfortunately, I cannot translate that for you into how far away would that be visible from. As a remote pilot and a GA pilot myself I honestly have to say that I would not suggest even to attempt "see and avoid" an RPAS like that. So once again – there is lighting, but it is an additional mitigation that could be helpful, but definitely not a primary safety tool.
- 3.

If you would like – you can download the KML file of the route from the PDF or use the one attached. You will notice that the route ends are away from active helipads, so if we are on the ground – then there should not be any impact on Emergency Services to land there. We will, however, need to come up with some sort of notification procedure i.e., so that we do not attempt to lift if a helicopter could arrive/depart in the next X minutes.

4. We fully appreciate the benefits of DACS/DAIS and are aiming to arrange that with Prestwick, but not asked them yet as our first proper conversation is scheduled for June 13th.

Ultimately, the simplest answer could hope for is that the TDAs are low enough (700 and 900 ft AMSL), so emergency services could successfully operate above that altitude anyway. So, we could commit to operate only in the weather conditions when crewed aircraft have sufficient space between the top of the TDA and cloud base to remain VMC and conduct the required operations.

I must say I totally accept that the previous paragraph could be super naïve and very wrong, so would appreciate any comment from your side.

In terms of obtaining information on the status of the RPAS.... It can be done in the following ways:

1. ADS-B IN detection of the RPAS onboard transponder
2. If DAIS is available, then ATC will be able to confirm if the RPAS is on the ground or if it is airborne in TDA segment A, B or C.

Ultimately, to better understand your

operations I would like to get clarity on matters like:

1. If your aircraft have ADS-B IN capability?
2. Is DAIS/DACS a must/useful/not so useful if exact position in a segment could not be determined?
3. Do you require unrestricted access to all areas and altitudes (even super low) as part of SAR tasking or remaining above 900 AMSL is typically sufficient?
4. As you mentioned landing at Ayr – it would be helpful for us to understand how much warning you might give before arriving at a particular site. We should be able to initiate a loiter or return to base when required in order to deconflict, but that might require further segmentation of the TDA

It is already a very long email and looks like we definitely should arrange a call to try and resolve some of the matters more efficiently. We have a session scheduled with Prestwick on Monday 13th of June between 15:00 and 16:00 BST. So, we can arrange a dedicated session with Bristow, invite you to the session with Prestwick or do both. Please let me know what your thoughts are and how you would like to proceed? I am happy to be flexible and if works for you – able to find time even in the next couple days.

Best wishes,
Alex

From: [REDACTED]
[REDACTED]
Date: Friday, 26 May 2023 at 16:51
To: Caelus Airspace
<caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
Subject: ACP -2022-103 - Prestwick SAR
Base

Afternoon [REDACTED]

I was forwarded your pack from Craig Sweeney, he is now the UKSAR Flight Ops Manager and I have taken over as Chief Pilot for Prestwick SAR Base. Firstly, you should be commended for your operations as I personally can see the huge benefit this would bring to individuals and hospitals alike.

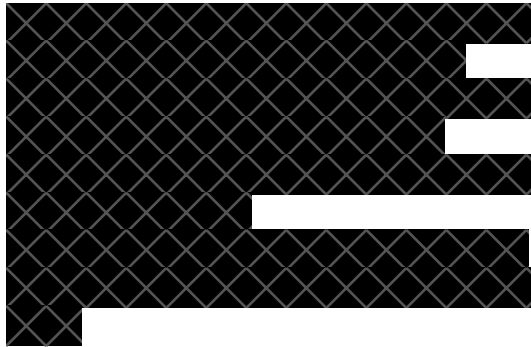
However, I have assessed your pack and do have some concerns. From what we've experienced before your routes have not been as close to a major airport, the airport we operate from in this case.

Without any prior notice we can be scrambled anywhere in our area (huge!) and will routinely be off the ground in 8-12 minutes from receiving the call from JRCC. We will be a CAT A callsign (R199A) and therefore are on life saving missions, we will unlikely be able to hold/reduce speed in order to deconflict with your drone. GPIA ATC are very flexible with our operations and will prioritise our departure and arrivals and I have concerns that an incident could occur without timely and accurate positioning information from yourselves and ATC. If the precise location and altitude can be ascertained, then I'm sure in most cases we will be able to deconflict. However, the following line concerns me:

'We will endeavour to arrange for Danger Area Information or Danger Area Crossing Service from a local ATSU if possible, but this has not yet been confirmed and can not be relied upon.'

1. What is your protocol for deconflicting from other A/C?
2. What lighting will your asset display?
3. What is your protocol if we need to land at Ayr Hospital if your asset is on the ground?

Thank you for giving us an opportunity to comment.



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From: [REDACTED]
To: [REDACTED]
Subject: Re: CAUTION: External email - Babcock engagement with CAELUS2 re ACP-2022-103 Ayrshire & Arran
Date: 14 June 2023 12:11:32
Attachments: [image8d690.PNG](#)
[image42c6d9.PNG](#)

Hi Alex,

Please accept my apologies, I was planning on dialling in to the meeting earlier but am on shift and unfortunately got called away at short notice for an urgent Police tasking.

I have had a quick back brief from Peter as to how the meeting went. As with the proposed trials in the GLA CTR, we will need a robust plan for deconfliction with the Police aircraft. I will await your resume from the meeting and will feedback with any comments and/suggestions.

Regards,

[REDACTED]

[REDACTED]

[REDACTED]

babcockTM

Creating a safe and secure world, together

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 08 June 2023 17:19:37

To: [REDACTED]

Subject: CAUTION: External email - Babcock engagement with CAELUS2 re ACP-2022-103 Ayrshire & Arran

When: 14 June 2023 11:00-12:00.

Where: [REDACTED]

As suggested by [REDACTED] is meeting is to discuss ACP-2022-103 in Ayrshire and Arran with Babcock. Kindly accept/decline/forward as required.

Microsoft Teams meeting

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: CAUTION: External email - CAELUS2 Arran ACP2022-103 Engagement Update
Date: 20 September 2023 16:36:24
Attachments: [image899dd4.PNG](#)
[image758013.PNG](#)

Dear [REDACTED]

Thank you very much for your reply and comments. We are also happy to receive any further comments or questions from your colleagues. Should you wish to provide any comments with respect to draft DACS principles we discussed last Friday – please also do so. You and your colleagues should have the information from the email exchanges we had with Gama and Bristow representatives in which you are CCed.

With respect to your question on the hours of operations – it is likely that some of our ops would occur during the hours of darkness (estimated between 7 and 8 am approximately), but we would still adhere to the weather limitations advised. We appreciate that likelihood of suitable weather in winter is reduced in general and even more so during night. However, it is simple rule that we wont fly unless the weather is within the limits agreed.

Hope this is helpful!

Best wishes,
Alexey

From: [REDACTED]
Date: Wednesday, 20 September 2023 at 10:35
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>, [REDACTED]
[REDACTED]
[REDACTED]
Subject: Re: CAUTION: External email - CAELUS2 Arran ACP2022-103 Engagement Update

Dear [REDACTED]

All received and understood, thank you. Many thanks for the invite but I was already committed to a prior meeting hence my apologies on the day.

With regards to our operations to support Police Scotland I think that the distance from base should allow sufficient time to allow you to react to any requirements for entry and/or crossing of the TDA. I will defer to one of my colleagues to advise on the potential impact to Air Ambulance/HEMS operations.

Given the issues previously raised by other stakeholders, I would opine that as long as you are operating within the weather limitations as prescribed within the ACP this should ensure no conflict for low level entry.

I would just ask for clarification as to whether this is planned as daytime operations or if you are planning on operating BVLOS during the hours of darkness. Given that the proposed trials are planned to take place in Jan/Feb 24 there would potentially be challenges around weather and daylight windows of opportunity to complete the trials. I trust this has been considered in the ACP proposal?

Regards,

✘

✘

✘

babcockTM

✘

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 18 September 2023 14:30:27

To: Y ✘

Subject: CAUTION: External email - CAELUS2 Arran ACP2022-103 Engagement Update

Dear ✘

You are receiving this email because Babcock was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the

Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email (caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

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From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: CAUTION: External email - Re: Babcock engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 08 June 2023 12:09:31
Attachments: [image4d443a.PNG](#)
[imageb8c5ea.PNG](#)

Hi Alex,

Unfortunately Tuesday wouldn't work for me as I have other commitments that day. I'm dayshift Wednesday & Thursday, either of those days would suit better.

Thanks,

[REDACTED]

[REDACTED]

[REDACTED]

babcockTM

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 07 June 2023 17:17:39

To: [REDACTED]

[REDACTED]

Subject: CAUTION: External email - Re: Babcock engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Apologies for the delay as I realised that Nigel did mention in his comms in the other thread that you would like to discuss the N2 Ayrshire and Arran proposal, which is part of CAELUS2 project.

Would you be able to kindly advise us of couple options of your availability for next week, so we could run a dedicated session and discuss N2 (ACP-2022-103) proposal specifically?

In fact, we already have a session scheduled with Bristow SAR based at Prestwick for Tuesday 13th between 16:00 and 17:00. Would you see it of benefit to join that or prefer a dedicated Babcock-only session?

Kind regards,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Tuesday, 23 May 2023 at 20:12

To: [REDACTED]
[REDACTED]
[REDACTED]

Subject: Babcock engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well. As you probably remember from our recent interactions – my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. The purpose of this email is to invite you to an official engagement as per CAP1616 process re one of our proposals for BVLOS RPAS flight in Ayrshire & Arran, which was now finalised and as you most likely remember require segregated airspace that will be in immediate proximity of Prestwick. Please see the attached PDF for details.

We are committed to minimising any possible impact on relevant stakeholders and are particularly careful about making sure that emergency services get all the priority access that they require. Your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd.

Normally we would say that depending on the feedback, we will either reply to questions via email or schedule an online conference call. However, I appreciate you already expressed some concerns earlier and would like to have an opportunity to discuss the proposals. Any chance you could provide a few suitable options for ~1h call during the first week of June?

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,
Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

PS

You have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions and emailed to us after have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this [Dropbox link](#) by 1st week of June and/or you receive a personal email response.

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 24 May 2023 13:12:31
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby GA users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

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PS

You might have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this Dropbox link

(https://www.dropbox.com/sh/enq9x7a6yz6w2zk/AACHQ9TU69_vJAD5cZg4oEja?dl=0) by 1st week of June and/or you receive a personal email response"

From: [REDACTED]
To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 07 June 2023 16:29:20
Attachments: [unknown.png](#)

Dear Alex,

Please accept this email as full support for the Caelus project and its proposal in Ayrshire and Arran from ARPAS UK, as a member of NATMAC. If we can do anything to help, do let us know.

kind regards

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



On 24 May 2023, at 13:12, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

<N2 Stakeholder Engagement v1.0.pdf>

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 18 September 2023 12:16:33
Attachments: [unknown.png](#)
[N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACs).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

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We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 7 June 2023 at 16:32

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you very much, Rupert! That's noted and appreciated. Absolutely will do.

Kind regards,
Alex

From: [REDACTED]

Date: Wednesday, 7 June 2023 at 16:29

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

[REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear Alex,

Please accept this email as full support for the Caelus project and its proposal in Ayrshire and Arran from ARPAS UK, as a member of NATMAC. If we can do anything to help, do let us know.

kind regards

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



On 24 May 2023, at 13:12, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

<N2 Stakeholder Engagement v1.0.pdf>

From: [REDACTED]
To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 22 September 2023 14:31:03
Attachments: [unknown.png](#)
[N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear [REDACTED]

Please find below ARPAS UK's input regarding the current proposal for ACP-2022-103:

ARPAS UK is fully supportive of this ACP providing three conditions are fulfilled:

- 1) A Danger Area Crossing Service is available through each period when the TDA is active.
- 2) If other Drone users wish to fly in the TDA at any time during the period when it is active, they are able to do so on request, with the maximum period of delay being no more than the time it takes for the airborne Caelus aircraft to leave the active sector. If the Caelus aircraft is on the ground waiting for the cargo to arrive, the Operator should not unreasonably withhold approval for another Drone Operator to access the airspace in blocks of a minimum of 15 minutes.
- 3) The aircraft used as part of Caelus project incorporate ADSB In and Out.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



On 18 Sep 2023, at 12:16, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear 

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Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 7 June 2023 at 16:32

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in
Ayrshire & Arran area

Thank you very much, [REDACTED] That's noted and appreciated. Absolutely will do.

Kind regards,
Alex

From: [REDACTED]

Date: Wednesday, 7 June 2023 at 16:29

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in
Ayrshire & Arran area

Dear [REDACTED]

Please accept this email as full support for the Caelus project and its proposal in
Ayrshire and Arran from ARPAS UK, as a member of NATMAC. If we can do anything
to help, do let us know.

kind regards

[REDACTED]

[REDACTED]

[REDACTED]



On 24 May 2023, at 13:12, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

<N2 Stakeholder Engagement v1.0.pdf>

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 25 September 2023 17:09:15
Attachments: [unknown.png](#)

Dear [REDACTED]

Thank you very much for your email. Hope I can clarify all the points with the answer below. Although, we noted that in your previous response you expressed support without mentioning additional conditions. Could you please advise if anything changed in the meantime that caused those requests and we should be aware of?

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Hope that helps. Please let us know if you want to discuss any points further.

Best wishes,
Alex

From: [REDACTED]

Date: Friday, 22 September 2023 at 14:31

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

[REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Please find below ARPAS UK's input regarding the current proposal for ACP-2022-103:

ARPAS UK is fully supportive of this ACP providing three conditions are fulfilled:

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- 3) The aircraft used as part of Caelus project incorporate ADSB In and Out.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



On 18 Sep 2023, at 12:16, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

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Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 7 June 2023 at 16:32

To: [REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you very much, Rupert! That's noted and appreciated. Absolutely will do.

Kind regards,
Alex

From: [REDACTED]

Date: Wednesday, 7 June 2023 at 16:29

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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[Redacted]

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<N2 Stakeholder Engagement v1.0.pdf>

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To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 25 September 2023 19:19:10
Attachments: [unknown.png](#)

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I have given input on the basis of our experience with a number of ACP's over the last couple of years. We are invited to give input on all Drone ACPs, as a member of NATMAC.

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If you are not planning to be at Drone X, happy to have a quick Teams call ?

Kind Regards

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



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Best wishes,

[Redacted]

From: [Redacted]

Date: Friday, 22 September 2023 at 14:31

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [Redacted]

[Redacted]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

<unknown.png>

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Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 7 June 2023 at 16:32

To: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you very much, Rupert! That's noted and appreciated. Absolutely will do.

Kind regards,

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From: [REDACTED]

Date: Wednesday, 7 June 2023 at 16:29

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

[REDACTED]

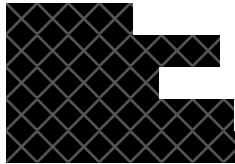
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Dear Alex,

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<N2 Stakeholder Engagement v1.0.pdf>

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 27 September 2023 09:08:43
Attachments: [unknown.png](#)

Dear [REDACTED]

Thank you for replying so quickly. We are engaging with ARPAS-UK as a member of NATMAC and value the inputs. We also appreciate that as per CAP-1616 we keep engagement open and ongoing for important updates or complaints etc. We would ask that moving forward with the future ACPs that requests are shared early following initial engagement as reengagement may not occur (in which case the requests below may not have been communicated) and it allows us more time to deal with it efficiently.

I am not at Drone X unfortunately, but could do a Teams call this week with pleasure. Kindly share a couple of suitable options for you or you can call/text my personal mobile on [REDACTED] it might be simpler and easier even in case it might be possible to chat at short notice. Meanwhile please see further comments below.

1. Agree.
2. We have asked Skyports to comment as indeed it might be fairly straightforward to grant such permissions in some circumstances and harder in other. Due to DACS we have higher chances of RTB, which means simply leaving a sector is unlikely to be enough to grant such permission. Furthermore, it might be the case that the TDA controlling authority will need to be involved to grant such permissions, rather than Skyports themselves. We will get back to you once get comments from Skyports and the CAA on how that might work.
3. Noted.

Best wishes,
Alex

From: [REDACTED]
Date: Monday, 25 September 2023 at 19:19
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
[REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Cc: [REDACTED]
[REDACTED]

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Date: Wednesday, 7 June 2023 at 16:32

To: [REDACTED]

[REDACTED]

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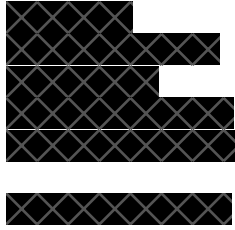
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From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Bcc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 03 October 2023 18:21:17
Attachments: [unknown.png](#)

Dear [REDACTED]

Following up from the previous email I would like to confirm that we spoke to Skyports and were advised that the nature of the previous arrangement for VLOS flying was a lot less formal and rather on ad-hoc bases whenever possible. So, on that topic I can only add that any airspace users (VLOS RPAS or otherwise) will have relevant phone number available from the NOTAM and would be able to confirm activity plans on a specific day.

Given NOTAM cancellation process is not very dynamic yet – it is indeed a good idea to call and confirm whether activity has stopped but cancellation just did not go through yet and it could be possible to get permission to fly without issues. However, for safety reasons such permission is unlikely to be granted upon BVLOS RPAS vacating a sector due to potential need to RTB.

Hope you find this useful and kindly feel free to contact me if you would still like to have a conversation.

Kind regards,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Date: Wednesday, 27 September 2023 at 09:08
To: [REDACTED]
[REDACTED]
[REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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Cc: [Redacted]

[Redacted]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

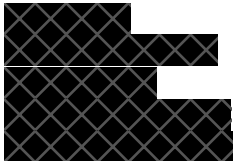
[Redacted]

Please find below ARPAS UK's input regarding the current proposal for ACP-2022-103:

ARPAS UK is fully supportive of this ACP providing three conditions are fulfilled:

- 1) A Danger Area Crossing Service is available through each period when the TDA is active.
- 2) If other Drone users wish to fly in the TDA at any time during the period when it is active, they are able to do so on request, with the maximum period of delay being no more than the time it takes for the airborne Caelus aircraft to leave the active sector. If the Caelus aircraft is on the ground waiting for the cargo to arrive, the Operator should not unreasonably withhold approval for another Drone Operator to access the airspace in blocks of a minimum of 15 minutes.
- 3) The aircraft used as part of Caelus project incorporate ADSB In and Out.

Kind regards



<unknown.png>

On 18 Sep 2023, at 12:16, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear 

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACs).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email (caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 7 June 2023 at 16:32

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you very much, [REDACTED] That's noted and appreciated.
Absolutely will do.

Kind regards,

Alex

From: [REDACTED]
Date: Wednesday, 7 June 2023 at 16:29
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
[REDACTED]
[REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Please accept this email as full support for the Caelus project and its proposal in Ayrshire and Arran from ARPAS UK, as a member of NATMAC. If we can do anything to help, do let us know.

kind regards

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

On 24 May 2023, at 13:12, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

<N2 Stakeholder Engagement v1.0.pdf>

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 07 June 2023 16:32:22
Attachments: [unknown.png](#)

Thank you very much [REDACTED]! That's noted and appreciated. Absolutely will do.

Kind regards,
Alex

From: [REDACTED]
Date: Wednesday, 7 June 2023 at 16:29
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: Re: ARPAS-UK engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear Alex,

Please accept this email as full support for the Caelus project and its proposal in Ayrshire and Arran from ARPAS UK, as a member of NATMAC. If we can do anything to help, do let us know.

kind regards

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



On 24 May 2023, at 13:12, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

<N2 Stakeholder Engagement v1.0.pdf>

From: [REDACTED]
To: [Caelus Airspace](#)
Subject: Prestwick Airport Local Radio Fail Procedure
Date: 11 June 2023 15:09:57
Attachments: [EGPK Local Raio Fail Procedure.pdf](#)

Dear [REDACTED]

Further to our Teams meeting on Friday I've attached a copy of the Radio Fail Procedure for PIK. As suspected it is a locally agreed procedure only for use by light aircraft based at PIK. My recollection of the holding points was not quite correct with the Northerly one being a few miles further up the coast away from Prestwick's Airspace and the Southerly one over to the coast a bit further South of the Airspace. The routings are as I described. The Northern hold is just outside the proposed TDA but the Southerly one infringes it.

Kind regards

[REDACTED]

From: [REDACTED]
To: [Caelus Airspace](#)
Cc: ["Mike Thrower"](#)
Subject: RE: Prestwick Airport Local Radio Fail Procedure
Date: 30 June 2023 16:10:45

Dear Alex

Thankyou for sending the updated proposals. I have looked through the changes and think that you now have a good basis for a sound trial. From a BALPA point of view the weather limits combined with the new routing will help to mitigate any conflicts with GA traffic inadvertently infringing the protected approach path.

From a local FI point of view again moving the TDA as you have and the weather limits should mitigate concerns over the radio fail in Special VFR issue.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: 12 June 2023 10:34
To: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Thank you very much! that's all noted and it goes without saying that all controlled airspace operations matters will be looked at closely and assessed with Prestwick.

Kind regards,
Alex

From: [REDACTED]
[REDACTED]
Date: Monday, 12 June 2023 at 10:23
To: [REDACTED]
[REDACTED]
Cc: [REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear Alex

I agree it was a very productive meeting and appreciate you taking the time to interact. Most of the discussions were focused on local procedures and I agree with what you have summarised. While BALPA does not have an issue with the overall scope of the project I'd just like to re-iterate that we do have concerns with the general principle of UAV's in controlled airspace and welcome the positive interaction with this project.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 12 June 2023 10:02

To: [REDACTED]

Cc: [REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Hope you had a nice weekend. Thank you very much for your time and meeting myself, [REDACTED]. That was a productive discussion and as promised I would like to confirm with you a few of the discussed points in writing:

1. Currently engagement is running only re Ayrshire and Arran route of the project. The stakeholder materials should be used as they have the latest information on the TDAs and might differ to what is in the assessment meeting slides. If there will be significant further change – we will make sure to inform our stakeholders.
2. BALPA per se doesn't have issues with the proposal, however, given your local knowledge and being an instructor in one of the local flying clubs – you kindly agreed to share some of your thoughts and concerns with us as well as remind your colleagues to respond to our engagement request.
3. There is a site that often used by paramotors. It is not a dedicated club or site, but still common to be in use during a good weather summer day. It is located at Beac Park, South of Stevenston Nature reserve (55 37.673N 004 44.681W). We will make sure to ask further details re that site and possible issues with BHPA when hear back from them we understand there is no currently an organisation in. charge.
4. There are radio failure procedures that were agreed with the local clubs only and are not published in the AIP. You have provided a description PDF (attached), which implies that the holds are a bit further away from the controlled airspace, but still conflict with the proposed TDAs laterally. We will therefore bring it up in our conversations with Prestwick directly.
5. From discussion of typical traffic flows in the area and GA potentially not using radio and willing to route outside or below controlled airspace there are potential conflicts with the proposed TDA. As a result, it was mentioned that agreeing to operate the UAV only when cloud base is 1500 ft or higher should give sufficient vertical space for most GA traffic to safely operate above the TDA, but below controlled airspace.
6. We have also briefly touched on the fact that routing to the East of Prestick is not feasible for Skyports due to ground risk and that there is a number of cases being considered for which the trial makes sense, despite relatively short distance by road.
7. Last thing that was mentioned is that we could consider potentially changing the A+B segments in such a way, so they route more in E-W direction and join TDA C sooner. I understand there are no immediate concerns on that idea from your side and it can

potentially reduce impact on GA.

We will be bringing up the points above in our conversations with other organisations, especially Prestwick themselves. At this point I just would like to thank you once again for your time input and kindly ask to confirm if the summary points above sound accurate to you?

Have a lovely week!

Best wishes,
Alex

From: [REDACTED]
[REDACTED]
Date: Sunday, 11 June 2023 at 15:09
To: [REDACTED]
Subject: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Further to our Teams meeting on Friday I've attached a copy of the Radio Fail Procedure for PIK. As suspected it is a locally agreed procedure only for use by light aircraft based at PIK. My recollection of the holding points was not quite correct with the Northerly one being a few miles further up the coast away from Prestwick's Airspace and the Southerly one over to the coast a bit further South of the Airspace. The routings are as I described. The Northern hold is just outside the proposed TDA but the Southerly one infringes it.

Kind regards

[REDACTED]

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For more information please visit <http://www.symanteccloud.com>

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure
Date: 18 September 2023 10:50:18
Attachments: [N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear [REDACTED]

You are receiving this email because you previously engaged on behalf of BALPA and a flying club at Prestwick regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

Thank you very much for all the time dedicated to support us previously and your suggestions were indeed very helpful. We wanted to let you know that we had to revise our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: [REDACTED]
Date: Monday, 3 July 2023 at 12:37
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Thank you very much for taking time to review the revised proposal version. We are pleased to hear that it sounds positive. It is of great value that individuals like yourself spend time and happy to share constructive feedback and enable us improve. Thanks again and feel free to reach out whenever if such need arises.

Best wishes,
Alex

From: [REDACTED]
[REDACTED]
Date: Friday, 30 June 2023 at 16:10
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear Alex

Thankyou for sending the updated proposals. I have looked through the changes and think that you now have a good basis for a sound trial. From a BALPA point of view the weather limits combined with the new routing will help to mitigate any conflicts with GA traffic inadvertently infringing the protected approach path.

From a local FI point of view again moving the TDA as you have and the weather limits should mitigate concerns over the radio fail in Special VFR issue.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: 12 June 2023 10:34
To: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Thank you very much! that's all noted and it goes without saying that all controlled airspace

operations matters will be looked at closely and assessed with Prestwick.

Kind regards,
Alex

From: [REDACTED]

Date: Monday, 12 June 2023 at 10:23

To: [REDACTED]

Cc: [REDACTED]

Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

I agree it was a very productive meeting and appreciate you taking the time to interact. Most of the discussions were focused on local procedures and I agree with what you have summarised. While BALPA does not have an issue with the overall scope of the project I'd just like to re-iterate that we do have concerns with the general principle of UAV's in controlled airspace and welcome the positive interaction with this project.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 12 June 2023 10:02

To: [REDACTED]

Cc: [REDACTED]

Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Hope you had a nice weekend. Thank you very much for your time and meeting myself, [REDACTED]. That was a productive discussion and as promised I would like to confirm with you a few of the discussed points in writing:

1. Currently engagement is running only re Ayrshire and Arran route of the project. The stakeholder materials should be used as they have the latest information on the TDAs and might differ to what is in the assessment meeting slides. If there will be significant further change – we will make sure to inform our stakeholders.
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7. Last thing that was mentioned is that we could consider potentially changing the A+B segments in such a way, so they route more in E-W direction and join TDA C sooner. I understand there are no immediate concerns on that idea from your side and it can potentially reduce impact on GA.

We will be bringing up the points above in our conversations with other organisations, especially Prestwick themselves. At this point I just would like to thank you once again for your time input and kindly ask to confirm if the summary points above sound accurate to you?

Have a lovely week!

Best wishes,
Alex

From: [REDACTED]

Date: Sunday, 11 June 2023 at 15:09

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Subject: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Further to our Teams meeting on Friday I've attached a copy of the Radio Fail Procedure for PIK. As suspected it is a locally agreed procedure only for use by light aircraft based at PIK. My recollection of the holding points was not quite correct with the Northerly one being a few miles further up the coast away from Prestwick's Airspace and the Southerly one over to the coast a bit further South of the Airspace. The routings are as I described. The Northern hold is just outside the proposed TDA but the Southerly one infringes it.

Kind regards



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For more information please visit <http://www.symanteccloud.com>

From: [REDACTED]
To: [Caelus Airspace; graemesmith@balpa.org](mailto:graemesmith@balpa.org)
Cc: [REDACTED]
Subject: RE: Prestwick Airport Local Radio Fail Procedure
Date: 12 June 2023 10:23:47

Dear Alex

I agree it was a very productive meeting and appreciate you taking the time to interact. Most of the discussions were focused on local procedures and I agree with what you have summarised. While BALPA does not have an issue with the overall scope of the project I'd just like to re-iterate that we do have concerns with the general principle of UAV's in controlled airspace and welcome the positive interaction with this project.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: 12 June 2023 10:02
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
[REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Hope you had a nice weekend. Thank you very much for your time and meeting myself, [REDACTED] That was a productive discussion and as promised I would like to confirm with you a few of the discussed points in writing:

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directly.

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We will be bringing up the points above in our conversations with other organisations, especially Prestwick themselves. At this point I just would like to thank you once again for your time input and kindly ask to confirm if the summary points above sound accurate to you?

Have a lovely week!

Best wishes,
Alex

From: [REDACTED]
[REDACTED]
Date: Sunday, 11 June 2023 at 15:09
To: [REDACTED]
Subject: Prestwick Airport Local Radio Fail Procedure

Dear Alex

Further to our Teams meeting on Friday I've attached a copy of the Radio Fail Procedure for PIK. As suspected it is a locally agreed procedure only for use by light aircraft based at PIK. My recollection of the holding points was not quite correct with the Northerly one being a few miles further up the coast away from Prestwick's Airspace and the Southerly one over to the coast a bit further South of the Airspace. The routings are as I described. The Northern hold is just outside the proposed TDA but the Southerly one infringes it.

Kind regards

[REDACTED]

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From: [Caelus Airspace](#)
To: [REDACTED]
Bcc: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure
Date: 03 July 2023 12:37:04

Dear [REDACTED]

Thank you very much for taking time to review the revised proposal version. We are pleased to hear that it sounds positive. It is of great value that individuals like yourself spend time and happy to share constructive feedback and enable us improve. Thanks again and feel free to reach out whenever if such need arises.

Best wishes,

[REDACTED]

From: [REDACTED]
[REDACTED]
Date: Friday, 30 June 2023 at 16:10
To: [REDACTED]
[REDACTED]
Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear Alex

Thankyou for sending the updated proposals. I have looked through the changes and think that you now have a good basis for a sound trial. From a BALPA point of view the weather limits combined with the new routing will help to mitigate any conflicts with GA traffic inadvertently infringing the protected approach path.

From a local FI point of view again moving the TDA as you have and the weather limits should mitigate concerns over the radio fail in Special VFR issue.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: 12 June 2023 10:34
To: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Thank you very much! that's all noted and it goes without saying that all controlled airspace operations matters will be looked at closely and assessed with Prestwick.

Kind regards,

[REDACTED]

From: [REDACTED]

[REDACTED]

Date: Monday, 12 June 2023 at 10:23

To: [REDACTED]

[REDACTED]

Cc: [REDACTED]

[REDACTED]

[REDACTED]

Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear Alex

I agree it was a very productive meeting and appreciate you taking the time to interact. Most of the discussions were focused on local procedures and I agree with what you have summarised. While BALPA does not have an issue with the overall scope of the project I'd just like to re-iterate that we do have concerns with the general principle of UAV's in controlled airspace and welcome the positive interaction with this project.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 12 June 2023 10:02

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Hope you had a nice weekend. Thank you very much for your time and meeting myself, [REDACTED]. That was a productive discussion and as promised I would like to confirm with you a few of the discussed points in writing:

1. Currently engagement is running only re Ayrshire and Arran route of the project. The stakeholder materials should be used as they have the latest information on the TDAs and might differ to what is in the assessment meeting slides. If there will be significant further change – we will make sure to inform our stakeholders.
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We will be bringing up the points above in our conversations with other organisations, especially Prestwick themselves. At this point I just would like to thank you once again for your time input and kindly ask to confirm if the summary points above sound accurate to you?

Have a lovely week!

Best wishes,



From: [Redacted]



Date: Sunday, 11 June 2023 at 15:09

To: [Redacted]

Subject: Prestwick Airport Local Radio Fail Procedure

Dear [Redacted]

Further to our Teams meeting on Friday I've attached a copy of the Radio Fail Procedure for PIK. As suspected it is a locally agreed procedure only for use by light aircraft based at PIK. My recollection of the holding points was not quite correct with the Northerly one being a few miles further up the coast away from Prestwick's Airspace and the Southerly one over to the coast a bit further South of the Airspace. The routings are as I described. The Northern hold is just outside the proposed TDA but the Southerly one infringes it.

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For more information please visit <http://www.symanteccloud.com>

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure
Date: 12 June 2023 10:34:22

Thank you very much! that's all noted and it goes without saying that all controlled airspace operations matters will be looked at closely and assessed with Prestwick.

Kind regards,
Alex

From: G [REDACTED]
[REDACTED]
Date: Monday, 12 June 2023 at 10:23
To: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] et>
Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear Alex

I agree it was a very productive meeting and appreciate you taking the time to interact. Most of the discussions were focused on local procedures and I agree with what you have summarised. While BALPA does not have an issue with the overall scope of the project I'd just like to re-iterate that we do have concerns with the general principle of UAV's in controlled airspace and welcome the positive interaction with this project.

Kind regards

[REDACTED]

From: [REDACTED]
Sent: 12 June 2023 10:02
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
[REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Hope you had a nice weekend. Thank you very much for your time and meeting myself, [REDACTED] That was a productive discussion and as promised I would like to confirm with you a few of the discussed points in writing:

1. Currently engagement is running only re Ayrshire and Arran route of the project. The

stakeholder materials should be used as they have the latest information on the TDAs and might differ to what is in the assessment meeting slides. If there will be significant further change – we will make sure to inform our stakeholders.

2. BALPA per se doesn't have issues with the proposal, however, given your local knowledge and being an instructor in one of the local flying clubs – you kindly agreed to share some of your thoughts and concerns with us as well as remind your colleagues to respond to our engagement request.
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We will be bringing up the points above in our conversations with other organisations, especially Prestwick themselves. At this point I just would like to thank you once again for your time input and kindly ask to confirm if the summary points above sound accurate to you?

Have a lovely week!

Best wishes,
Alex

From: [REDACTED]
[REDACTED]
Date: Sunday, 11 June 2023 at 15:09
To: [REDACTED]
Subject: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

Further to our Teams meeting on Friday I've attached a copy of the Radio Fail Procedure for PIK.

As suspected it is a locally agreed procedure only for use by light aircraft based at PIK. My recollection of the holding points was not quite correct with the Northerly one being a few miles further up the coast away from Prestwick's Airspace and the Southerly one over to the coast a bit further South of the Airspace. The routings are as I described. The Northern hold is just outside the proposed TDA but the Southerly one infringes it.

Kind regards



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From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure
Date: 12 June 2023 10:01:53
Attachments: [EGPK Local Raio Fail Procedure.pdf](#)

Dear [REDACTED]

Hope you had a nice weekend. Thank you very much for your time and meeting myself, [REDACTED] That was a productive discussion and as promised I would like to confirm with you a few of the discussed points in writing:

1. Currently engagement is running only re Ayrshire and Arran route of the project. The stakeholder materials should be used as they have the latest information on the TDAs and might differ to what is in the assessment meeting slides. If there will be significant further change – we will make sure to inform our stakeholders.
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Have a lovely week!

Best wishes,
Alex

From: [REDACTED]

[REDACTED]

Date: Sunday, 11 June 2023 at 15:09

To: [REDACTED]

Subject: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

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Kind regards

[REDACTED]

From: [REDACTED]
To: [Caelus Airspace](#)
Subject: RE: Prestwick Airport Local Radio Fail Procedure
Date: 18 September 2023 11:19:21

Dear Alex

I've read through the revised PDF pack. You have done a lot of work on the procedures and I can't see anything in there that gives cause for concern from a BALPA point of view. A minor point for local pilots and I'm sure it was just a typo: Slide 7, Note 2 states: "If a DACS cannot be provided, and this may occur for a number of reasons, then a DAIS from London Information would be provided." It's not possible to contact London Information in our area, only Scottish Information.

Kind regards

[REDACTED]

From: [REDACTED]
Sent: 18 September 2023 10:50
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

You are receiving this email because you previously engaged on behalf of BALPA and a flying club at Prestwick regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

Thank you very much for all the time dedicated to support us previously and your suggestions were indeed very helpful. We wanted to let you know that we had to revise our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACCS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we

would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email (caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,

[Redacted signature]

From: [Redacted]

Date: Monday, 3 July 2023 at 12:37

To: [Redacted]

[Redacted]

Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [Redacted]

Thank you very much for taking time to review the revised proposal version. We are pleased to hear that it sounds positive. It is of great value that individuals like yourself spend time and happy to share constructive feedback and enable us improve. Thanks again and feel free to reach out whenever if such need arises.

Best wishes,

[Redacted signature]

From: [Redacted]

[Redacted]

Date: Friday, 30 June 2023 at 16:10

To: [Redacted]

[Redacted]

Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear Alex

Thankyou for sending the updated proposals. I have looked through the changes and think that you now have a good basis for a sound trial. From a BALPA point of view the weather limits combined with the new routing will help to mitigate any conflicts with GA traffic inadvertently infringing the protected approach path.

From a local FI point of view again moving the TDA as you have and the weather limits should mitigate concerns over the radio fail in Special VFR issue.

Kind regards

[REDACTED]

From: [REDACTED]
Sent: 12 June 2023 10:34
To: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure

Thank you very much! that's all noted and it goes without saying that all controlled airspace operations matters will be looked at closely and assessed with Prestwick.

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Alex

From: [REDACTED]
[REDACTED]
Date: Monday, 12 June 2023 at 10:23
To: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: Prestwick Airport Local Radio Fail Procedure

Dear Alex

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Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: 12 June 2023 10:02

To: [REDACTED]

Cc: [REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: Prestwick Airport Local Radio Fail Procedure

Dear [REDACTED]

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Best wishes,
Alex

From: [REDACTED]

[REDACTED]

Date: Sunday, 11 June 2023 at 15:09

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Subject: Prestwick Airport Local Radio Fail Procedure

Dear Alex

Further to our Teams meeting on Friday I've attached a copy of the Radio Fail Procedure for PIK. As suspected it is a locally agreed procedure only for use by light aircraft based at PIK. My recollection of the holding points was not quite correct with the Northerly one being a few miles further up the coast away from Prestwick's Airspace and the Southerly one over to the coast a bit further South of the Airspace. The routings are as I described. The Northern hold is just outside the proposed TDA but the Southerly one infringes it.

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: Prestwick Airport Local Radio Fail Procedure
Date: 18 September 2023 15:10:04

Thank you so much, [REDACTED] Oh dear, that's an awkward one.. thanks a lot for pointing out.

Best wishes,
Alex

From: [REDACTED]
Date: Monday, 18 September 2023 at 11:19
To: C [REDACTED]
Subject: RE: Prestwick Airport Local Radio Fail Procedure

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Cc: [REDACTED]
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Cc: [REDACTED]

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From: [REDACTED]

[REDACTED]

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To: [REDACTED]

[REDACTED]

Subject: RE: Prestwick Airport Local Radio Fail Procedure

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Sent: 12 June 2023 10:34

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[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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Sent: 12 June 2023 10:02

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Best wishes,
Alex

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[REDACTED]
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To: [REDACTED]
Subject: Prestwick Airport Local Radio Fail Procedure

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From: [REDACTED]
To: [REDACTED]
Subject: RE: Stakeholder Status and Comments
Date: 07 June 2023 18:07:37

Dear Alex

Yes, I admit some of the references probably require local knowledge. I'd appreciate a chance to interact and a call would be good. I'm flying out of Glasgow for the RAF Reserve most of Friday but happy to talk in the evening (any time after 5pm) if that works?

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: 07 June 2023 17:38
To: [REDACTED]
[REDACTED]
Subject: Re: Stakeholder Status and Comments

Dear [REDACTED]

Thank you very much for responding and correcting some of the points. I must admit that despite carefully going sentence by sentence with a map next to me, not all references were 100% clear and matching for me. Would you be willing to do a 45 mins call with me possibly this Friday? We have a stakeholder, who expressed a number of similar sounding concerns, so I would definitely like to have a conversation with you to build a more complete picture of the issues raised. Please let me know what your availability looks like and I will do my best to find an option that works.

Kind regards,

[REDACTED]

From: [REDACTED]
Date: Tuesday, 6 June 2023 at 19:30
To: [REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: Stakeholder Status and Comments

Dear [REDACTED]

Thank you for the quick response. I am engaging on behalf as BALPA as a consortium. Mike Thrower asked me to get involved as I am on his working group and based local to PIK and take an interest in Scottish Airspace issues.

Any engagement with myself will be fed back to the ATS Group and recorded at our monthly

meetings.

Having had more time to consider the briefing material I realise I have incorrectly referenced the TDA's so please accept this amended submission:

Of your proposed routes, TDA B is of most concern as this impacts on the Special VFR entry and exit routes for PIK and also the Radio Fail procedure routings for EGPK. TDA A poses issues for uncontrolled VFR traffic beneath the 12 panhandle. Both the TDA's you propose crosses entry and exit lanes for North and South routings and infringes the normal route for GA traffic to transit under the seaward panhandle of Prestwick airspace. That particular airspace is very busy with VFR traffic especially in poor weather when VFR is allowed under SERA in Class E airspace but Special VFR transits of the zone are unavailable. A great number of uncontrolled traffic (GA and Paramotors) use that routing when avoiding Prestwick Airspace. At one point in your presentation you state that crewed aircraft will be operating above 1000 feet. SERA allows VFR traffic to operate at 500 feet clear of obstacle, persons or structures. Whilst most GA pilots will normally use 500 feet as a minimum transit altitude there is no legal barrier to them flying lower in order to maintain sight of the surface when no obstacles etc., are in their flightpath.

With the best will in the World you cannot rely on every GA pilot reading NOTAMS before using this airspace. I fully accept that they should and they would be fully at fault for infringing any active TDA. That does not however mitigate the very high collision risk associated with this proposed route. A pilot taking avoiding action in the vicinity of both TDA's would have a very significant probability of infringing the IFR approaches to runway 12.

TDA B is from Crosshouse Hospital to Ayr Hospital. I personally live in the area concerned, almost equidistant from both hospitals. I really fail to see the benefits of what will be a 15 minute drone flight (not including the preparation time for flight) compared to 20 minutes in a car or ambulance weighed against the potential collision risk of this route. The benefits of TDA A are more evident as this crossing takes quite some time by sea and is expensive by helicopter however it crosses an area of the Ayrshire coast popular for recreational Paramotor users who launch from a site at the southern tip of Saltcoats, directly in the centre of your proposed corridor.

Kind regards

[REDACTED]

From: [REDACTED]

Sent: 06 June 2023 19:06

To: [REDACTED]

Subject: Re: Stakeholder Status and Comments

Dear [REDACTED]

Thank you very much for reaching out to us. Stakeholder engagement and feedback is important to us and is a key element of the CAP 1616 process aiming to highlight and bring to the fore any

impacts of a proposed airspace change proposal and so thank you for taking the time to reach out to us.

We will certainly add BALPA to the list of stakeholders but would be grateful if you could confirm whether you are replying on behalf of BALPA as a consortium as their formal view or whether we need to engage with the contact on the NATMAC list (CCed) and your views below are as an interested stakeholder? This is solely to help us collate and present the engagement and the responses within the final submission for the CAA.

We are shortly to discuss the ACP with Prestwick and been in touch with some of the local GA users, some of which raised similar questions and issues. We will ensure that your concerns below are articulated and included in that conversation. We thank you for your comprehensive input and we will revert to you once we have had the opportunity of addressing the below in relation to any mitigations or adjustments that the airspace design may require.

Dear [REDACTED] please kindly see attached the PDF materials on the ACP that your member Graeme is referencing. Kindly note that the suggested reply by date of June 11th is likely to be quite tight and possibly not even feasible, but we would value if you could provide your feedback by June 18th if possible?

Kind regards,
Alex

From: [REDACTED]
[REDACTED]
Date: Monday, 5 June 2023 at 21:54
To: [REDACTED]
Subject: Stakeholder Status and Comments

Good evening

As a member of the BALPA (British Airline Pilots Association) Air Traffic Services Group I have just been made aware of your proposals for the CAELUS TRIAL C - AYRSHIRE & ARRAN. I note that BALPA is not a nominated stakeholder. Could you possibly amend this? Airspace Change Proposals are very much the remit of the ATS Group and we represent the interests of the great number of professional pilots who operate in and out of Prestwick Airport in commercial operations and the interests of our members who also fly General Aviation from the same airport.

Of your proposed routes, TDA B is of most concern as this impacts on the Special VFR entry and exit routes for PIK and also the Radio Fail procedure routings for EGPK. TDA A poses issues for uncontrolled VFR traffic beneath the 12 panhandle. Both the TDA's you propose crosses entry and exit lanes for North and South routings and infringes the normal route for GA traffic to transit under the seaward panhandle of Prestwick airspace. That particular airspace is very busy with VFR traffic especially in poor weather when VFR is allowed under SERA in Class E airspace but Special VFR transits of the zone are unavailable. A great number of uncontrolled traffic (GA and Paramotors) use that routing when avoiding Prestwick Airspace. At one point in you

presentation you state that crewed aircraft will be operating above 1000 feet. SERA allows VFR traffic to operate at 500 feet clear of obstacle, persons or structures. Whilst most GA pilots will normally use 500 feet as a minimum transit altitude there is no legal barrier to them flying lower in order to maintain sight of the surface when no obstacles etc., are in their flightpath.

With the best will in the World you cannot rely on every GA pilot reading NOTAMS before using this airspace. I fully accept that they should and they would be fully at fault for infringing any active TDA. That does not however mitigate the very high collision risk associated with this proposed route. A pilot taking avoiding action in the vicinity of both TDA's would have a very significant probability of infringing the IFR approaches to runway 12.

TDA B is from Crosshouse Hospital to Ayr Hospital. I personally live in the area concerned, almost equidistant from both hospitals. I really fail to see the benefits of what will be a 15 minute drone flight (not including the preparation time for flight) compared to 20 minutes in a car or ambulance weighed against the potential collision risk of this route. The benefits of TDA A are more evident as this crossing takes quite some time by sea and is expensive by helicopter however it crosses an area of the Ayrshire coast popular for recreational Paramotor users who launch from a site at the southern tip of Saltcoats, directly in the centre of your proposed corridor.

Kind regards

[Redacted signature block]

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From: [REDACTED]
To: [REDACTED]
Subject: RE: Stakeholder Status and Comments
Date: 06 June 2023 19:30:17
Attachments: [Caelus Airspace Submission.docx](#)

Dear Alex

Thank you for the quick response. I am engaging on behalf as BALPA as a consortium. [REDACTED] [REDACTED] asked me to get involved as I am on his working group and based local to PIK and take an interest in Scottish Airspace issues.

Any engagement with myself will be fed back to the ATS Group and recorded at our monthly meetings.

Having had more time to consider the briefing material I realise I have incorrectly referenced the TDA's so please accept this amended submission:

Of your proposed routes, TDA B is of most concern as this impacts on the Special VFR entry and exit routes for PIK and also the Radio Fail procedure routings for EGPK. TDA A poses issues for uncontrolled VFR traffic beneath the 12 panhandle. Both the TDA's you propose crosses entry and exit lanes for North and South routings and infringes the normal route for GA traffic to transit under the seaward panhandle of Prestwick airspace. That particular airspace is very busy with VFR traffic especially in poor weather when VFR is allowed under SERA in Class E airspace but Special VFR transits of the zone are unavailable. A great number of uncontrolled traffic (GA and Paramotors) use that routing when avoiding Prestwick Airspace. At one point in your presentation you state that crewed aircraft will be operating above 1000 feet. SERA allows VFR traffic to operate at 500 feet clear of obstacle, persons or structures. Whilst most GA pilots will normally use 500 feet as a minimum transit altitude there is no legal barrier to them flying lower in order to maintain sight of the surface when no obstacles etc., are in their flightpath.

With the best will in the World you cannot rely on every GA pilot reading NOTAMS before using this airspace. I fully accept that they should and they would be fully at fault for infringing any active TDA. That does not however mitigate the very high collision risk associated with this proposed route. A pilot taking avoiding action in the vicinity of both TDA's would have a very significant probability of infringing the IFR approaches to runway 12.

TDA B is from Crosshouse Hospital to Ayr Hospital. I personally live in the area concerned, almost equidistant from both hospitals. I really fail to see the benefits of what will be a 15 minute drone flight (not including the preparation time for flight) compared to 20 minutes in a car or ambulance weighed against the potential collision risk of this route. The benefits of TDA A are more evident as this crossing takes quite some time by sea and is expensive by helicopter however it crosses an area of the Ayrshire coast popular for recreational Paramotor users who launch from a site at the southern tip of Saltcoats, directly in the centre of your proposed corridor.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 06 June 2023 19:06

To: [REDACTED]

Subject: Re: Stakeholder Status and Comments

Dear [REDACTED]

Thank you very much for reaching out to us. Stakeholder engagement and feedback is important to us and is a key element of the CAP 1616 process aiming to highlight and bring to the fore any impacts of a proposed airspace change proposal and so thank you for taking the time to reach out to us.

We will certainly add BALPA to the list of stakeholders but would be grateful if you could confirm whether you are replying on behalf of BALPA as a consortium as their formal view or whether we need to engage with the contact on the NATMAC list (CCed) and your views below are as an interested stakeholder? This is solely to help us collate and present the engagement and the responses within the final submission for the CAA.

We are shortly to discuss the ACP with Prestwick and been in touch with some of the local GA users, some of which raised similar questions and issues. We will ensure that your concerns below are articulated and included in that conversation. We thank you for your comprehensive input and we will revert to you once we have had the opportunity of addressing the below in relation to any mitigations or adjustments that the airspace design may require.

Dear [REDACTED] please kindly see attached the PDF materials on the ACP that your member Graeme is referencing. Kindly note that the suggested reply by date of June 11th is likely to be quite tight and possibly not even feasible, but we would value if you could provide your feedback by June 18th if possible?

Kind regards,
Alex

From: [REDACTED]

Date: Monday, 5 June 2023 at 21:54

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Subject: Stakeholder Status and Comments

Good evening

As a member of the BALPA (British Airline Pilots Association) Air Traffic Services Group I have just been made aware of your proposals for the CAELUS TRIAL C - AYRSHIRE & ARRAN. I note that BALPA is not a nominated stakeholder. Could you possibly amend this? Airspace Change

Proposals are very much the remit of the ATS Group and we represent the interests of the great number of professional pilots who operate in and out of Prestwick Airport in commercial operations and the interests of our members who also fly General Aviation from the same airport.

Of your proposed routes, TDA B is of most concern as this impacts on the Special VFR entry and exit routes for PIK and also the Radio Fail procedure routings for EGPK. TDA A poses issues for uncontrolled VFR traffic beneath the 12 panhandle. Both the TDA's you propose crosses entry and exit lanes for North and South routings and infringes the normal route for GA traffic to transit under the seaward panhandle of Prestwick airspace. That particular airspace is very busy with VFR traffic especially in poor weather when VFR is allowed under SERA in Class E airspace but Special VFR transits of the zone are unavailable. A great number of uncontrolled traffic (GA and Paramotors) use that routing when avoiding Prestwick Airspace. At one point in your presentation you state that crewed aircraft will be operating above 1000 feet. SERA allows VFR traffic to operate at 500 feet clear of obstacle, persons or structures. Whilst most GA pilots will normally use 500 feet as a minimum transit altitude there is no legal barrier to them flying lower in order to maintain sight of the surface when no obstacles etc., are in their flightpath.

With the best will in the World you cannot rely on every GA pilot reading NOTAMS before using this airspace. I fully accept that they should and they would be fully at fault for infringing any active TDA. That does not however mitigate the very high collision risk associated with this proposed route. A pilot taking avoiding action in the vicinity of both TDA's would have a very significant probability of infringing the IFR approaches to runway 12.

TDA B is from Crosshouse Hospital to Ayr Hospital. I personally live in the area concerned, almost equidistant from both hospitals. I really fail to see the benefits of what will be a 15 minute drone flight (not including the preparation time for flight) compared to 20 minutes in a car or ambulance weighed against the potential collision risk of this route. The benefits of TDA A are more evident as this crossing takes quite some time by sea and is expensive by helicopter however it crosses an area of the Ayrshire coast popular for recreational Paramotor users who launch from a site at the southern tip of Saltcoats, directly in the centre of your proposed corridor.

██████████

██████████
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From: [REDACTED]
To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: RE: Stakeholder Status and Comments
Date: 08 June 2023 12:09:14
Attachments: [Routes.pdf](#)

Dear Alex

Further to my email of last night I've put some information on the map contained in your presentation material. Due to the short timescale I thought it best to try and clarify my information in case a call tomorrow is not possible. I think the main reason for confusion is probably due to the TDA designations on the maps in the Stakeholder Brief being different to the designations in the Assessment Meeting Presentation.

Normally, operations such as yours would not be of particular concern to our members apart from those who fly General Aviation as well. UAV operations through the protected area of an IFR approach to an International Airport which is also the 24 hour preferred hi-jack/incident destination for the Northern UK does concern them.

With the short timescale left for comments I have only managed to briefly look through all your different areas of proposed operation throughout Scotland and the Prestwick zone is the one of most concern which is why I have commented on it specifically. The route across to Arran has obvious merits and the main concern of BALPA would be inadvertent entry into controlled airspace by non professional airspace users while avoiding your TDA. As an example the paramotor operations from the area south of Saltcoats are not NOTAM'd so you may not be aware of them unlike the model aircraft site near Dundonald which I note your Drone Track specifically avoids. While no licence is required to operate a Paramotor a user should abide by the rules of the air. I have not been made aware of any issues caused by the Paramotor Operations so can only assume they are operating responsibly.

The main concern is the TDA which encompasses the Western edge of Prestwick's airspace. As I have attempted to illustrate, this crosses the Special VFR and Radio/Electrics Failure routes for VFR traffic. IFR traffic in emergency will be at higher altitudes and should be easily identifiable by ATC. Low level VFR traffic in difficulty may not have any comms or Electronic Conspicuity available to them while crossing your proposed TDA in emergency and are difficult to identify. GA aircraft in such an emergency pose a general risk to IFR traffic in normal circumstances but UAV operation on top of that exacerbates the situation.

The route by road from Crosshouse to Ayr is 18 miles and 95% dual carriageway so the benefits of UAV operation are difficult to see.

An alternative route to the East of the Prestwick Zone would appear to have minimal confliction with emergency VFR traffic using the published entry/exit routes but may be operationally more difficult for a UAV.

I said yesterday that I would be available from 5pm but have now arranged to be available after 3pm if that is more convenient.

Kind regards

[REDACTED]
[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 07 June 2023 17:38

To: [REDACTED]
[REDACTED]

Subject: Re: Stakeholder Status and Comments

Dear [REDACTED]

Thank you very much for responding and correcting some of the points. I must admit that despite carefully going sentence by sentence with a map next to me, not all references were 100% clear and matching for me. Would you be willing to do a 45 mins call with me possibly this Friday? We have a stakeholder, who expressed a number of similar sounding concerns, so I would definitely like to have a conversation with you to build a more complete picture of the issues raised. Please let me know what your availability looks like and I will do my best to find an option that works.

Kind regards,
Alex

From: [REDACTED]

Date: Tuesday, 6 June 2023 at 19:30

To: [REDACTED]
[REDACTED]
[REDACTED]

Subject: RE: Stakeholder Status and Comments

Dear Alex

Thank you for the quick response. I am engaging on behalf as BALPA as a consortium. Mike Thrower asked me to get involved as I am on his working group and based local to PIK and take an interest in Scottish Airspace issues.

Any engagement with myself will be fed back to the ATS Group and recorded at our monthly meetings.

Having had more time to consider the briefing material I realise I have incorrectly referenced the TDA's so please accept this amended submission:

Of your proposed routes, TDA B is of most concern as this impacts on the Special VFR entry and exit routes for PIK and also the Radio Fail procedure routings for EGPK. TDA A poses issues for uncontrolled VFR traffic beneath the 12 panhandle. Both the TDA's you propose crosses entry and exit lanes for North and South routings and infringes the normal route for GA traffic to

transit under the seaward panhandle of Prestwick airspace. That particular airspace is very busy with VFR traffic especially in poor weather when VFR is allowed under SERA in Class E airspace but Special VFR transits of the zone are unavailable. A great number of uncontrolled traffic (GA and Paramotors) use that routing when avoiding Prestwick Airspace. At one point in your presentation you state that crewed aircraft will be operating above 1000 feet. SERA allows VFR traffic to operate at 500 feet clear of obstacle, persons or structures. Whilst most GA pilots will normally use 500 feet as a minimum transit altitude there is no legal barrier to them flying lower in order to maintain sight of the surface when no obstacles etc., are in their flightpath.

With the best will in the World you cannot rely on every GA pilot reading NOTAMS before using this airspace. I fully accept that they should and they would be fully at fault for infringing any active TDA. That does not however mitigate the very high collision risk associated with this proposed route. A pilot taking avoiding action in the vicinity of both TDA's would have a very significant probability of infringing the IFR approaches to runway 12.

TDA B is from Crosshouse Hospital to Ayr Hospital. I personally live in the area concerned, almost equidistant from both hospitals. I really fail to see the benefits of what will be a 15 minute drone flight (not including the preparation time for flight) compared to 20 minutes in a car or ambulance weighed against the potential collision risk of this route. The benefits of TDA A are more evident as this crossing takes quite some time by sea and is expensive by helicopter however it crosses an area of the Ayrshire coast popular for recreational Paramotor users who launch from a site at the southern tip of Saltcoats, directly in the centre of your proposed corridor.

Kind regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 06 June 2023 19:06

To: [REDACTED]

Subject: Re: Stakeholder Status and Comments

Dear [REDACTED]

Thank you very much for reaching out to us. Stakeholder engagement and feedback is important to us and is a key element of the CAP 1616 process aiming to highlight and bring to the fore any impacts of a proposed airspace change proposal and so thank you for taking the time to reach out to us.

We will certainly add BALPA to the list of stakeholders but would be grateful if you could confirm whether you are replying on behalf of BALPA as a consortium as their formal view or whether we need to engage with the contact on the NATMAC list (CCed) and your views below are as an interested stakeholder? This is solely to help us collate and present the engagement and the responses within the final submission for the CAA.

We are shortly to discuss the ACP with Prestwick and been in touch with some of the local GA

users, some of which raised similar questions and issues. We will ensure that your concerns below are articulated and included in that conversation. We thank you for your comprehensive input and we will revert to you once we have had the opportunity of addressing the below in relation to any mitigations or adjustments that the airspace design may require.

Dear [REDACTED] please kindly see attached the PDF materials on the ACP that your member Graeme is referencing. Kindly note that the suggested reply by date of June 11th is likely to be quite tight and possibly not even feasible, but we would value if you could provide your feedback by June 18th if possible?

Kind regards,
Alex

From: [REDACTED]

Date: Monday, 5 June 2023 at 21:54

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Subject: Stakeholder Status and Comments

Good evening

As a member of the BALPA (British Airline Pilots Association) Air Traffic Services Group I have just been made aware of your proposals for the CAELUS TRIAL C - AYRSHIRE & ARRAN. I note that BALPA is not a nominated stakeholder. Could you possibly amend this? Airspace Change Proposals are very much the remit of the ATS Group and we represent the interests of the great number of professional pilots who operate in and out of Prestwick Airport in commercial operations and the interests of our members who also fly General Aviation from the same airport.

Of your proposed routes, TDA B is of most concern as this impacts on the Special VFR entry and exit routes for PIK and also the Radio Fail procedure routings for EGPK. TDA A poses issues for uncontrolled VFR traffic beneath the 12 panhandle. Both the TDA's you propose crosses entry and exit lanes for North and South routings and infringes the normal route for GA traffic to transit under the seaward panhandle of Prestwick airspace. That particular airspace is very busy with VFR traffic especially in poor weather when VFR is allowed under SERA in Class E airspace but Special VFR transits of the zone are unavailable. A great number of uncontrolled traffic (GA and Paramotors) use that routing when avoiding Prestwick Airspace. At one point in you presentation you state that crewed aircraft will be operating above 1000 feet. SERA allows VFR traffic to operate at 500 feet clear of obstacle, persons or structures. Whilst most GA pilots will normally use 500 feet as a minimum transit altitude there is no legal barrier to them flying lower in order to maintain sight of the surface when no obstacles etc., are in their flightpath.

With the best will in the World you cannot rely on every GA pilot reading NOTAMS before using this airspace. I fully accept that they should and they would be fully at fault for infringing any active TDA. That does not however mitigate the very high collision risk associated with this proposed route. A pilot taking avoiding action in the vicinity of both TDA's would have a very significant probability of infringing the IFR approaches to runway 12.

TDA B is from Crosshouse Hospital to Ayr Hospital. I personally live in the area concerned, almost equidistant from both hospitals. I really fail to see the benefits of what will be a 15 minute drone flight (not including the preparation time for flight) compared to 20 minutes in a car or ambulance weighed against the potential collision risk of this route. The benefits of TDA A are more evident as this crossing takes quite some time by sea and is expensive by helicopter however it crosses an area of the Ayrshire coast popular for recreational Paramotor users who launch from a site at the southern tip of Saltcoats, directly in the centre of your proposed corridor.

Kind regards

Graeme Smith
Captain (Retired)
BALPA ATS Group

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From: [REDACTED]
To: [Caelus Airspace](#)
Subject: Stakeholder Status and Comments
Date: 05 June 2023 21:54:46

Good evening

As a member of the BALPA (British Airline Pilots Association) Air Traffic Services Group I have just been made aware of your proposals for the CAELUS TRIAL C - AYRSHIRE & ARRAN. I note that BALPA is not a nominated stakeholder. Could you possibly amend this? Airspace Change Proposals are very much the remit of the ATS Group and we represent the interests of the great number of professional pilots who operate in and out of Prestwick Airport in commercial operations and the interests of our members who also fly General Aviation from the same airport.

Of your proposed routes, TDA C is of most concern as this impacts on the Special VFR entry and exit routes for PIK and also the Radio Fail procedure routings for EGPK. The TDA you propose crosses both entry and exit lanes for North and South routings and gives a 600 foot gap for GA traffic to transit under the seaward panhandle of Prestwick airspace. That particular airspace is very busy with VFR traffic especially in poor weather when VFR is allowed under SERA in Class E airspace but Special VFR transits of the zone are unavailable. A great number of uncontrolled traffic (GA and Paragliders) use that routing when avoiding Prestwick Airspace. At one point in your presentation you state that crewed aircraft will be operating above 1000 feet. SERA allows VFR traffic to operate at 500 feet clear of obstacle, persons or structures. Whilst most GA pilots will normally use 500 feet as a minimum transit altitude there is no legal barrier to them flying lower in order to maintain sight of the surface when no obstacles etc., are in their flightpath.

With the best will in the World you cannot rely on every GA pilot reading NOTAMS before using this airspace. I fully accept that they should and they would be fully at fault for infringing any active TDA. That does not however mitigate the very high collision risk associated with this proposed route. A pilot taking avoiding action in the vicinity of TDA C would have a very significant probability of infringing the IFR approaches to runway 12.

The particular route (TDA C) is from Crosshouse Hospital to Ayr Hospital. I personally live in the area concerned, almost equidistant from both hospitals. I really fail to see the benefits of what will be a 15 minute drone flight (not including the preparation time for flight) compared to 20 minutes in a car or ambulance weighed against the potential collision risk of this route.

Kind regards

[REDACTED]
[REDACTED]
[REDACTED]

From: [Caelus Airspace](#)
To: [REDACTED]
Bcc: [REDACTED]
Subject: Airspace Change Proposal Engagement re Project CAELUS2 UAV (drone) flights
Date: 18 September 2023 10:30:24
Attachments: [N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear [REDACTED],

You are receiving this email because you were previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with them temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route in question has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

Given that your farm strip is located on the edge of one of the TDA segments (within that segment) we are keen to make sure that we come up with a robust plan for strategic and tactical deconfliction or to put it simply – we are keen to ensure that you or your friends are able to operate in/out of the strip safely without any risks. That will require coordination and communication, but we are certain we have a feasible solution that will work. One of our member would be happy to meet you in person and discuss our proposed solution, understand your operations more closely and see if there is anything else we can do to come up with an agreement acceptable for everyone.

In the meantime, we include our latest revision of the proposal as a PDF for your reference, but please rest assured that we will explain all the nuances of it as well when we get a chance to speak. Could you please let us know if you have any availability in the near future and we will be happy to arrange the meeting? It would be extremely helpful if we could get a chance to speak no later than 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: [Caelus Airspace](#)
To: [REDACTED]
Bcc: [REDACTED]
Subject: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal (Mayfield Farm)
Date: 03 July 2023 15:16:30

Dear [REDACTED]

Thank you very much for taking time to review the information and for your kind response. I have just tried calling you on the number provided, but unfortunately had no response.

Please kindly call me back or if possible – even better if we could arrange a teams/zoom or any other platform call online as that would allow me to share screen and better articulate some of our ideas. If you prefer normal phone – that’s still no problem at all. I should be able to explain the arrangement we have in place, which should ensure that safety is not compromised and convenience/freedom of your operations are not affected.

Looking forward to speaking to you.

Best wishes,
Alex

From: [REDACTED]
Date: Monday, 3 July 2023 at 13:59
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Subject: Re: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal

Dear Alex ,

I fly my Eurostar from my farm strip at mayfield farm Stevenston, I note that the route the drones will be taking is directly over my farm strip.

I strongly object to these proposals, this corridor is a busy route for light aviation heading north west or to the islands , a lot of these aviators do not talk to air traffic which is perfectly legal, I have friends who regularly fly into my strip ,this is very concerning as we have no chance to see these drones when flying .

I look forward to hearing from you , you can contact me on [REDACTED]

Regards ,

[REDACTED]

Sent from my iPad

On 30 Jun 2023, at 11:37, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear Stakeholder,

You are receiving this email because you were previously engaged regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal [ACP-2022-103](#) planned as part of CAELUS2 Future Flight Challenge project. The flight route this pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our [original proposal](#) based on feedback received over the past weeks. Changes mostly relate to location of the Ayr–Crosshouse route, TDA segmentation, AMSL ceiling of the TDA segments and implementing weather restrictions to increase the airspace available to support the safe transit of all airspace users above the TDA.

We would really appreciate if you could review the revised key aspects of the proposed operations described in this pack and get back to us by **Wednesday July 5th 2023** with any final thoughts and comments on the proposal. Please respond in the original thread you already have with caelus2airspace@traxinternational.co.uk rather than to this email. All information will be also regularly updated on the UK CAA [portal](#).

Kindly note, that further engagement activities will be undertaken to formalise the procedures, so that airspace users that might require access to the TDA will be able to get it quickly and efficiently. Most such procedures, however, will be covered by a letter of agreement between CAELUS2 and Prestwick Airport.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

From: 
To: [Caelus Airspace](#)
Subject: Letter sent to Mayfield Farm
Date: 28 June 2023 11:38:49

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PostCode/Zip Code: KA204AQ

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receipt as it is your Proof Of Posting.

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Conditions.

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We have been advised that G-CGWE aircraft occasionally operates in the vicinity of Prestwick Airport, most likely from Mayfield Farm. We therefore located your details from the UK CAA G-INFO website as we would like to invite you to participate in aviation stakeholder engagement with respect to Project CAELUS2.

We are reaching as the routes planned for the BVLOS RPAS flights (drone flights and associated temporary danger areas) as part of CAELUS2 Future Flight Challenge project route in the vicinity of Mayfield Farm.

The flight routes considered have two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital and b) University Hospital Crosshouse with University Hospital Ayr. To enable such flights under current regulatory framework, we have to establish temporary danger areas. We would like to ensure that in our progression we make suitable accommodations for the airspace users, so that they could continue to safely operate with minimal restrictions.

You can review our proposal by downloading a PDF with the following link: <https://urlis.net/vcwe990q>; However, I have to note that we are currently in the process of making adjustments based on feedback received so far (mostly from General Aviation users), which will ensure that suitable arrangements are in place to enable other airspace users to continue operate safely in the area.

Therefore, it would be most efficient if you could kindly reach out to us by email to caelus2airspace@traxinternational.co.uk or by phone number 07564172993. This way it would be possible for us to arrange a dedicated engagement session for you and ensure that you are happy with the latest proposal and arrangements in place.

If possible, we kindly ask you to make contact with us using the details above by 26th of June.

Thank you very much for your time.

Sincerely yours,

Alex
On behalf of CAELUS2 project.

To:



Mayfield Farm
Mayfield Road
Strensley



Kind regards,



From: Caelus Airspace
To: [REDACTED]
Subject: Mayfield Farm GA operations and engagement with respect to CAELUS2 BVL Drone Project
Date: 28 June 2023 11:36:54

Dear [REDACTED]

Hope both of you are doing well! [REDACTED] thank you very much for continuing to be so helpful and kind – really appreciate the contact details for William. In fact, we attempted to send him a letter in post based on the G-INFO address, but surely an email will work quicker.

Dear [REDACTED]

Apologies for not reaching out to you earlier, but it took us quite some time to learn about your operations and then to locate suitable contact details.

As you might be aware from Ross or from our letter – we are essentially a drone project that intend to operate between Ayr, Arran and Crosshouse hospitals. Given those are significant distances – that would be something called BVLOS (beyond visual line of sight) operations and under current regulation require establishing segregated airspace (Temporary Danger Area). You can find more information on that on the Airspace Change Portal (<https://airspacechange.caa.co.uk/PublicProposalArea?pID=528>). As we have been running the engagement for some time already – we made notes of certain requirements and made adjustments to our proposals, which we are currently finalising in written format.

On the one hand – operations from your farm strip could be impacted because of how close it is to the proposed TDA. On the other hand, it looks like that in the worst case scenario it is likely to be no more than 5-7 minutes delay. As we should be able to share information on our operations in advance – it is very likely we can reach an agreement, so that no actual delay would occur.

All in all, would you be so kind to advise us of your earliest availability for a ~30-40 minutes online call? That will be the quickest and most efficient way for us to talk through the latest proposal (which has important adjustments compared to what is currently published on the CAA portal) and answer any questions or concerns that you might have.

Best wishes,
Alex

From: [REDACTED]
To: [Caelus Airspace](mailto:caelus2airspace@traxinternational.co.uk)
Subject: Re: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal
Date: 03 July 2023 13:59:45
Attachments: [N2 REVISED Proposal v2.0.pdf](#)

Dear [REDACTED]

I fly my Eurostar from my farm strip at mayfield farm Stevenston, I note that the route the drones will be taking is directly over my farm strip.

I strongly object to these proposals, this corridor is a busy route for light aviation heading north west or to the islands , a lot of these aviators do not talk to air traffic which is perfectly legal, I have friends who regularly fly into my strip ,this is very concerning as we have no chance to see these drones when flying .

I look forward to hearing from you , you can contact me on [REDACTED]

Re ards ,

[REDACTED]

Sent from my iPad

On 30 Jun 2023, at 11:37, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear Stakeholder,

You are receiving this email because you were previously engaged regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal [ACP-2022-103](#) planned as part of CAELUS2 Future Flight Challenge project. The flight route this pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our [original proposal](#) based on feedback received over the past weeks. Changes mostly relate to location of the Ayr–Crosshouse route, TDA segmentation, AMSL ceiling of the TDA segments and implementing weather restrictions to increase the airspace available to support the safe transit of all airspace users above the TDA.

We would really appreciate if you could review the revised key aspects of the proposed operations described in this pack and get back to us by **Wednesday July 5th 2023** with any final thoughts and comments on the proposal. Please respond in the original thread you already have with caelus2airspace@traxinternational.co.uk rather than to this email. All information will be also regularly updated on the UK CAA [portal](#).

Kindly note, that further engagement activities will be undertaken to formalise the procedures, so that airspace users that might require access to the TDA will be able to get it quickly and efficiently. Most such procedures, however,

will be covered by a letter of agreement between CAELUS2 and Prestwick Airport.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

From: [Caelus Airspace](#)
To: [REDACTED]
Bcc: [REDACTED]
Subject: Re: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal (Mayfield Farm)
Date: 03 July 2023 17:21:28

Dear [REDACTED]

Thank you very much for calling me back just now. I understand that you do have concerns about ability to see the drone, busy traffic in the area and ability for you and your friends to safely arrive and depart to/from Mayfield Farm Strip. As agreed, I would like to summarise a few key points of our proposal, which hopefully will be able reassure you about our proposal:

1. We will be applying for a temporary segregated airspace, which means it will exist only for 4 weeks of our flying. The temporary segregated airspace will only be active when the drone is flying and this will be notified by NOTAM.
2. Segregated airspace is required because under today legislation that is the only available mechanism to ensure safe separation from drones i.e. conventional aircraft can not fly in the same volume of airspace.
3. We will notify pilots about the establishment of the airspace i.e. through NOTAM with at least 24h notice and through AIC as per publication schedule.
4. Ultimately, pilots of conventional aircraft will have to remain clear of the TDA when active, which hopefully will not be an issue because most of the TDA has ceiling of 700ft AMSL and after speaking to some local pilots (e.g. Ross that you know) – it was discussed that by committing to fly the drone only when cloud base is at least 1500ft – there should be enough airspace for pilots to fly above the TDA and remain safely in clear VFR conditions. So, even if somebody does not have a radio – they still should be able to operate in the class G corridor that you referred to.
5. We are discussing provision of Danger Area Crossing Service with Prestwick, which means that aircraft that do have a radio – will be able to access cold segments of the TDA if required. Although I would note that it is not typical for an aircraft to operate below 700 feet.

All in all, when it comes to most aircraft transiting the airspace – we expect it to be of no issue because they will be able to fly over the segregated airspace and not be impacted by our operations. If an aircraft has a radio – it might be possible to make use of DACS service, which we are aiming to arrange with Prestwick.

When it comes to operations from Mayfield farm itself – it is a bit trickier because as you mentioned – the strip is inside the proposed area, however, we still hope there is a workable solution.

If you look at the map within the PDF you received – you will see that the farm is closer to the Northern edge of so-called A2 segment. That segment is about 7.5NM long and with the cruise speed of the drone of 66 KIAS – the Drone will only be in that segment between 5 and 10 minutes depending on the wind.

What that means is that just before starting up for departure from the farm – you will be able to call a phone number of the Remote Pilot of the drone, who will either:

- Delay departure of the drone if not yet flying and wait for you to take off
- Initiate a holding pattern in one of the other TDA segments and not pass through the A2 segment until you departed and are clear of it
- Return to the point of departure of the drone without crossing the A2 segment
- Ask you to hold off your departure for at most 10-15 minutes in order to let the drone fly past the A2 segment.

When it comes to arrival back to the farm – you should be able to obtain information about hot/cold segments of the TDA through Prestwick as we are currently working with them on arranging for Danger Area crossing service. Assuming you are able to initiate the radio call in advance – then there also should be no delay to arrival back to the farm.

The only area of concerns I see is if you intend to continuously operate e.g. doing circuits from the farm. However, if you advise us of such intentions 48 hours in advance – we will do our best to deconflict and come to an agreement about scheduling operations. This may also be possible on the day and we would do our best to accommodate such requests.

We would be happy to chat further tomorrow once you have had time to read the above if you have further questions.

Best wishes,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Monday, 3 July 2023 at 15:16

To: [REDACTED]

Subject: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal (Mayfield Farm)

Dear [REDACTED]

Thank you very much for taking time to review the information and for your kind response. I have just tried calling you on the number provided, but unfortunately had no response.

Please kindly call me back or if possible – even better if we could arrange a teams/zoom or any other platform call online as that would allow me to share screen and better articulate some of our ideas. If you prefer normal phone – that's still no problem at all. I should be able to explain the arrangement we have in place, which should ensure that safety is not compromised and convenience/freedom of your operations are not affected.

Looking forward to speaking to you.

Best wishes,
Alex

From: [REDACTED]

Date: Monday, 3 July 2023 at 13:59

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Subject: Re: CAELU2 UPDATE: Revised Ayrshire & Arran Proposal

Dear [REDACTED]

I fly my Eurostar from my farm strip at mayfield farm Stevenston, I note that the route the drones will be taking is directly over my farm strip.

I strongly object to these proposals, this corridor is a busy route for light aviation heading north west or to the islands , a lot of these aviators do not talk to air traffic which is perfectly legal, I have friends who regularly fly into my strip ,this is very concerning as we have no chance to see these drones when flying .

I look forward to hearing from you , you can contact me on [REDACTED]

Regards ,

[REDACTED]

Sent from my iPad

On 30 Jun 2023, at 11:37, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear Stakeholder,

You are receiving this email because you were previously engaged regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal [ACP-2022-103](#) planned as part of CAELUS2 Future Flight Challenge project. The flight route this pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our [original proposal](#) based on feedback received over the past weeks. Changes mostly relate to location of the Ayr–Crosshouse route, TDA segmentation, AMSL ceiling of the TDA segments and implementing weather restrictions to increase the airspace available to support the safe transit of all airspace users above the TDA.

We would really appreciate if you could review the revised key aspects of the proposed operations described in this pack and get back to us by **Wednesday July 5th 2023** with any final thoughts and comments on the proposal. Please respond in the original thread you already have with caelus2airspace@traxinternational.co.uk rather than to this email. All information will be also regularly updated on the UK CAA [portal](#).

Kindly note, that further engagement activities will be undertaken to formalise the procedures, so that airspace users that might require access to the TDA will be able to get it quickly and efficiently. Most such procedures, however,

will be covered by a letter of agreement between CAELUS2 and Prestwick Airport.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

From: [REDACTED]
To: [Caelus Airspace](#)
Subject: RE: External - Re: External - Prestwick Airport Engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 15 June 2023 15:23:20

Alex,

Details of the owner of [REDACTED] obtained from the CAA G-INFO website, are as follows:-

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

I've attached a jpg of the location.
Right on the edge of the proposed TDA route towards Arran.
Not sure if the airstrip is still active or not.

Rgds,

[REDACTED]

From: [REDACTED]
Sent: Thursday, June 15, 2023 10:37 AM
To: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
Subject: External - Re: External - Prestwick Airport Engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]
[REDACTED]

Thank you very much for your time on Tuesday to discuss our ACP-2022-103 proposal. We held a session, where the first 1:20 was mostly concentrated on Prestwick concerns and suggestions of the proposal, whereas the last 40 minutes were dedicated to Bristow only. Below is the summary of the key things noted by CAELUS2.

Re Prestwick:

1. There are issues due to close proximity of TDA C to the ATZ.
2. Altitude of 900 ft AMSL is an issue both for circuit traffic and some of the arriving/departing military operations.
3. Requirement of sterilising airspace and increased workload is a potential issue.
4. Routing further away towards the water is preferred for TDA C and we managed to do a quick draft as per image attached, which will be revised by Skyports ops team [REDACTED] and we will provide more accurate version soon.
5. Given proximity to the airspace – Prestwick most likely need to be the controlling authority for the TDA.
6. Provision of DACS is something that Prestwick would consider, but might need further support to organise.
7. Additional Segmentation of the TDA would be helpful to assist traffic with crossings, so the additional segmentations also discussed with some of the local airspace users are shown on the attached draft.
8. Use of VHF by the RP could further simplify communications and make it possible to relay any relevant traffic information quicker.
9. Prestwick do not see issues for the Radio Failure procedures or SVFR clearances, especially if CAELUS2 proposal includes weather limit for the operations.

So, ultimately the next step would be for us to provide a detailed revised proposal as soon as we get any additional feedback from other organisations. Among questions that we would like to ask based on interactions we had with other stakeholders:

1. Any chance you might have contacts for the farm strip owner/user located around the Northern corner of the CTR.
2. Long shot, but could it be considered for the Remote Pilot to be placed in the same room as ATCO of the relevant frequency? That would be the quickest way for the RP to get information on any emergency services the drone needs to get away from and was mentioned on call with Bristow.

That would normally be 1 person with a laptop. S/he would require a seating space, ability to connect to internet or use own mobile hotspot and be able to do some minimal talking to the drone operator at the take off place (not on VHF) to ensure all relevant checks were completed.

We fully appreciate it is potentially a big ask and we have to be clear that it is not a critical requirement for us as the RP can be placed somewhere else in a control van. Nevertheless, decided to ask the question in case you also see benefits of such an arrangement and it is not too troublesome?

Thank you very much once again for your time. Please kindly advise if there are any issues with the summary above?

Summary of the conversation with Bristow will be sent separately.

Best wishes,
Alex

From: [REDACTED]

Date: Wednesday, 24 May 2023 at 10:04

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

Subject: Re: External - Prestwick Airport Engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi [REDACTED]

Yes absolutely, happy for anybody from your side to attend. At the moment it looks like I have no responses on the Doodle poll though. Would it be possible please for Prestwick and CAELUS colleagues to fill it in today as I will be away for next few days and would probably be most efficient if I manage to put something in the calendar tonight.

[REDACTED]

Best wishes,
Alex

From: [REDACTED]

Date: Wednesday, 24 May 2023 at 09:43

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

[REDACTED]

Subject: RE: External - Prestwick Airport Engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

[REDACTED]

Can I ask you to extend an invitation to [REDACTED] responsible for business development and [REDACTED] our commercial director.

[REDACTED] as expressed some concern about the potential impact on some of our military ops and you may be able to offer some assurance on that front.

Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Tuesday, May 23, 2023 1:21 PM

To: [REDACTED]

Subject: External - Prestwick Airport Engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Some people who received this message don't often get email from caelus2airspace@traxinternational.co.uk.
[Learn why this is important](#)

Dear [REDACTED]

I hope this email finds you well. My name is Alex and I represent the Future Flight Challenge Project CAELUS2*. The purpose of this email is to start an official engagement as per CAP1616 process with Prestwick Airport as one of our proposals for BVLOS RPAS flight is in Ayrshire & Arran and requires segregated airspace that will be in immediate proximity of Prestwick and even cross the CTR. Please see the attached PDF for details.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us with any immediate questions/requests.

Given the obvious potential impact on Prestwick from our proposal, we are keen to arrange an online briefing session with you. I understand that some dates were already proposed to the CAELUS project director [REDACTED]th, but I would like to kindly ask to fill in the [REDACTED] to that all relevant individuals (including Skyports and NATS from our side) could attend.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: AOPA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 24 May 2023 19:26:34
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby GA users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

PS

You might have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this Dropbox link

(https://www.dropbox.com/sh/enq9x7a6yz6w2zk/AACHQ9TU69_vJAD5cZg4oEja?dl=0) by 1st week of June and/or you receive a personal email response.

From: [REDACTED]
To: [REDACTED]
Subject: CAELUS2 ACP
Date: 12 June 2023 12:51:54
Attachments: [image001.png](#)

Thank you for your recent email. The purpose of TRA is to provide a “safe” environment for the testing of UA operations. Most GA operators will be avoiding accessing the airspace and may result in GA operations having less direct routes and therefore increasing fuel burn and costs. Safety is maintained through restricting access to manned aviation. Once the period of the TRA is finished what is the proposed solution ? TMZ? And if this is the case then we will not know how the safety of the airspace is maintained. I see nothing in the proposal about managing the integration of manned and unmanned aircraft. EC as you mention is a tool form improving situational awareness not collision avoidance. Whilst I am sure the NHS will want to see this as saving lives and lowering costs I would like to understand the business case , how many UM flights are predicted per day / week against the inconvenience to other airspace users. It not clear how the airspace will be managed in a way the allows maximum access for all users in a safe an integrated way.

Kind regards



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From: 
To: 
Subject: Re: CAELUS2 ACP
Date: 16 June 2023 12:47:23
Attachments: [image001.png](#)

Dear 

Thank you very much for your kind active participation in the pre-engagement briefing session and your further comments sent to us over email below.

First of all, let me assure you that we have been engaging with local GA operators and received a lot of useful feedback on our proposal. It has been discussed and adaptations were made to ensure our finalised submission to the CAA accounts for the feedback received. We are yet to finalise all key details, but are optimistic that the adaptations made are satisfactory and not cause any unnecessary complications for local users. In short – we were able to keep our segregated airspace proposal low enough to allow for safe overflight by most users. We are also potentially looking at limiting weather conditions in which we operate to ensure there is sufficient VFR gap between TDA and cloud base. Last, but not least, as mentioned in the engagement materials – we had initial positive response from Prestwick re providing DACS service. In short – we are confident that adaptations are in place to ensure safe GA operations can continue.

Secondly, let me clarify that the proposal is for a TDA only that could be in place during 4 consecutive weeks only during hours of activation as per schedule proposed in the engagement pack, which in fact, only gradually will increase in duration. TMZ or TRA proposals are not being considered.

The CAA BVLOS Sandbox project for TRAs has been launched independently from our project to assess and validate the safe integration concepts for crewed and uncrewed aircraft. It is our understanding that the conclusion of the project may generate prescribed drone separation rules, DAA requirements, and the identification of suitable EC components to enable the safe integration of GA. We believe the outcome of the Sandbox project may predicate the next steps, but that is a matter for the CAA.

The Caelus 2 flight trials within the TDA construct enables the exploration and development of suitable drone flight rules and what capacity of drone flights the rules will support. The TDA facilitates the safe volume of airspace to test and validate those rules. The test creates a mimic of integrated airspace within a TDA to gather evidence towards removing the TDA for full operational deployment. The use of TDAs is to ensure safety of airspace users, both within and outside the TDAs during trial flights.

Finally, to address your last question. We were advised by local GA users that they estimate up to 20 movements per day in the class G corridor between Glasgow and Prestwick controlled airspace. It should be noted that due to mitigations described earlier – no inconvenience or deviations are expected by the GA pilots. As for the UAV flights, we expect to utilise the airspace during activations with ~2 flights per hour on average. We will be deactivating relevant TDAs if weather or other factors will prevent us from flying. Since such notifications do not take immediate effect, there also will be an operational phone number available as well as DACS to advise on the TDA status.

Please let me know if you have any remaining concerns or happy with the comments received? We welcome AOPA's further involvement and support in helping us develop suitable drone flight rules and are available to address any further concerns.

Best wishes,



From: [REDACTED]

Date: Monday, 12 June 2023 at 12:51

To: C [REDACTED]

Subject: CAELUS2 ACP

Thank you for your recent email. The purpose of TRA is to provide a “safe” environment for the testing of UA operations. Most GA operators will be avoiding accessing the airspace and may result in GA operations having less direct routes and therefore increasing fuel burn and costs. Safety is maintained through restricting access to manned aviation. Once the period of the TRA is finished what is the proposed solution ? TMZ? And if this is the case then we will not know how the safety of the airspace is maintained. I see nothing in the proposal about managing the integration of manned and unmanned aircraft. EC as you mention is a tool form improving situational awareness not collision avoidance.

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Kind regards

[REDACTED]



[REDACTED]

[REDACTED]



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From: 
To: 
Subject: Re: CAELUS2 ACP
Date: 18 September 2023 11:55:44
Attachments: [image001.png](#)
[N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear 

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,



From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Friday, 16 June 2023 at 12:47

To: [REDACTED]

Subject: Re: CAELUS2 ACP

Dear [REDACTED]

Thank you very much for your kind active participation in the pre-engagement briefing session and your further comments sent to us over email below.

First of all, let me assure you that we have been engaging with local GA operators and received a lot of useful feedback on our proposal. It has been discussed and adaptations were made to ensure our finalised submission to the CAA accounts for the feedback received. We are yet to finalise all key details, but are optimistic that the adaptations made are satisfactory and not cause any unnecessary complications for local users. In short – we were able to keep our segregated airspace proposal low enough to allow for safe overflight by most users. We are also potentially looking at limiting weather conditions in which we operate to ensure there is sufficient VFR gap between TDA and cloud base. Last, but not least, as mentioned in the engagement materials – we had initial positive response from Prestwick re providing DACS service. In short – we are confident that adaptations are in place to ensure safe GA operations can continue.

Secondly, let me clarify that the proposal is for a TDA only that could be in place during 4 consecutive weeks only during hours of activation as per schedule proposed in the engagement pack, which in fact, only gradually will increase in duration. TMZ or TRA proposals are not being considered.

The CAA BVLOS Sandbox project for TRAs has been launched independently from our project to assess and validate the safe integration concepts for crewed and uncrewed aircraft. It is our understanding that the conclusion of the project may generate prescribed drone separation rules, DAA requirements, and the identification of suitable EC components to enable the safe integration of GA. We believe the outcome of the Sandbox project may predicate the next steps, but that is a matter for the CAA.

The Caelus 2 flight trials within the TDA construct enables the exploration and development of suitable drone flight rules and what capacity of drone flights the rules will support. The TDA facilitates the safe volume of airspace to test and validate those rules. The test creates a mimic of integrated airspace within a TDA to gather evidence towards removing the TDA for full operational deployment. The use of TDAs is to ensure safety of airspace users, both within and outside the TDAs during trial flights.

Finally, to address your last question. We were advised by local GA users that they estimate up to 20 movements per day in the class G corridor between Glasgow and Prestwick controlled airspace. It should be noted that due to mitigations described earlier – no inconvenience or deviations are expected by the GA pilots. As for the UAV flights, we expect to utilise the airspace during activations with ~2 flights per hour on average. We will be deactivating relevant TDAs if weather or other factors will prevent us from flying. Since such notifications do not take immediate effect, there also will be an operational phone number available as well as DACS to advise on the TDA status.

Please let me know if you have any remaining concerns or happy with the comments received? We welcome AOPA's further involvement and support in helping us develop suitable drone flight rules and are available to address any further concerns.

Best wishes,
Alex

From: [REDACTED]

Date: Monday, 12 June 2023 at 12:51

To: [REDACTED]

Subject: CAELUS2 ACP

Thank you for your recent email. The purpose of TRA is to provide a “safe” environment for the testing of UA operations. Most GA operators will be avoiding accessing the airspace and may result in GA operations having less direct routes and therefore increasing fuel burn and costs. Safety is maintained through restricting access to manned aviation. Once the period of the TRA is finished what is the proposed solution ? TMZ? And if this is the case then we will not know how the safety of the airspace is maintained. I see nothing in the proposal about managing the integration of manned and unmanned aircraft. EC as you mention is a tool form improving situational awareness not collision avoidance.

Whilst I am sure the NHS will want to see this as saving lives and lowering costs I would like to understand the business case , how many UM flights are predicted per day / week against the inconvenience to other airspace users. It not clear how the airspace will be managed in a way the allows maximum access for all users in a safe an integrated way.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED]



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From: [REDACTED]
To: [REDACTED]
Subject: Re: CAELUS2 ACP
Date: 27 September 2023 10:12:18
Attachments: [image001.png](#)

Hello,

We would like to kindly follow up re our request for engagement below. Please note the deadline of this Sunday October 1st if you would like to submit a response.

Best wishes,



From: [REDACTED]
Date: Monday, 18 September 2023 at 11:55
To: [REDACTED]
Subject: Re: CAELUS2 ACP

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide

DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Friday, 16 June 2023 at 12:47

To: [REDACTED]

Subject: Re: CAELUS2 ACP

Dear [REDACTED]

Thank you very much for your kind active participation in the pre-engagement briefing session and your further comments sent to us over email below.

First of all, let me assure you that we have been engaging with local GA operators and received a lot of useful feedback on our proposal. It has been discussed and adaptations were made to ensure our finalised submission to the CAA accounts for the feedback received. We are yet to finalise all key details, but are optimistic that the adaptations made are satisfactory and not cause any unnecessary complications for local users. In short – we were able to keep our segregated airspace proposal low enough to allow for safe overflight by most users. We are also potentially looking at limiting weather conditions in which we operate to ensure there is sufficient VFR gap between TDA and cloud base. Last, but not least, as mentioned in the engagement materials – we had initial positive response from Prestwick re providing DACS service. In short – we are confident that adaptations are in place to ensure safe GA operations can continue.

Secondly, let me clarify that the proposal is for a TDA only that could be in place during 4 consecutive weeks only during hours of activation as per schedule proposed in the engagement pack, which in fact, only gradually will increase in duration. TMZ or TRA proposals are not being considered.

The CAA BVLOS Sandbox project for TRAs has been launched independently from our project to assess and validate the safe integration concepts for crewed and uncrewed aircraft. It is our understanding that the conclusion of the project may generate prescribed drone separation rules, DAA requirements, and the identification of suitable EC components to enable the safe integration of GA. We believe the outcome of the Sandbox project may predicate the next steps, but that is a matter for the CAA.

The Caelus 2 flight trials within the TDA construct enables the exploration and development of suitable drone flight rules and what capacity of drone flights the rules will support. The TDA facilitates the safe volume of airspace to test and validate those rules. The test creates a mimic of integrated airspace within a TDA to gather evidence towards removing the TDA for full operational deployment. The use of TDAs is to ensure safety of airspace users, both within and outside the TDAs during trial flights.

Finally, to address your last question. We were advised by local GA users that they estimate up to 20

movements per day in the class G corridor between Glasgow and Prestwick controlled airspace. It should be noted that due to mitigations described earlier – no inconvenience or deviations are expected by the GA pilots. As for the UAV flights, we expect to utilise the airspace during activations with ~2 flights per hour on average. We will be deactivating relevant TDAs if weather or other factors will prevent us from flying. Since such notifications do not take immediate effect, there also will be an operational phone number available as well as DACS to advise on the TDA status.

Please let me know if you have any remaining concerns or happy with the comments received? We welcome AOPA's further involvement and support in helping us develop suitable drone flight rules and are available to address any further concerns.

Best wishes,



From: [REDACTED]

Date: Monday, 12 June 2023 at 12:51

To: [REDACTED]

Subject: CAELUS2 ACP

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From: 
To: 
Bcc: 
Subject: Re: CAELUS2 ACP
Date: 16 June 2023 12:47:21
Attachments: [image001.png](#)

Dear 

Thank you very much for your kind active participation in the pre-engagement briefing session and your further comments sent to us over email below.

First of all, let me assure you that we have been engaging with local GA operators and received a lot of useful feedback on our proposal. It has been discussed and adaptations were made to ensure our finalised submission to the CAA accounts for the feedback received. We are yet to finalise all key details, but are optimistic that the adaptations made are satisfactory and not cause any unnecessary complications for local users. In short – we were able to keep our segregated airspace proposal low enough to allow for safe overflight by most users. We are also potentially looking at limiting weather conditions in which we operate to ensure there is sufficient VFR gap between TDA and cloud base. Last, but not least, as mentioned in the engagement materials – we had initial positive response from Prestwick re providing DACS service. In short – we are confident that adaptations are in place to ensure safe GA operations can continue.

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Best wishes,



From: [REDACTED]

Date: Monday, 12 June 2023 at 12:51

To: [REDACTED]

Subject: CAELUS2 ACP

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Kind regards

[REDACTED]

[REDACTED]

[REDACTED]



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From: [REDACTED]
To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: All CAELUS2 BVLOS RPAS proposals
Date: 03 October 2023 21:42:26

Hi Alex,

Thank you for the prompt response.

- We discussed the 1500 ft limitation ...

Whilst your comments are pertinent to the Ayrshire and Arran proposal I have allowed a degree of confusion to creep in here by having the email still titled as "Ayrshire and Arran when I have been treating it as covering all the CAELUS ACPs – I have retitled the email!

- Please note that all TDA information is in ft AMSL, so 900 ft AMSL is the highest segment Surely not on the Aberdeen <> Elgin <> Inverness proposal or the Edinburgh <> Borders Hospital proposal where the ground to be traversed by the TDA is around or higher than this number?

Regards

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Tuesday, October 3, 2023 6:31 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you for sharing helpful and interesting resources.

1. I have looked at METAR history for past 3 years in Jan-Feb and depending on various ways of looking at it I got 20-30% reports for which weather was outside of limits. It varies slightly if we look at whole 24h period or if only at 6am-6pm.
Monitoring payload parameters is also part of the project objectives, but I do not have all the details to comment further.
2. We discussed the 1500 ft limitation with a number of local users and they shared positive feedback, although expressed still interest in DACS in case unexpected weather will force them to descend. Please note that all TDA information is in ft AMSL, so 900 ft AMSL is the highest segment, which allows for at least of 600 ft of room for manoeuvring. It is 800 ft above most segments, which are 700 ft AMSL.
3. Thank you very much for pointing out the concern about "goose season". We will explore with my colleagues any mitigation options and ask them to ensure it is included in

relevant risk assessments.

Please feel free to reach out to us anytime as always.

Best wishes,

Alex

From: [REDACTED]
Date: Sunday, 1 October 2023 at 15:22
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi [REDACTED]

Thanks for the responses.

- measuring the weather is not objective of the project

W.r.t. weather the comment isn't about measuring the weather it is to do with how many times and for how long the weather will prevent RPAS operations both in the trial and for real world operations.

Is CAELUS aware of the weather elements of this work: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0264669#sec003> ?

- the weather limitations of 1500 ft cloud base, so we expect most aircraft to be able to cross above the TDA safely VFR.

With a 400ft TDA over land that is at 400+ metres (the route round Huntly as shown on the CAP1616 web portal) the top of the TDA is already in cloud with a 1500ft base. Now if the cloudbase limitation was going to be top of TDA plus say 1000ft then that would be a different thing to assess.

One additional thing that is very pertinent to lower level flying in the Moray Firth autumn to spring is what is locally known as the "Goose Season". This is a very real threat to flying that caused the crash of a four engine Nimrod aircraft (<https://www.baaa-acro.com/crash/crash-bae-nimrod-imr2-raf-kinloss-2-killed>). Prior to a new radar the RAF limited flying each day to reduce the risk

(<https://www.robinradar.com/press/news/lossiemouth-becomes-first-raf-base-to-trial-bird-radar>).

It is the return of the formations that reminded me of the issue and that unless there is someone on your team who has experienced it you will not know of this very local phenomenon. There are literally thousands of birds flying at sub-2,000ft in large V formations.

At take-off:

<https://external-content.duckduckgo.com/iu/?u=https%3A%2F%2Ftse4.mm.bing.net%2Fth%3Fid%3DOIP.Xu6gjUWR5l6ifpHp36lG1wHaDm%26pid%3DApi&f=1&ipt=2d3982993c852e37d4996bb4bb5cbab4e43c16c2a7226a595bdf600bf988638e&ipo=images>

Break into many formations like this:

<https://external-content.duckduckgo.com/iu/?u=https%3A%2F%2Ftse3.mm.bing.net%2Fth%3Fid%3DOIP.EK6QV8K6GT2yR2RtqJ-eTQHaE8%26pid%3DApi&f=1&ipt=d67944ccbbb7812cb7f616c916e3961dce0ed610a2af6584f68d82711e32acfe&ipo=images>

Regards

[REDACTED]

[REDACTED]

Email: [REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Wednesday, September 27, 2023 9:37 AM

To: [REDACTED]

[REDACTED]

Subject: Re: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

The date on the slides is when they were created and submitted for internal approval. Appreciate that a study from scratch of relevant materials would be quite time consuming, yet I have to note that the key change/question is re period of operations. But as mentioned previously when we met – we do reach out to your members anyway and are grateful if they simply get a reminder from you to respond.

2) Noted

3) Please excuse me for possibly misunderstanding the question, but measuring the weather is not objective of the project, but obviously will adhere to operational imitations

4) We are working on the DACS and ensuring unrestricted access for emergency services is the primary goal. It is possible that recreational GA requiring crossing will not be given it immediately, but we will do our best to make it as accessible as possible. Once again we would like to remind of the weather limitations of 1500 ft cloud base, so we expect most aircraft to be able to cross above the TDA safely VFR. We can assure you that any aircraft in distress needing access to the TDA will be given highest priority.

5) Only 1 BVLOS rpas will be allowed

Best wishes,

Alex

From: [REDACTED]

Date: Thursday, 21 September 2023 at 14:24

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

Subject: RE: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi [REDACTED]

Thank you for your email and the update.

We offer the following comments/questions:

1. We note that the slides are dated 11Sep2023 but your email was 18Sep2023. With the requested respond by time of 01Oct2023 we have insufficient time to co-ordinate any GAA consolidated response. We will copy this email to all GAA members for them to respond directly to you as they see

fit, but again the short timescale will not help.

2. In general the weather for GA flying is worst in January/February and so that would be our preferred time window, with an added benefit to CAELUS of being able to assess real world weather issues.
3. To what extent is weather a factor that is being measured by the project? We were recently given a presentation from project FORSETI that painted An interesting picture with respect to weather impacts in Scotland.
4. The provision of a DACS is welcome. To fully understand the impacts the devil will be in the detail of how it is to work between the ATS unit, the drone operator, and the manned aircraft calling to request a clearance. At its worst it will be little better than a DAAIS. Please can we be kept informed of what transpires as it happens because with the best will in the world unless potential users are involved it could be sub-standard to what is actually possible?
5. I cannot recall if the number of aircraft that will be airborne simultaneously in the TDAs has been stated, apologies if I have missed it? This detail will enable a basic assessment as to the likelihood of getting a DACS clearance through a TDA.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Sent: Monday, September 18, 2023 2:24 PM

To: [REDACTED]

Subject: RE: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thanks Alex & Lucy

Tom will address and coordinate GAA – happy to be kept in the loop.

Best regards

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: 18 September 2023 12:16

To: [REDACTED]

Subject: Re: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACs).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACs to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 24 May 2023 at 13:17

To: 

Subject: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby GA users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

PS

You might have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this Dropbox link

(https://www.dropbox.com/sh/enq9x7a6yz6w2zk/AACHQ9TU69_vJAD5cZg4oEja?dl=0) by

1st week of June and/or you receive a personal email response.

From: [REDACTED]
To: [REDACTED]
Subject: Re: CAELUS STAKEHOLDER ENGAGEMENTS
Date: 03 October 2023 19:23:02

Dear [REDACTED]

Apologies for the delay. As promised forwarding you the information we received from the CAA. It was not an immediate response from them, but you will be please to hear that the advice received matches what you told us. PLease see below:

'Even if the DAAIS provider was notified that the actual activity within an active DA had paused, was taking place in another part of a DA complex or finished early, it should not be passing this supplementary information on to the pilot.'

Please note re portal updates – materials were not uploaded only for the ACPs where engagement not started yet and materials not finalised.

Best wishes,

[REDACTED]

From: [REDACTED]
Date: Monday, 18 September 2023 at 12:56
To: [REDACTED]
Subject: RE: CAELUS STAKEHOLDER ENGAGEMENTS

Hi [REDACTED]

Thank you for your response.

- Please do let us know if you feel that there is anything specific that you feel is missing [from the CAP1616 portal].

CAELUS TRIAL B - GRAMPIAN REGION (ACP-2022-102) none of the stakeholder engagement documents have been uploaded

CAELUS TRIAL D - LOTHIAN REGION (ACP-2022-104) none of the stakeholder engagement documents have been uploaded

CAELUS TRIAL E - GRAMPIAN SHETLAND (ACP-2022-105) only the Statement of Need document posted back in January 2023

In the interests of transparency and mutual efficiency stakeholder engagement documents should be uploaded as soon as they are available.

- Once we have received further information [from the CAA on DAAIS] we will update you. Thank you, we look forward to that with interest.

- Finally, we would ask that all correspondence, including any attachments, is conducted with language which is respectful and appropriate.

We totally agree and will gladly be called out should we transgress. Equally should a GA participant be less than appropriate we will gladly seek to improve things as far as we are able.

Regards

[REDACTED]




From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Monday, September 18, 2023 10:08 AM

To: GAA Programme Manager <Prog.Man@gaalliance.org.uk>

Subject: Re: CAELUS STAKEHOLDER ENGAGEMENTS

Hi 

Good to hear from you and we acknowledge the receipt and for ease or records will continue communicating from the generic email, so all relevant colleagues could have access.

We have been awaiting confirmation from the CAA with regards to an updated timeline for ACP 2022-103 and we have updated the portal to reflect the revised timelines. ACP 2022-101 is correctly reflected on the CAA ACP Portal also. The timelines for ACP 2022-102, 104 and 105 are being revised and will be submitted to the ACP for review and approval before we submit the amended timelines on the CAA ACP Portal. Please do let us know if you feel that there is anything specific that you feel is missing.

As per our discussion at RAUWG we understand that you normally distribute our information to your members (we reach out to them too), but where possible you will acknowledge receipt of engagement request. For us the RAUWG was a good opportunity to engage with our stakeholders.

We appreciate the generic concerns stated regarding amount and purpose of ACPs. This will be included in the feedback summary for the UK CAA as part of the CAP 1616 process as an additional reminder of the challenge that most likely they are well aware of. However, we have to stress that only a blanket objection to the purpose of a project is not always the healthiest way to progress things. As our Arran route experience have proven – we were able to find a specific solution in that locality that satisfied the GA users operating there. It does not mean that same solution is possible for other ACPs or that there is one at all, but we find it more productive if we can understand the specific airspace users objections for the particular ACP and therefore try to evaluate and mitigate potential impacts.

BMFA is on our list of stakeholders and we do our best to check for any clubs along our routes and contact them where applicable.

As discussed, an enquiry with the UK CAA has been raised on the topic of DAAIS, and we are always trying to provide the greatest flexibility with regards to access to airspace. We have been unable to receive their response to date, we had been hoping to incorporate it within this email, but due to limited resources coinciding with leave still did not receive a clarification. Once we have received further information we will update you. Your concerns are noted and they are discussed when DAAIS is mentioned, yet it absolutely does provide some mitigation that will allow users to become aware of an early cancellation of the TDA NOTAM, which we have undertaken to do so the airspace is released as soon as possible.

We note your comments on the night operations and it provides a mitigation to some operators (gliders etc) but we are also mindful of other airspace users such as SAR and others that might require access to VLL even at night, thus DACS solution remains a priority one whenever possible. Unfortunately, procedural aspects related to setting it up also require additional time and permissions.

Knockomie Inn helipad is currently indicated on SkyDemon VFR chart, but thank you very much for sharing the info.

Finally, we would ask that all correspondence, including any attachments, is conducted with language which is respectful and appropriate.

Best regards,
Alex and Lucy on behalf of CAELUS2

From: [REDACTED]

Date: Friday, 25 August 2023 at 15:01

To: [REDACTED]

[REDACTED]

Subject: CAELUS STAKEHOLDER ENGAGEMENTS

Hi Alex,

Due to the vagaries of email please can you acknowledge receipt of this email.

It was good to see you at the Lossiemouth RAUWG. I hope that it was of use to your team. I always find the RAUWGs fascinating, particularly when you see someone finally grasp that they are not as knowledgeable as they might think about Class G activities.

Three things on the current CAELUS ACP engagements:

1. The CAP1616 ACP web portal is not fully up to date with the stakeholder engagement documents for all the CAELUS ACPs, please can this be corrected and maintained in a timely manner?

2. As discussed, you can be assured that when you communicate with this GAA address that all GAA members are informed. The current membership is shown here <http://gaalliance.org.uk/member-organisations/>

As with all things the GAA is resource limited and cannot respond to all engagements in detail, so it has to prioritise. From what we have seen all the following apply to the CAELUS Class G ACP proposals and can be taken as our initial response to all of them that may subsequently be added to, also the individual GAA members are always free to make their own representations.

With respect to all drone applications that involve segregation the GAA will object in all but the most exceptional of cases as, amongst other things:

- As detailed so far these ACPs are not the way to move things forward towards what has to be full integration
- The GAA is particularly disheartened from the number of ACP proposals that appear to have learnt nothing from the many that have gone before. There is absolutely no need to repeat the imposing of segregated airspace when lessons should have been learnt for

previously imposed segregated airspace ACPs

- The stated need for far too many ACPs are at best ill-defined, particularly as there are considerable sums of public money being spent. Every ACP espousing future benefits should publicly state a series of postulated theories together with quantifiable results that can either prove or disprove that theory. To do other than this is to waste all our scarce resources (ACP sponsor, stakeholders, and the Regulator) and public money.
- Too many ACP sponsors do not appreciate that no-one knows all the activities that take place in Class G airspace. Unfortunately there are some regulators who give false expectations on this matter. Please see the attached presentation that was made to the CAA's RPAS Key Stakeholder Forum on 13Apr2021, particularly slides 6 and 7 for activity indications noting that model aircraft locations are not included in what is already pretty universal UK coverage, outwith controlled airspace and urban areas, from the surface upwards. None of the CAA's subject matter experts questioned any of the presentation's slides then or subsequently.
- Currently there are no mitigations for TDAs that mitigate for all day VFR UK Class G users.
- The espousing of DAAIS as a mitigation is at best ignorant and at worst disingenuous, as a TDA NOTAM'd as active can only be accessed through a DACS, or the NOTAM being cancelled or amended by another NOTAM see slides 9 and 10 of the presentation.
- The giving of a telephone number is again at best ignorant and at worst disingenuous, as a TDA NOTAM'd as active can only be accessed through a DACS, or the NOTAM being cancelled or amended by another NOTAM see slides 9 and 10 of the presentation.
- The one mitigation that works for all GAA members is for the proposed flights to take place during official night whilst remaining outside existing drone FRZs. The further away that the proposed drone flights are away from night the greater the objections will be.

3. I noticed that on the stakeholder list was a helicopter site at Knockomie Hotel, Forres. As part of something else that I do I provide IT support to the owners, Gavin and Penny Ellis. They have told me that due to a housing development they notified the CAA some years ago that this landing site is no longer available. Maybe you could check with the source of the data and appraise them of this?

Regards



From: Caelus Airspace
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 03 October 2023 18:30:35

Dear [REDACTED]

Thank you for sharing helpful and interesting resources.

1. I have looked at METAR history for past 3 years in Jan-Feb and depending on various ways of looking at it I got 20-30% reports for which weather was outside of limits. It varies slightly if we look at whole 24h period or if only at 6am-6pm.
Monitoring payload parameters is also part of the project objectives, but I do not have all the details to comment further.
2. We discussed the 1500 ft limitation with a number of local users and they shared positive feedback, although expressed still interest in DACS in case unexpected weather will force them to descend. Please note that all TDA information is in ft AMSL, so 900 ft AMSL is the highest segment, which allows for at least of 600 ft of room for manoeuvring. It is 800 ft above most segments, which are 700 ft AMSL.
3. Thank you very much for pointing out the concern about "goose season". We will explore with my colleagues any mitigation options and ask them to ensure it is included in relevant risk assessments.

Please feel free to reach out to us anytime as always.

Best wishes,
Alex

From: [REDACTED]
Date: Sunday, 1 October 2023 at 15:22
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Cc: [REDACTED]
Subject: RE: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi [REDACTED]

Thanks for the responses.

- measuring the weather is not objective of the project

W.r.t. weather the comment isn't about measuring the weather it is to do with how many times and for how long the weather will prevent RPAS operations both in the trial and for real world operations. Is CAELUS aware of the weather elements of this work: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0264669#sec003> ?

- the weather limitations of 1500 ft cloud base, so we expect most aircraft to be able to cross above the TDA safely VFR.

With a 400ft TDA over land that is at 400+ metres (the route round Huntly as shown on the CAP1616 web portal) the top of the TDA is already in cloud with a 1500ft base. Now if the cloudbase limitation was going to be top of TDA plus say 1000ft then that would be a different thing to assess.

One additional thing that is very pertinent to lower level flying in the Moray Firth autumn to spring is

what is locally known as the "Goose Season". This is a very real threat to flying that caused the crash of a four engine Nimrod aircraft (<https://www.baaa-acro.com/crash/crash-bae-nimrod-imr2-raf-kinloss-2-killed>). Prior to a new radar the RAF limited flying each day to reduce the risk (<https://www.robinradar.com/press/news/lossiemouth-becomes-first-raf-base-to-trial-bird-radar>). It is the return of the formations that reminded me of the issue and that unless there is someone on your team who has experienced it you will not know of this very local phenomenon. There are literally thousands of birds flying at sub-2,000ft in large V formations.

At take-off:

<https://external-content.duckduckgo.com/iu/?u=https%3A%2F%2Ftse4.mm.bing.net%2Fth%3Fid%3DOIP.Xu6qjUWR5l6ifpHp36lG1wHaDm%26pid%3DApi&f=1&ipt=2d3982993c852e37d4996bb4bb5cbab4e43c16c2a7226a595bdf600bf988638e&ipo=images>

Break into many formations like this:

<https://external-content.duckduckgo.com/iu/?u=https%3A%2F%2Ftse3.mm.bing.net%2Fth%3Fid%3DOIP.EK6QV8K6GT2yR2RtqJ-eTQHaE8%26pid%3DApi&f=1&ipt=d67944ccb7812cb7f616c916e3961dce0ed610a2af6584f68d82711e32acfe&ipo=images>

Regards



From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Wednesday, September 27, 2023 9:37 AM

To: [REDACTED]

Cc: [REDACTED]

Subject: Re: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

The date on the slides is when they were created and submitted for internal approval. Appreciate that a study from scratch of relevant materials would be quite time consuming, yet I have to note that the key change/question is re period of operations. But as mentioned previously when we met – we do reach out to your members anyway and are grateful if they simply get a reminder from you to respond.

2) Noted

3) Please excuse me for possibly misunderstanding the question, but measuring the weather is not objective of the project, but obviously will adhere to operational limitations

4) We are working on the DACS and ensuring unrestricted access for emergency services is the primary goal. It is possible that recreational GA requiring crossing will not be given it immediately, but we will do our best to make it as accessible as possible. Once again we would like to remind of the weather limitations of 1500 ft cloud base, so we expect most aircraft to be able to cross above the TDA safely VFR. We can assure you that any aircraft in distress needing access to the TDA will be given highest priority.

5) Only 1 BVLOS rpas will be allowed

Best wishes,



From: [REDACTED]

Date: Thursday, 21 September 2023 at 14:24

To: [REDACTED]

[REDACTED]

Subject: RE: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hi [REDACTED]

Thank you for your email and the update.

We offer the following comments/questions:

1. We note that the slides are dated 11Sep2023 but your email was 18Sep2023.
With the requested respond by time of 01Oct2023 we have insufficient time to co-ordinate any GAA consolidated response.
We will copy this email to all GAA members for them to respond directly to you as they see fit, but again the short timescale will not help.
2. In general the weather for GA flying is worst in January/February and so that would be our preferred time window, with an added benefit to CAELUS of being able to assess real world weather issues.
3. To what extent is weather a factor that is being measured by the project? We were recently given a presentation from project FORSETI that painted An interesting picture with respect to weather impacts in Scotland.
4. The provision of a DACS is welcome. To fully understand the impacts the devil will be in the detail of how it is to work between the ATS unit, the drone operator, and the manned aircraft calling to request a clearance. At its worst it will be little better than a DAAIS. Please can we be kept informed of what transpires as it happens because with the best will in the world unless potential users are involved it could be sub-standard to what is actually possible?
5. I cannot recall if the number of aircraft that will be airborne simultaneously in the TDAs has been stated, apologies if I have missed it? This detail will enable a basic assessment as to the likelihood of getting a DACS clearance through a TDA.

Regards



[REDACTED]

From: [REDACTED]
Sent: Monday, September 18, 2023 2:24 PM
To: [REDACTED]
Subject: RE: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thanks [REDACTED]

Tom will address and coordinate GAA – happy to be kept in the loop.

Best regards

[REDACTED]

From: [REDACTED]
Sent: 18 September 2023 12:16
To: [REDACTED]
Subject: Re: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but

we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 24 May 2023 at 13:17

To: [REDACTED]
[REDACTED]

Subject: GAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby GA users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

PS

You might have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this Dropbox link

(https://www.dropbox.com/sh/enq9x7a6yz6w2zk/AACHQ9TU69_vJAD5cZg4oEja?dl=0) by

1st week of June and/or you receive a personal email response.

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: BMAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 02 June 2023 18:16:37

Hi all,

For everyone's info. Stair is no longer active.

For Alex, have you Benson at Cumnock on your list?

Very best wishes,

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

On Fri, 2 Jun 2023 at 17:59, Caelus Airspace <caelus2airspace@traxinternational.co.uk> wrote:

Dear Adrian,

Thank you very much for your kind advice previously re finding out an airfield contact. We managed to get through to the owners in the end, which is very good news. I was wondering if yourself or your colleagues might be able to assist re one more site we have been struggling with – Stair Microflight Site.

Somehow despite it being inside the CTR, even Prestwick ATC seemed unaware of it, although it is showing in SkyDemon, but no additional info.

Thanks a lot once again and have a lovely weekend.

Best wishes,

Alex

From: [REDACTED]
Date: Wednesday, 31 May 2023 at 19:19
To: [REDACTED]
Subject: Re: BMAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Dear [REDACTED]

Thank you very much for your kind response and a great idea. I have previously managed to call a nearby caravan site, who suggested I should be looking for Adam Fergusson. We are aware of somebody with same name, but he has retired, so we don't have a suitable contact anymore. I will try to go via the nearby airfield you suggested. Many thanks again.

Best wishes,

[REDACTED]

From: [REDACTED]
Date: Friday, 26 May 2023 at 17:07
To: [REDACTED]
Subject: RE: BMAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Dear Alex,

Regarding your PS message below: I looked it up on SkyDemon, moving map system. But there wasn't any contact. Perhaps Colin could find some local contact. The next nearest airfield I can see on SkyDemon is Castle Kennedy, 26nm S-SW of Kilkerran, which has contacts (website: <http://www.castlekenedvairfield.co.uk/>) so I suspect you could call them to ask about Kilkerran.

Here you go:



Regards

[Redacted]
BMAA Airspace Team

From: [Redacted]
Sent: Wednesday, May 24, 2023 7:04 PM
To: [Redacted]
Subject: RE: BMAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [Redacted]

Thank you for your responses. I can confirm we received a short acknowledgement email from Adrian and a long detailed response from Colin. We will do our best to address the points raised in an email response to start with. However, should we require more details on some aspects or if requested by you we will run a dedicated online session. Thank you very much once again for your time.

Best wishes,
Alex

PS
On a completely different note I wanted to ask if you might have any relevant contacts for Kilkerran airfield? Unfortunately I did not have a lot of luck through Pooleys or online search

From: [Redacted]
Date: Wednesday, 24 May 2023 at 17:48
To: [Redacted]
Subject: RE: BMAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [Redacted]

We have already forwarded this information to the team and I believe our regional Team member, Colin MacKinnon copied above here, has already responded.

Regards
[Redacted]
BMAA Airspace Team member

From: Caclus Airspace <caclus@airspace-taxiinternational.co.uk>
Sent: Wednesday, May 24, 2023 1:32 PM
To: [Redacted]
Subject: BMAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [Redacted]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby GA users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,



On behalf of CAELUS2 FFC Project

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PS

You might have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this Dropbox link (https://www.dropbox.com/s/eng9s7af6z6w2zk/AACHO91U169_vJAD5cZg4E1a?dl=0) by 1st week of June and/or you receive a personal email response.

From: [Caelus Airspace](#)
To: S [REDACTED]
Subject: Re: CAELUS2 Engagement Update re ACP-2022-103
Date: 03 October 2023 19:12:11

Dear [REDACTED]

Lovely to hear from you and hope the weather is nice VFR in Scotland these days. We really appreciate your kind comment provided for Strathaven Airfield.

Best wishes,

[REDACTED]

From: [REDACTED]
Date: Monday, 2 October 2023 at 13:55
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Subject: Re: CAELUS2 Engagement Update re ACP-2022-103

Dear team,

Strathaven Airfield supports the revised proposals and thanks Caelus for engagement.

This response is solely applicable to ACP-2022-103 and the Kilmarnock area.

Very best wishes,

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

On Wed, 27 Sept 2023 at 10:13, Caelus Airspace <caelus2airspace@traxinternational.co.uk> wrote:

Hello,

We would like to kindly follow up re our request for engagement below. Please note the deadline of this Sunday October 1st if you would like to submit a response.

Best wishes,

Alex

From: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Subject: CAELUS2 Engagement Update re ACP-2022-103

Dear [REDACTED]

You are receiving this email because you engaged on behalf of BMAA and Starhaven airfield regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,

Alex and Lucy on behalf of CAELUS

From: [REDACTED]
To: [Caelus Airspace](#)
Subject: Re: Objection to ACP-2022-103
Date: 06 July 2023 08:49:16

Sorry, now found the meeting email. Got back from Skye at midnight, so still a bit woozy!

[REDACTED]

[REDACTED]

[REDACTED]

Leave a review on [TripAdvisor](#) or [Google](#) - 5* is nice!

www.strathavenairfield.co.uk

[REDACTED]

On Thu, 6 Jul 2023 at 08:47, Strathaven Airfield <strathavenairfield@gmail.com> wrote:

Hi Lucy,

How do you want to do this - over the phone or are you setting up an online meeting?

[REDACTED]

[REDACTED]

[REDACTED]

Leave a review on [TripAdvisor](#) or [Google](#) - 5* is nice!

www.strathavenairfield.co.uk

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Directors: Colin MacKinnon (Secretary) and Marta Briongos

On Wed, 5 Jul 2023 at 16:45, Strathaven Airfield <strathavenairfield@gmail.com> wrote:

9am tomorrow.

Sent from my iPhone

On 4 Jul 2023, at 10:28, Caelus Airspace

<caelus2airspace@traxinternational.co.uk> wrote:

Morning [REDACTED]

Not an issue at all, I appreciate your current commitments and logistics. I had scheduled the call for 9am on Thurs 6th and if you could make that call your efforts would be very much appreciated!

If there are particular issues not picked up in our previous response, then please do drop us an email prior so that we can address the issues as best as possible.

Very kind regards,

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Monday, July 3, 2023 5:06 PM
To: [REDACTED]
Subject: Re: Objection to ACP-2022-103

Hi [REDACTED]

Apologies, should have replied earlier. But June/July is our peak time and I have also had to deal with a Scottish Power turbine lighting plan.

I can be free on Thursday, but Friday would be best. With the weather forecast it looks like I may not get away from Skye until Thursday lunchtime (and there is a problem in Torrinn because there is no mobile reception!)

But if you have Thursday in your diary, just let me know when and I can be in Broadford, where there is a signal!

Very best wishes,

XXXX

XXXXXXXXXXXXXXXX

XX

XXXXXXXXXXXXXXXXXXXX

XX
XX
XX

XX

On Wed, 28 Jun 2023 at 08:31, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Morning XXXX

I appreciate the complexities of your diary and would like to thank you again for your active engagement on this ACP considering the same.

If I were to arrange a discussion next Thursday morning (the 6th as you suggest) would this be acceptable? In the meantime, please do let me know if you have any further comments or questions that we can look at in the meantime.

Kind regards,



On behalf of CAELUS 2

From: [REDACTED]
Sent: Tuesday, June 27, 2023 10:27 PM
To: [REDACTED]
Subject: Re: Objection to ACP-2022-103

Hi [REDACTED]

I am afraid my calendar is pretty busy this week - meeting on Thursday with Scottish Power Renewables here at the airfield (lighting on wind turbines and potentially something else), our daughter on Friday (with various trips we won't see each other from more than three months, so I can't put her off!) and then in Skye on Mon-Weds to discuss the future of the airstrips at Broadford and Plockton.

In between that, there is the day job at Strathaven Airfield and updating files for all the other ACPs in Scotland, from Windracers in the very far north to the Firth of Clyde/Irish Sea one.

I think next Thursday, 6th July would be the first available day. (As you can see from this, I am dealing with ACP stuff at 10:30pm to try and keep on top!)


Very best wishes,



Le

www.strathavenairfield.co.uk

On Mon, 26 Jun 2023 at 14:50, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:


Thank you for taking the time to formulate a response to the engagement, and we would welcome further communication on this but in the meantime we will try to address some of your points below.

1. Integration:

Please kindly note that integration with airspace users/aircraft that are not directly involved in the trial is not currently possible. Before such stage could be reached – a trial has to happen and test certain scenarios in a fully controlled environment. Establishing a Temporary Danger Area (TDA) is the solution that would allow us achieve such an environment. Yet, for the safety and convenience of the aircraft not involved in the trial we are undertaking this engagement exercise to ensure we only apply for the smallest feasible segregated airspace (TDA) that would not cause unreasonable inconvenience throughout the limited times of activation.

CAELUS does not intend to request permanent restricted areas such as the ones that are cited within your objection. We would wish to reassure you and your associated stakeholders that the airspace requested in the ACP is a danger area of a temporary duration. This can be supported by a DACS/DAIS provision where possible, and subject to the operations of the RPAS system, access to the airspace provided. It was mentioned on a call with

Bute airfield representative that Prestwick are open to DACS provision and we will be pursuing that avenue with them. The outcome so far is looking optimistic, however, it is a lengthy process and we cannot guarantee DACS until a number of formalities are sorted but a DAIS will be in place if not.

We would also reiterate that the dimensions, duration of the trial and the time for activation are being considered in line with the CAP 1616 principles. The reason for the type of airspace requested is that we are currently bound by current regulations and requirements of the CAA for BVLOS operations to occur in a danger area. CAELUS is a trial to show the feasibility of BVLOS air systems delivering requirements for NHS Scotland and to do that in a safe manner, and to have airspace within which to demonstrate this model, it needs to occur in a temporary danger area for the duration of this trial.

We had productive engagement so far with various stakeholders and you have been part for the most of the engagement call with Bute airfield, where we discussed revised TDA shape and conditions of activations (e.g. weather) that seemed not to raise any major objections or concerns.

We would wish to reiterate that it is a TDA that is being applied for in the current ACP and not a TRA.

2. Safety:

Despite the ambition to be a stepping stone for a proper “national network” one day, within the timeline of the project (ending April 2024) we are testing and investigating small local networks that need segregated airspace today, but hopefully will not require such in the future.

Given the temporary nature of the airspace change it is typically considered proportionate and appropriate not to go through a formal full-scale CAP1616 process which includes the additional steps you mention.. CAA will assess our application and will review all feedback provided by stakeholders.

3. Electronic Conspicuity:

The wider discussion regarding carriage of EC to access various classes of airspace is outside the scope of this airspace change proposal. We are running a large project,

but we still have capacity limitations in the number of matters it is feasible to investigate. We would also wish to make it clear that CAELUS have no influence or involvement with the grant deadlines associated with EC and any safety concerns regarding this should be addressed to the CAA. As much as it seems to be the response that gets challenged the most – it is still a fixed regulatory limitation that segregation of airspace remains the primary mitigation method for BVLOS flights of RPAS.

Onboard Detecting system of the RPAS is an additional situational awareness tool and is set by the OEM to process SIL1 only. Our partner network of ground sensors will be capable of processing SIL0, yet remains only a secondary situational awareness tool. Even though we will make use of data received by aircraft operating in the vicinity, as per para 1) above – it is only aircraft directly involved in the trial that should care about the equipment used, whereas everybody else can continue operating as usual and will remain safe by remaining clear of an active TDA segment.

The current Airspace Modernisation Strategy published by the CAA points to an environment where crewed and uncrewed air systems operate within the same airspace in a co-operative manner. We cannot comment on wider aviation projects, but we would wish to assure you that CAELUS is aiming to be as inclusive of access to airspace as possible, in line with the AMS principles. The CAELUS project has airspace management levers which will enable, where safe to do so, air systems to access the airspace, regardless of their EC fit.

With regards to the concern regarding controller availability to provide a service, we would like to clarify that CAELUS is not seeking to implement a network of danger areas (which is the type of temporary airspace within this ACP) for which the DACS/DAIS provision is associated. So, the long-term future ambition for CAELUS is to achieve moves away from segregation by way of danger areas to an integrated network of airspace where crewed and uncrewed air systems can both be accommodated. Nevertheless, in today world TDA and associated DACS is a robust helpful combination. If DACS will be confirmed to be an essential requirement to operate the proposed TDA in Ayrshire and Arran area, then we will only activate, when adequate staffing will be available by Prestwick to support that.

4) Use case:

CAELUS2 is not merely testing the possibility to have a cargo box onboard an RPAS. The background is more

complex than that as we have investigated only use cases with true life and cost-saving potential. In fact, some proposals had to be modified or discontinued solely based on the grounds that disproportionate impact on other airspace users would not be acceptable. ACP-2022-103 was taken forward as one of the proposals that will both deliver true value to people on the ground and still be feasible without causing undue inconvenience for aviation stakeholders.

As for DAA solutions – we could still use EC returns from overflying aircraft or aircraft crossing through cold segments of the TDA in order to simulate conflict avoidance scenarios. Yet, as per para 1) above – most testing will rely on involved briefed aircraft.

Despite the overall large scope of the project – being a trial, rather than routinely working solution we have agreed internally to limit our investigations to ADS-B solutions only and do it well, rather spread attention across a variety of EC. Low-powered nature of some portable ADS-B devices is the primary reason for need of additional installations since given the nature of the RPAS flight – we would like to ensure coverage to the lowest possible levels.

All in all, we feel that there may have been some confusion between the ACP that is currently in progress and the long-term intention of CAELUS and also between the CAP 1616 process for temporary and permanent changes.

We would welcome the opportunity to ensure that there is clarity regarding the nature of the airspace that is currently being sought under this ACP and the mitigations that would be in place to minimise any issues. There has been considerable discussion with yourself to make accommodations and understand your position with regards to the ACPs in particular and we would hope to continue those conversations. I would invite you to provide your availability for this week to set up a call.

Kind regards,



On behalf of the CAELUS Project

From: [REDACTED]

To: [REDACTED]

Subject: Objection to ACP-2022-103

Dear [REDACTED]

Please find a final consultation response from both Strathaven Airfield and the British Microlight Aircraft Association. I believe we also have the agreement of Ross Mitchell, representing Bute Airstrip. Ross is now on holiday so will confirm this on his return.

I appreciate it may come as a surprise to you after the hours we have spent in detailed consultation on route N2.

There have been many local trials which have already tested the concept of local drone delivery. If this was just another one of these, then you know we were more than happy to seek a workable solution.

However, it has been pointed out in detailed discussion within our organisations that this is a key part of a high-level proposal with national impact. Therefore we cannot support this trial as it stands because it would create an unacceptable precedent.

Very best wishes,

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: LAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 03 October 2023 19:08:47

Dear [REDACTED]

Thank you for kindly providing such detailed and helpful feedback that allowed us to evaluate our proposal from a different angle or give you extra reassurance that some aspects we have considered and accounted for already:

1. Please note that route planning was a fine balancing act between minimising disturbance in class G, but also being mindful of operations that occur at Prestwick and having to comply with ground risk and terrain limitations in the area. We ended up plotting our route through Prestwick in the area where it was considered the best safe compromise. Also, I have to note that we did engage over a number of sessions with local GA users flying from several airfields, who expressed similar concerns, but had positive feedback on our revision once we introduced the minimum weather requirements of 1500 ft for any cloud, i.e. we would not be there in the first place on a day when a GA aircraft might need to descend low. But if sudden low cloud appears unexpectedly – we hope for DACS to be the suitable solution.
2. I had to ask my colleagues to ensure I get the most up to date response. I was advised that “Economic assessment is ongoing within the project and includes the costs to and benefits for the NHS health boards as well as patients and communities. The flight trials will inform that assessment”. To put it simply – we have reasonable grounds to justify the trial, but we are not blindly assuming the benefits and will be estimating outcomes throughout. I would also note that 4kg payload capable aircraft is our best trial platform at this point, but it is possible that final recommendation would comment on that aspect further.
3. 3.1 The drone is capable to operate at night and will have lights onboard. From my experience it makes the drone better visible at night than even during the day. However, I have to stress that it is only additional mitigation and no airspace user is expected to visually see and avoid the RPAS. Segregation of airspace today remains the primary mitigation.
 2. I would note that we are re-assessing the cloudbase requirements to possibly make it stricter and make FEW clouds below 1500 ft also not acceptable. That came up in the conversation with SAR operators, who might need to avoid any minimal icing. With respect to your question on notice – we will publish a NOTAM for activation at least 24h in advance and monitor the weather to provide as much notice as possible. However, short-term cancellation through UK CAA is not dynamic enough to take immediate effect and from my understanding can take up to a few hours, it could be a good idea to check the status with Prestwick or by calling the phone number provided on the NOTAM if somebody would like to confirm for sure..
4. RPAS Remote Pilot will have an established channel of communication with the ATC. Our procedures are designed to give absolute priority to any CAT-A aircraft, which includes the situations you described.

Please be advised that Stathaven representative have been engaged more than anybody else. It appears that they are content with our latest version of the proposal due to mitigations put in

place. Please feel free to reach out should you have any additional questions.

Best wishes,



From: [Redacted]

Date: Sunday, 1 October 2023 at 16:06

To: [Redacted]

Subject: Re: LAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [Redacted]

I apologise for the last minute response re engagement.

1— . As regards N2 which obstructs part of the class G VFR corridor between Glasgow and Prestwick airspace you have requested further discussion. As previously stated, due to terrain, VHF communication with Glasgow is not possible at low level flight which may be necessary due to weather.

You have stated that you have an agreement in principle for Prestwick to provide a DACS service. If so, is it not reasonable to route A1 directly south over the Kilmarnock area where the minimum overflight is 1500 ft AGL into the northern margin of Prestwick airspace so that A2 is within controlled airspace as are B1 and B2 thus minimising the risk of conflict in class G airspace until you have reached your goal of integration.

2— As regards the ongoing economic assessment of NHS benefit, has it been concluded that there is a viable business case for drone transport of 4 Kg at commercial rates?

3— I note your intention is to operate in January 2024 from 0.700. As it will be night will the drone be equipped with visible anti collision measures? I also note you will not operate if the cloud is SCT, BKN or OVC below 1500 ft. How much notice will be given of drone flight cancellation due to cloud base, wind velocity or freezing conditions?

4— Should a powered aircraft, when over the TDA be forced to descend due to eg engine failure, aircrew incapacitation, etc or an unpowered sailplane land away will the drone operator have immediate communication of this from ATC or the D and D service?

As a large part of the aviation activity of the West of Scotland strut of the LAA is based at Strathaven airfield and the VFR corridor is the principal route west, these questions are asked to understand better the safety implication to the GA community of your proposed activity.

Yours. [Redacted]

Sent from my iPad

On 27 Sep 2023, at 11:13, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Hello,

We would like to kindly follow up re our request for engagement below. Please note the deadline of this Sunday October 1st if you would like to submit a response.

Best wishes,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Monday, 18 September 2023 at 12:07

To: [REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: LAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

You are receiving this email because you or your organisation was previously invited to engage regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACCS).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport

to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email (caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Wednesday, 24 May 2023 at 19:14

To: [REDACTED]

[REDACTED]

Subject: LAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby GA users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders, and your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

*CAELUS2 is part-funded by UKRI, led by AGS Airports and Supported by NHS-Scotland. 16 partners are working on the project to facilitate use of RPAS for real-life high value use-cases for the NHS as well as look into ways for safe and successful integration of RPAS alongside conventional aviation.

PS

You might have been previously invited to a pre-engagement briefing session on the project overall. Questions raised at these sessions have been combined into a single document, but some are still awaiting review by Subject Matter Experts. Please rest assured that we did not forget about it and please expect that a file with complete set of responses could be downloaded using this Dropbox link (https://www.dropbox.com/sh/enq9x7a6yz6w2zk/AACHQ9TU69_vJAD5cZg4oEja?dl=0) by 1st week of June and/or you receive a personal email response."

From: [Caelus Airspace](#)
To: [REDACTED]
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Date: 03 October 2023 19:08:47

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Date: Sunday, 1 October 2023 at 16:06
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Subject: Re: LAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Yours. Neil Geddes.

Sent from my iPad

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Best wishes,



From: [Redacted]

Date: Monday, 18 September 2023 at 12:07

To: [Redacted]

[Redacted]

[Redacted]

Subject: Re: LAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Kind regards,

[REDACTED]

From: [REDACTED]
Date: Wednesday, 24 May 2023 at 19:14
To: [REDACTED]
Subject: LAA engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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From: [REDACTED]
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Start: 15 June 2023 15:00:00
End: 15 June 2023 16:00:00
Location: Microsoft Teams Meeting

Dear all,

This session is to engage with PDG helicopters re CAELUS2 Ayrshire and Arran Routes. Please accept/decline/forward the invite as required.

Best wishes,
Alex

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting <<https://teams.microsoft.com/join/1>>

[REDACTED]

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Start: 15 June 2023 15:00:00
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Best wishes,
Alex

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting <<https://teams.microsoft.com/l/meetup->

[REDACTED]

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 24 May 2023 21:45:20
Attachments: [N2 Stakeholder Engagement v1.0.pdf](#)

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby airspace users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

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Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

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(https://www.dropbox.com/sh/enq9x7a6yz6w2zk/AACHQ9TU69_vJAD5cZg4oEja?dl=0) by 1st week of June and/or you receive a personal email response.

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Start: 15 June 2023 15:00:00
End: 15 June 2023 16:00:00
Location: Microsoft Teams Meeting

Dear all,

This session is to engage with PDG helicopters re CAELUS2 Ayrshire and Arran Routes. Please accept/decline/forward the invite as required.

Best wishes,
Alex

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting <<https://teams.microsoft.com/j/meetup-join>>

[REDACTED]

Download Teams <<https://www.microsoft.com/en-us/microsoft-teams/download-app>> | Join on the web <<https://www.microsoft.com/microsoft-teams/join-a-meeting>>
Learn More <<https://aka.ms/JoinTeamsMeeting>> | Meeting options <https://teams.microsoft.com/meetingOptions/?organizerId=c1b20626-b795-4d0a-b4ce-8cd48ce7d3d5&tenantId=6b26ba13-8042-40ff-84ca-ca54477c583f&threadId=19_meeting_ZjRIMzZjZWEtYjc5My00ZDYyLTk0OTMfZDFkYTA4NmZmZWQ1@thread.v2&messageId=0&language=en-US>

From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 27 September 2023 10:04:13

Hello,

We would like to kindly follow up re our request for engagement below. Please note the deadline of this Sunday October 1st if you would like to submit a response.

Best wishes,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Date: Monday, 18 September 2023 at 11:30
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

You are receiving this email because you previously engaged with us regarding Beyond Visual Line of Sight drone flights and associated with temporary Airspace Change Proposal ACP-2022-103 planned as part of CAELUS2 Future Flight Challenge project. The flight route the attached pack refers to has two legs, which connect a) University Hospital Crosshouse with the Arran War Memorial Hospital b) University Hospital Crosshouse with University Hospital Ayr.

We have revised our proposal further and would like to update you and seek feedback on the proposed changes. Even though we consider the changes minor and some are beneficial for the stakeholders, we want to ensure there are no changes from your side that would make our revised proposal not feasible. The three key updates relate to a) period of operations b) the airspace coordinates for both the TDA and TSA elements c) Provision of Danger Area Crossing Service (DACs).

A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide

DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: [REDACTED]

Date: Friday, 16 June 2023 at 18:09

To: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you very much for your time the other day. It was a helpful reassuring discussion. I would like to take this opportunity to briefly summarise once again everything we discussed and confirm with you if our summary is accurate.

Most of PDG operations are fairly predictable inspections, yet there situations when emergency powerline inspections might be require operations to ground level.

HESLO operations can potentially occur at very low level for prolonged periods of times, yet they will be fairly predictable and come with some warning.

Ultimately, the proposal does not raise major concerns on your end. However, even though highly unlikely it is theoretically possible that a conflicting tasking will be required by PDG within lateral dimensions of the proposed TDA. It is suggested that suitable contacts are exchanged (also will be available from NOTAM for CAELuS2) and strategic deconfliction is discussed on case by case bases. That arrangement could be written up in a form of a Letter of Agreement if required by PDG.

Please kindly advise if the above appears to be an accurate summary and if there are any comments/edits/requests you would like to make?

Sincerely yours,
Alex

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Tuesday, 13 June 2023 at 18:06

To: [REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you! Just sent an invite

Speak then!

Best wishes,
Alex

From: [REDACTED]

Date: Tuesday, 13 June 2023 at 12:21

To: [REDACTED]

[REDACTED]
[REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello Alex,

I am available on Thursday after 1pm.

Regards,

[REDACTED]

From: Caelus Airspace

Sent: Friday, June 9, 2023 5:48 PM

To: [REDACTED]

[REDACTED]
[REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you for detailed and clear breakdown. Would you be able to advise if you have availability Thursday/Friday next week for up to 1h call, so we could go over all points more effectively and with presence of wider group from our side? I am sure we will be able to find a compromise re operations in the area should the need arise, but how exactly that would be done is best to discuss properly.

Kind regards,
Alex

From: [REDACTED]

Date: Friday, 9 June 2023 at 15:39

To: [REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello Alex,

PDG engage in a wide variety of tasking from our Cumbernauld and Inverness bases:

- CAT passenger transfers
- Aerial filming and photography
- HESLO
- Pipeline patrols
- Powerline inspections
- Aerial surveys
- Lighthouse support operations

For normal A to B transit and if weather/cloudbase permits, the aircraft is flown at approx. 2000' and therefore no conflict with your proposed airspace. However, many of these tasks are performed at low or very low levels, e.g. pipeline patrols at approx. 700' AGL, or filming/HESLO/? powerlines down to ground level.

Examples of where there may be conflict of interests:

- Recent HESLO tasking at Symington (near Prestwick) between ground & 400' AGL
- Pipeline patrol every 2 weeks at approx. 700' AGL in area of Stewarton, Irvine, Ayr.
- GLA/NLB Lighthouse support operations to Ailsa Craig
- Regular powerline inspections throughout this area ground to approx. 300' AGL (often at short notice)

To clarify my earlier statement, PDG will not object to the proposed ACP as long as PDG is not adversely affected commercially.

I am keen to know what would happen for example if PDG was tasked to carry out a full day of HESLO operations within the area while you were also planning to be active. Would the trial take priority over our commercial operations and would we be denied access?

Regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Friday, June 9, 2023 3:10 PM

To: [REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you very much for your response. We are in discussions with various operators and emergency services, so it will be inevitable that we will have some discussions re need for access

to the area etc. It also goes without saying that our activities will be notified with a 24h notam and via AIC.

Nevertheless, could you kindly provide a bit of context re what operations you might be conducting and from what bases?

Also, would you be able to please clarify if you might need access to the area at low level and short notice? If yes – it would be best if we could have a discussion and try to agree some procedures. The reason I am asking is because the remark under * in your response made me a bit confused as it made it sound that if TDA areas remains inaccessible for PDG for the time being of the project, then it is not a problem or your ops. Please kindly clarify if possible?

Best wishes,
Alex

From: [REDACTED]
Date: Friday, 9 June 2023 at 11:54
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Good morning [REDACTED]

I'm sorry I was not able to attend the engagement briefing, but I have read the attached information and the feedback from other stakeholders.
As with similar projects we have previously discussed, provided the means of communicating activation status of the TDA is robust, and there is a facility for short-notice access to the area*, PDG have no objection to the project proceeding as planned.

* I specifically mean that PDG will not be commercially negatively affected by denial of access should there be a requirement to operate at low level within the designated area – powerline patrols, HESLO tasking etc.

Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Sent: Wednesday, May 24, 2023 9:45 PM
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from

your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby airspace users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders and are particularly careful about making sure that emergency services get all the priority access that they require. Your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

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W: www.pdgaviationservices.com

The Heliport, Dalcross, Inverness, IV2 7XB

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Please visit our website at www.pdgaviationservices.com

From: [REDACTED]
To: [Caelus Airspace](#)
Cc: [REDACTED]
Subject: [REDACTED] yrshire & Arran area
Date: 13 June 2023 12:21:26

Hello [REDACTED]

I am available on Thursday after 1pm.

Regards,

[REDACTED]

From: Caelus Airspace
Sent: Friday, June 9, 2023 5:48 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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From: [REDACTED]
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To: [REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello Alex,

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Kind regards,

[REDACTED]

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Sent: Wednesday, May 24, 2023 9:45 PM

To: [REDACTED]

Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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Please visit our website at www.pdgaviationservices.com

From: [Caelus Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 09 June 2023 17:47:46

Dear [REDACTED]

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Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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To clarify my earlier statement, PDG will not object to the proposed ACP as long as PDG is not

patrols, HESLO tasking etc.

Kind regards,



From: [REDACTED]
Sent: Wednesday, May 24, 2023 9:45 PM
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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From: [Caelus Airspace](#)
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 18 September 2023 11:30:33
Attachments: [N2 REVISED Proposal v3.0 - 2023-09-15 17.31.13.pdf](#)

Dear [REDACTED]

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Date: Friday, 16 June 2023 at 18:09

To: [REDACTED]

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Please kindly advise if the above appears to be an accurate summary and if there are any comments/edits/requests you would like to make?

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To: [REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you! Just sent an invite

Speak then!

Best wishes,
Alex

From: [REDACTED]

Date: Tuesday, 13 June 2023 at 12:21

To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Cc: [REDACTED]

[REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Regards,

[REDACTED]

From: Caelus Airspace

Sent: Friday, June 9, 2023 5:48 PM

To: [REDACTED]

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[REDACTED]

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Kind regards,

Alex

From: [REDACTED]

Date: Friday, 9 June 2023 at 15:39

To: [REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello Alex,

PDG engage in a wide variety of tasking from our Cumbernauld and Inverness bases:

- CAT passenger transfers
- Aerial filming and photography
- HESLO

XX

From: [REDACTED]

Date: Friday, 9 June 2023 at 11:54

To: [REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Good morning [REDACTED]

I'm sorry I was not able to attend the engagement briefing, but I have read the attached information and the feedback from other stakeholders.

As with similar projects we have previously discussed, provided the means of communicating activation status of the TDA is robust, and there is a facility for short-notice access to the area*, PDG have no objection to the project proceeding as planned.

* I specifically mean that PDG will not be commercially negatively affected by denial of access should there be a requirement to operate at low level within the designated area – powerline patrols, HESLO tasking etc.

Kind regards,

XX

Sent: Wednesday, May 24, 2023 9:45 PM

To: [REDACTED]

Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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Please visit our website at www.pdgaviationservices.com

From: [REDACTED]
To: [Caelus Airspace](#)
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 09 June 2023 15:39:56

Hello Alex,

PDG engage in a wide variety of tasking from our Cumbernauld and Inverness bases:

- CAT passenger transfers
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- HESLO
- Pipeline patrols
- Powerline inspections
- Aerial surveys
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Examples of where there may be conflict of interests:

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To clarify my earlier statement, PDG will not object to the proposed ACP as long as PDG is not adversely affected commercially.

I am keen to know what would happen for example if PDG was tasked to carry out a full day of HESLO operations within the area while you were also planning to be active. Would the trial take priority over our commercial operations and would we be denied access?

Regards,

[REDACTED]

From: [REDACTED]
Sent: Friday, June 9, 2023 3:10 PM
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you very much for your response. We are in discussions with various operators and emergency services, so it will be inevitable that we will have some discussions re need for access to the area etc. It also goes without saying that our activities will be notified with a 24h notam and via AIC.

Nevertheless, could you kindly provide a bit of context re what operations you might be conducting and from what bases?

Also, would you be able to please clarify if you might need access to the area at low level and short notice? If yes – it would be best if we could have a discussion and try to agree some procedures. The reason I am asking is because the remark under * in your response made me a bit confused as it made it sound that if TDA areas remains inaccessible for PDG for the time being of the project, then it is not a problem or your ops. Please kindly clarify if possible?

Best wishes,

✘

From: ✘

Date: Friday, 9 June 2023 at 11:54

To: ✘

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Kind regards,

✘

From: ✘

Sent: Wednesday, May 24, 2023 9:45 PM

To: ✘

Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear ✘

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Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

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On behalf of CAELUS2 FFC Project

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From: [REDACTED]
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 09 June 2023 15:10:20

Dear [REDACTED]

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Date: Friday, 9 June 2023 at 11:54
To: [REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Kind regards,

[REDACTED]

From: [REDACTED]
Sent: Wednesday, May 24, 2023 9:45 PM
To: [REDACTED]

Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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From: [REDACTED]
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 13 June 2023 18:06:18

Thank you! Just sent an invite

Speak then!

Best wishes,

[REDACTED]

From: [REDACTED]

Date: Tuesday, 13 June 2023 at 12:21

To: [REDACTED]

[REDACTED]

[REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello Alex,

I am available on Thursday after 1pm.

Regards,

[REDACTED]

From: Caelus Airspace

Sent: Friday, June 9, 2023 5:48 PM

To: [REDACTED]

[REDACTED]

[REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you for detailed and clear breakdown. Would you be able to advise if you have availability Thursday/Friday next week for up to 1h call, so we could go over all points more effectively and with presence of wider group from our side? I am sure we will be able to find a compromise re operations in the area should the need arise, but how exactly that would be done is best to discuss properly.

Kind regards,
Alex

From: [REDACTED]

Date: Friday, 9 June 2023 at 15:39

To: [REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello [REDACTED]

PDG engage in a wide variety of tasking from our Cumbernauld and Inverness bases:

- CAT passenger transfers
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- Powerline inspections
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To clarify my earlier statement, PDG will not object to the proposed ACP as long as PDG is not adversely affected commercially.

I am keen to know what would happen for example if PDG was tasked to carry out a full day of HESLO operations within the area while you were also planning to be active. Would the trial take priority over our commercial operations and would we be denied access?

Regards,

[REDACTED]

From: [REDACTED]

Sent: Friday, June 9, 2023 3:10 PM

To: [REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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From: [REDACTED]
To: [REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 09 June 2023 11:54:32

Good morning [REDACTED]

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Kind regards,

[REDACTED]

From: [REDACTED]
Sent: Wednesday, May 24, 2023 9:45 PM
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well.

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From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 09 June 2023 17:47:46

Dear [REDACTED]

Thank you for detailed and clear breakdown. Would you be able to advise if you have availability Thursday/Friday next week for up to 1h call, so we could go over all points more effectively and with presence of wider group from our side? I am sure we will be able to find a compromise re operations in the area should the need arise, but how exactly that would be done is best to discuss properly.

Kind regards,

[REDACTED]

From: [REDACTED]
Date: Friday, 9 June 2023 at 15:39
To: [REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello [REDACTED]

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To clarify my earlier statement, PDG will not object to the proposed ACP as long as PDG is not

patrols, HESLO tasking etc.

Kind regards,



From: [Redacted]
Sent: Wednesday, May 24, 2023 9:45 PM
To: [Redacted]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [Redacted]

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To: [REDACTED]
Bcc: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 09 June 2023 15:10:19

Dear [REDACTED]

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Best wishes,

[REDACTED]

From: [REDACTED]
Date: Friday, 9 June 2023 at 11:54
To: [REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Good morning Alex,

I'm sorry I was not able to attend the engagement briefing, but I have read the attached information and the feedback from other stakeholders. As with similar projects we have previously discussed, provided the means of communicating activation status of the TDA is robust, and there is a facility for short-notice access to the area*, PDG have no objection to the project proceeding as planned.

* I specifically mean that PDG will not be commercially negatively affected by denial of access should there be a requirement to operate at low level within the designated area – powerline patrols, HESLO tasking etc.

Kind regards,

[REDACTED]

From: [REDACTED]
Sent: Wednesday, May 24, 2023 9:45 PM

To: [REDACTED]

Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I hope this email finds you well.

As you might be already aware, my name is Alex and I represent the Future Flight Challenge Project CAELUS2*. We have been in touch previously with either yourself or somebody else from your organisation regarding an introductory briefing session for CAELUS2 overall. The purpose of this email is to invite you to an official engagement as per CAP1616 process for one of the BVLOS RPAS routes that we have planned in Ayrshire & Arran. The operation requires segregated airspace that will be in immediate proximity of Prestwick Airport and might affect some of the nearby airspace users. Please see the attached PDF for details. We would really appreciate if the information could be forwarded on to a suitable member of your team.

We are committed to minimising any possible impact on relevant stakeholders and are particularly careful about making sure that emergency services get all the priority access that they require. Your contribution will help ensure that we address any concerns and issues that may arise from the proposal. We would really appreciate if you could carefully review the provided materials with the appropriate members of your organisation and get back to us before June 11th, so we could try to address any concerns in good time before engagement closes on July 2nd. Depending on your feedback, we will either reply to questions via email or schedule an online conference call.

Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,

Alex

On behalf of CAELUS2 FFC Project

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[REDACTED]

[REDACTED]



PLM Dollar Group Limited t/a PDG Aviation Services

The Heliport, Dalcross, Inverness, IV2 7XB

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Please visit our website at www.pdgaviationservices.com

From: [REDACTED]
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 28 September 2023 15:05:49

Thank you very much, David!

From: [REDACTED]
Date: Thursday, 28 September 2023 at 11:10
To: Caelus Airspace <caelus2airspace@traxinternational.co.uk>
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

No additional comment or issues from PDG.

Regards,

[REDACTED]

From: [REDACTED]
Sent: Monday, September 18, 2023 11:31 AM
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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A) Given the requirements for various approvals (not just this ACP), we have experienced delays which mean these flights will no longer happen in 2023. We are still looking only for 4 consecutive weeks of flying, but we would like to ask for any relevant feedback if those 4 weeks are to occur at some point between January and July 2024. Our target date window of opportunity is in January-February, but we would like to get as complete feedback picture as possible should any further unexpected delays occur.

B) The shape and segmentation of the airspace broadly remained the same, however it was redrawn in order to align more neatly with the existing permanent airspace structures to incorporate both the TDA and TSA sections.

C) We have confirmed an agreement in principle with Prestwick Airport to provide DACS to aircraft, however, the regulatory part of arranging that and exact procedures is currently work in progress.

We will continue to update relevant information on the UK CAA portal as soon as it is known to us. Meanwhile, we would like to kindly ask to review the attached PDF pack in full and get back to us by replying to this email

(caelus2airspace@traxinternational.co.uk) no later than Sunday 1st of October 2023 to ensure we have enough time to address any concerns that might arise.

Kind regards,
Alex and Lucy on behalf of CAELUS

From: Caelus Airspace <caelus2airspace@traxinternational.co.uk>

Date: Friday, 16 June 2023 at 18:09

To: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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HESLO operations can potentially occur at very low level for prolonged periods of times, yet they will be fairly predictable and come with some warning.

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Please kindly advise if the above appears to be an accurate summary and if there are any comments/edits/requests you would like to make?

Sincerely yours,
Alex

From: [REDACTED]
Date: Tuesday, 13 June 2023 at 18:06
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you! Just sent an invite

Speak then!

Best wishes,
Alex

From: [REDACTED]
Date: Tuesday, 13 June 2023 at 12:21
To: [REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello Alex,

I am available on Thursday after 1pm.

Regards,

[REDACTED]

From: Caelus Airspace
Sent: Friday, June 9, 2023 5:48 PM
To: [REDACTED]
[REDACTED]
[REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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operations in the area should the need arise, but how exactly that would be done is best to discuss properly.

Kind regards,

✘

From: ✘

Date: Friday, 9 June 2023 at 15:39

To: ✘

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello ✘

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Kind regards,

David

From: [REDACTED]

Sent: Wednesday, May 24, 2023 9:45 PM

To: [REDACTED]

Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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From: [REDACTED]
To: [REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 28 September 2023 11:10:48

No additional comment or issues from PDG.

Regards,

[REDACTED]

From: [REDACTED]
Sent: Monday, September 18, 2023 11:31 AM
To: [REDACTED]
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Date: Friday, 16 June 2023 at 18:09

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

[REDACTED]

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To: [REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Best wishes,
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From: [REDACTED]

Date: Tuesday, 13 June 2023 at 12:21

To: C [REDACTED]

Cc: [REDACTED]

[REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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Sent: Friday, June 9, 2023 5:48 PM

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

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To: [REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

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[REDACTED]

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To: [REDACTED]

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Kind regards,

[REDACTED]

From: C [REDACTED]
Sent: Wednesday, May 24, 2023 9:45 PM
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 13 June 2023 12:21:27

Hello [REDACTED]

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Regards,

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Sent: Friday, June 9, 2023 5:48 PM
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[REDACTED]
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Thank you for your time and consideration. We would be honoured to have the opportunity to discuss the proposal with you and receive feedback.

Kind regards,



On behalf of CAELUS2 FFC Project

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PLM Dollar Group Limited t/a PDG Aviation Services

The Heliport, Dalcross, Inverness, IV2 7XB

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Please visit our website at www.pdgaviationservices.com

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 16 June 2023 18:09:26

Dear [REDACTED]

Thank you very much for your time the other day. It was a helpful reassuring discussion. I would like to take this opportunity to briefly summarise once again everything we discussed and confirm with you if our summary is accurate.

Most of PDG operations are fairly predictable inspections, yet there situations when emergency powerline inspections might be require operations to ground level.

HESLO operations can potentially occur at very low level for prolonged periods of times, yet they will be fairly predictable and come with some warning.

Ultimately, the proposal does not raise major concerns on your end. However, even though highly unlikely it is theoretically possible that a conflicting tasking will be required by PDG within lateral dimensions of the proposed TDA. It is suggested that suitable contacts are exchanged (also will be available from NOTAM for CAELuS2) and strategic deconfliction is discussed on case by case bases. That arrangement could be written up in a form of a Letter of Agreement if required by PDG.

Please kindly advise if the above appears to be an accurate summary and if there are any comments/edits/requests you would like to make?

Sincerely yours,

[REDACTED]

From: [REDACTED]
Date: Tuesday, 13 June 2023 at 18:06
To: [REDACTED]
Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Thank you! Just sent an invite

Speak then!

Best wishes,

[REDACTED]

From: [REDACTED]
Date: Tuesday, 13 June 2023 at 12:21
To: [REDACTED]
[REDACTED]
[REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello [REDACTED]

I am available on Thursday after 1pm.

Regards,

[REDACTED]

From: Caelus Airspace

Sent: Friday, June 9, 2023 5:48 PM

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

Subject: Re: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

Thank you for detailed and clear breakdown. Would you be able to advise if you have availability Thursday/Friday next week for up to 1h call, so we could go over all points more effectively and with presence of wider group from our side? I am sure we will be able to find a compromise re operations in the area should the need arise, but how exactly that would be done is best to discuss properly.

Kind regards,

[REDACTED]

From: [REDACTED]

Date: Friday, 9 June 2023 at 15:39

To: [REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Hello [REDACTED]

PDG engage in a wide variety of tasking from our Cumbernauld and Inverness bases:

- CAT passenger transfers
- Aerial filming and photography
- HESLO
- Pipeline patrols
- Powerline inspections
- Aerial surveys
- Lighthouse support operations

[REDACTED]

Subject: RE: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Good morning Alex,

I'm sorry I was not able to attend the engagement briefing, but I have read the attached information and the feedback from other stakeholders.

As with similar projects we have previously discussed, provided the means of communicating activation status of the TDA is robust, and there is a facility for short-notice access to the area*, PDG have no objection to the project proceeding as planned.

* I specifically mean that PDG will not be commercially negatively affected by denial of access should there be a requirement to operate at low level within the designated area – powerline patrols, HESLO tasking etc.

Kind regards,

[REDACTED]

From: [REDACTED]
Sent: Wednesday, May 24, 2023 9:45 PM
To: [REDACTED]
Subject: PDG Helicopters engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

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From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: GAAC engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 31 May 2023 19:28:59

Dear [REDACTED]

Thank you very much for such detailed response. It looks like we are in the right place as the additional representation you hold and knowledge you bring with it sounds very relevant and useful, so indeed excited to continue the conversation.

Please do not take it personally as the capitalisation has nothing to do with the importance of an organisation. The last two organisations on that slide were added later and most likely were copy-pasted like that, so it is purely a formatting error on my side. Apologies!

Nevertheless, could you please clarify what correction do you require to your name?

Many thanks again and looking forward to hearing from you.

Best wishes,

[REDACTED]

From: [REDACTED]
Date: Tuesday, 30 May 2023 at 21:22
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: GAAC engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area

Dear [REDACTED]

I have passed this across to my planning colleague as we both sit on the CAST Working Group at the CAA.

In addition I sit on the HELP (Helipads on NHS assets) Working Group and the joint NHSE/MCA (Coastguard) Working Group dealing with issues arising from the Gov't's recent procurement of some rather large helicopters so I have some working knowledge of the issues faced by the NHS.

Please could you amend our name in your PDF. I am also curious to know why some names in capitals while the rest, the more important organisations, are in lower case? For instance the AOG represents 60 airfields while the GAAC represents the entire industry with its 800+ airfields - and we have advised on over 120 of them in the past seven years.

We look forward to continuing the discussion with you in the future.

Kind regards

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
E: [REDACTED]

On 24 May 2023, at 19:32, Caelus Airspace
<caelus2airspace@traxinternational.co.uk> wrote:

Dear [REDACTED]

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<N2 Stakeholder Engagement v1.0.pdf>

From: [REDACTED]
To: [REDACTED]
Subject: Drone Major engagement re CAELUS2 BVLOS RPAS proposal in Ayrshire & Arran area
Date: 24 May 2023 19:34:25
Attachments: [REDACTED]

Dear [REDACTED]

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