



**Snowdonia Aerospace Airspace Change Proposal  
Design Options Development (Stage 2A), ACP-2019-58  
Llanbedr Danger Area (DA)**

**Annex 1 - Supporting Evidence**

## Document Details

Approval Level	Name	Authorisation
Author		Consultant
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Second reviewer and release authorisation		Chief Executive

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## Executive Summary

**This document provides supporting evidence as an annex to the “Stage 2A Design Options Development” element of the Snowdonia Aerospace LLP submission for an Airspace Change Proposal, Reference: ACP-2019-58, Llanbedr Danger Area (DA), under the Civil Aviation Authority (CAA) CAP1616 Airspace Change Process.**

Snowdonia Aerospace LLP is continuing to progress and further develop a number of complementary business opportunities at Llanbedr Aerodrome relating to aerospace Research, Development, Test and Evaluation (RDT&E) and military aircraft training. To support these operations (and others) action is required to upgrade and formalise the current airspace around the Aerodrome as the present provision is insufficient to meet the identified future need and risks restricting opportunities that are in the strategic economic interest of the UK and Welsh governments and required to sustain long term employment in the region. Snowdonia Aerospace LLP (hereafter also referred to as the Change Sponsor) is therefore developing two Airspace Change Proposals (ACPs) to underpin these activities:

- ACP-2019-58, Llanbedr Danger Area (DA), which can be accessed online via: <https://airspacechange.caa.co.uk/PublicProposalArea?plD=193>
- ACP-2020-02, Llanbedr Aerodrome Traffic Zone (ATZ), which can be accessed online via: <https://airspacechange.caa.co.uk/PublicProposalArea?plD=211>

This document relates to the former application, ACP-2019-58, with a view to creating a permanent Danger Area that will enable Llanbedr Aerodrome to increase support to the RDT&E for next-generation UK aerospace - e.g. drones (particularly non-military “drones for good”), electric aircraft, urban/regional air mobility vehicles, balloons, airships, near-space testing *etc.*

The CAA Civil Aviation Publication CAP1616 defines a six-stage process through to implementation of a permanent airspace change, some of which have more than one step. This document addresses the requirements for Stage 2A: Options Development. The objectives for Stage 2A are as follows:

- identify all the possible airspace design options;
- evaluate the design options against the design principles from Stage 1B;
- evaluate that the design options are compliant with the required technical criteria.

CAP1616 asks that the change sponsor preliminarily tests the design options with the same stakeholders it engaged with in Step 1B to ensure that they are satisfied that the design options are aligned with the design principles and that the change sponsor has properly understood and accounted for stakeholder concerns specifically related to the design options.

The engagement strategy has been dictated very strongly by the impact of the Covid-19 pandemic, the need to avoid face-to-face meetings and to move all communication to email and video/phone conferencing. This introduced a slight hiatus in the immediate aftermath of the UK-wide lockdown on 23rd March 2020, but the breadth and scope of the engagement has not been unduly affected.

Snowdonia Aerospace (SAC) has undertaken a number of stakeholder engagement activities to help shape the DA design principles. In addition to a number of targeted stakeholder meetings, a questionnaire was also sent out to over 200 stakeholders and interested parties and 36 responses were received (see Stage 1B Annex 1). A further 32 responses were received in request for further feedback on the design options and are documented in this further Annex to the Stage 2A report.

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## 1. Draft Design Options Discussion Note

Reflecting the observations and comments made as part of the two-way engagement process, Snowdonia Aerospace prepared two initial design options for the Danger Area upon which we then requested further feedback and comment from the stakeholders and interested parties previously engaged on the Design Principles. The following technical note was distributed by email to the stakeholders and interested parties in both English and Welsh as a draft for discussion with a request for further comment on the design options via: [da.acp@snowdoniaaerospace.com](mailto:da.acp@snowdoniaaerospace.com) by Friday 3<sup>rd</sup> July 2020. Submissions received after this date have still been considered.



## Design Options for Airspace Change, ACP-2019-58, Llanbedr Danger Area (DA) – draft for discussion

### Design Principles

Snowdonia Aerospace (SAC) has undertaken a number of stakeholder engagement activities to help shape the Danger Area (DA) design principles. In addition to a number of targeted stakeholder meetings, a questionnaire was also sent out to over 160 stakeholders and interested parties. The initial draft design principles have been reviewed and revised to take account of feedback and reflect the observations and comments made as part of the two-way engagement process. An updated draft is presented below in Table 1:

ID	Category	Design Principle
1	Technical	The design will provide an area of segregated airspace local to Llanbedr Aerodrome for the research, development, test and evaluation (RDT&E) of novel aerospace systems
2	Technical	The design will also provide an air corridor that will link Llanbedr Aerodrome with the existing Danger Area D201
3	Technical / Operational	The design will consist of multiple segments that should, where possible, allow the area of segregated airspace to be kept to a minimum in line with Flexible Use of Airspace principles while still meeting operational requirements
5	Technical / Operational	The Danger Area (DA) design will be consistent with the operation of the Aerodrome Traffic Zone (ATZ)
5	Safety	The design will not adversely affect the safety of operations at other nearby aerodromes
6	Safety / Operational	Operating hours of the Flight Information Service (FIS) and DA will be linked to ensure consistent traffic procedures and radio calls, and demand for changes in operating hours of the FIS will require a corresponding change in the operating hours of the DA and vice-versa
7	Environmental / Operational	Any impact on the environment should, where possible, be minimised via operating procedures and should, where possible, take account of any local development projects or noise sensitive areas that are highlighted as a result of stakeholder engagement
8	Environmental	The design should, where possible, take account of local planning policy including that of the Snowdonia National Park Authority and the aerodrome registered Safeguarding Map
9	Operational	Impact on military aircraft training should, where possible, be minimised via operating procedures in line with Flexible Use of Airspace principles
10	Operational	Impact on General Aviation (GA), gliding, microlight flying, hang gliding, paragliding or model flying should, where possible, be minimised via operating procedures in line with Flexible Use of Airspace principles

**Table 1** - Final technical, safety, environmental and operational design principles for ACP-2019-58, Llanbedr Danger Area (DA)

## Design Options

Again, reflecting the observations and comments made as part of the two-way engagement process, SAC has prepared two initial Design Options for the DA upon which we are now requesting further feedback / comment from those stakeholders and interested parties engaged with to date. Details of the two proposed Options are set out below. The subsequent responses to this further engagement will help determine the ultimate Design Option selection.

### Airspace Design Option #1

#### Airspace Volume Description

Figure 1 describes a baseline Option #1 for the permanent airspace change based on the Temporary Danger Area (TDA) that was originally consulted on, approved and promulgated in 2014 (Ref: QINETIQ/MS/AD/LET1404197, 15th September 2014). The TDA provides the extant position under which SAC and others presently operate, either in part or whole, to support the research, development, test and evaluation (RDT&E) of novel aerospace systems on an as-and-when-required basis. Option #1 takes the TDA definition and identifies an additional volume to reflect the proposed Aerodrome Traffic Zone (ATZ), the latter subject to the current second Airspace Change application ACP-2020-02. Four separate volumes of airspace are referenced under the same DA identity, but each take a separate suffix - e.g. Areas A to D:

- Area A: a cylinder of 2.5 nautical mile radius, centred on the main runway 17/35, from surface to 2000 feet altitude - *i.e.* coincident with the proposed Aerodrome Traffic Zone (ATZ).
- Area B: a cylinder of 5 nautical mile radius, centred on the main runway 17/35, from surface to 6000 feet altitude. Area B provides an extended area for inshore, coastal, lowland and mountain operational testing.
- Area C: a rectangle of 10 nautical mile width and 4.91 nautical mile length that extends from Areas A and B tangentially out toward Danger Area D201, from surface to 6000 feet altitude. Areas A, B and C collectively extend to approximately 10 nautical mile in length (measured from the centre of the main runway 17/35). Areas A+B+C combined provide an extended area for offshore/maritime operational testing.
- Area D: a rectangle of 10 nautical mile width and 4 nautical mile length that further extends Areas A+B+C to create either an extended straight-line testing route and / or a "bridge" into the existing Danger Area D201, from an altitude of 2000 feet up to 6000 feet. Access to D201 provides an ability for extended range/endurance/altitude testing. This will be managed via Letter of Agreement with QinetiQ/MOD. The 6000 feet upper altitude limit is defined so as to enable an engine out recovery without leaving segregated airspace in Area D for glide profiles <1000 feet per nautical mile.

The DA can be promulgated either as Area A, A+B, A+B+C or A+B+C+D. In-line with Flexible Use of Airspace principles, none of the areas of the proposed DA will be permanently active and will only be activated by NOTAM when RDT&E flying activities are due to take place. Basic Air Traffic Management procedures as described below will apply to all operations in Areas A to D when the DA is active.

#### Air Traffic Management

A FISO service will be provided by Snowdonia Aerospace from take-off to landing for all novel aerospace operations within Areas A to D of the proposed DA. The core FIS will be augmented with an Unmanned Traffic Management (UTM) system. Llanbedr FIS will also provide a Danger Area Activity Information Service (DAAIS) for all airspace users in the vicinity of the DA.

QinetiQ/MOD Aberporth Air Traffic Control (ATC) will be notified of all novel aerospace operations and their services will be engaged via Letter of Agreement for operations that intend to transit through Area D onwards to operate in D201 or further into D202.



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It is anticipated that the novel aerospace system will be equipped with a transponder when in Areas B to D.

The novel aerospace system crew is responsible for monitoring flight systems and communicating directly with Llanbedr FIS or MOD Aberporth ATC. In addition, the novel aerospace system crew is to ensure that the aircraft remains within the confines of the segregated airspace during both normal operation and in the event of any routine emergency.

### Airspace Design Option #2

#### Airspace Volume Description

As a result of the two-way engagement process and in line with the resulting design principles (Table 1), the following Option #2 (Figure 2) is put forward for the permanent airspace change:

- Area A1: a cylinder of 2.5 nautical mile radius, centred on the main runway 17/35, from surface to 2000 feet altitude - *i.e.* coincident with the proposed Aerodrome Traffic Zone (ATZ), the subject of the current second Airspace Change application ACP-2020-02.
- Area A2: extends Area A1 from an altitude of 2000 feet up to 6000 feet.
- Area B1: a partial annulus of 2.5 nautical mile inner radius, 5 nautical mile outer radius, centred on the main runway 17/35, extending to the west and angled west/south-west, from surface to 2000 feet altitude. Areas A+B combined provide an extended area for inshore/coastal operational testing. The Area B/E division cuts north/south from the Area A/C intersect to maximise the coastal coverage of Area B whilst minimising the overland area. The Area B/F division is nominally aligned with the coastline, but offset from the coast by approximately 1 nautical mile to minimise the impact on any paragliding and hang-gliding activities in the vicinity of Harlech.
- Area B2: extends Area B1 from an altitude of 2000 feet up to 6000 feet.
- Area C1: a rectangle of 5 nautical mile width and 4.91 nautical mile length that extends from Area A tangentially out toward Danger Area D201. Area A and C1 collectively extend to approximately 10 nautical mile in length (measured from the centre of the main runway 17/35), from surface to 2000 feet altitude. Areas A+C combined provide an extended area for offshore/maritime operational testing.
- Area C2: extends Area C1 from an altitude of 2000 feet up to 6000 feet.
- Area D1: *unused to maintain a "tunnel" from surface to 2000 feet for low-level air traffic transiting to / from RAF Valley.*
- Area D2: a rectangle of 5 nautical mile width and 4 nautical mile length that further extends Areas A+C to create either an extended straight-line testing route and / or a "bridge" into the existing Danger Area D201, from an altitude of 2000 feet up to 6000 feet. Access when required to D201 will provide an ability for extended range/endurance/altitude testing, which will be managed via Letter of Agreement with QinetiQ/MOD. The 6000 feet upper altitude limit is defined so as to enable an engine out recovery without leaving segregated airspace in Area D for glide profiles <1000 feet per nautical mile.
- Area E1: *unused to keep experimental aircraft clear of the Rhinog mountains.*
- Area E2: a partial annulus of 2.5 nautical mile inner radius, 5 nautical mile outer radius, centred on the main runway 17/35, extending to the east, from an altitude of 2000 feet up to 6000 feet. Areas A+E combined provide an extended area for upland/mountain operational testing. The Area E/F division is nominally aligned with the extended centreline from Runway 05/23 and represents a natural division between upland/mountain and coastal lowland environments, again seeking to minimise the impact on any paragliding and hang-gliding activities in the vicinity of Harlech.



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- Area F1: a partial annulus of 2.5 nautical mile inner radius, 5 nautical mile outer radius, centred on the main runway 17/35, extending to the north, from surface to 2000 feet altitude. Areas A+F combined provide an extended area for coastal/lowland operational testing
- Area F2: extends Area F1 from an altitude of 2000 feet up to 6000 feet.

The areas can be used in any combination, the most likely being: A, A+B, A+C, A+C+D, A+E, A+F, A+B+E+F. In-line with Flexible Use of Airspace principles, none of the Areas of the proposed DA will be permanently active and will only be activated by NOTAM when RDT&E flying activities are due to take place.

Basic Air Traffic Management procedures as described below and will apply to all operations in Areas A to F when the DA is active.

### Air Traffic Management

A FISO service will be provided by Snowdonia Aerospace from take-off to landing for all novel aerospace operations within Areas A to F of the proposed DA. The core FIS will be augmented with an Unmanned Traffic Management (UTM) system. Llanbedr FIS will also provide a Danger Area Activity Information Service (DAAIS) for all airspace users in the vicinity of the DA.

QinetiQ/MOD Aberporth Air Traffic Control (ATC) will be notified of all novel aerospace operations and their services will be engaged via Letter of Agreement for operations that intend to transit through Area D onwards to operate in D201 or further into D202.

It is anticipated that the novel aerospace system will be equipped with a transponder when in Areas B to F.

The novel aerospace system crew is responsible for monitoring flight systems and communicating directly with Llanbedr FIS or MOD Aberporth ATC. In addition, the novel aerospace system crew is to ensure that the aircraft remains within the confines of the segregated airspace during both normal operation and in the event of any routine emergency.

### Next Steps

We would be grateful if all stakeholders and interested parties could further comment on the draft design options via [da.acp@snowdoniaaerospace.com](mailto:da.acp@snowdoniaaerospace.com) by Friday 3rd July 2020.

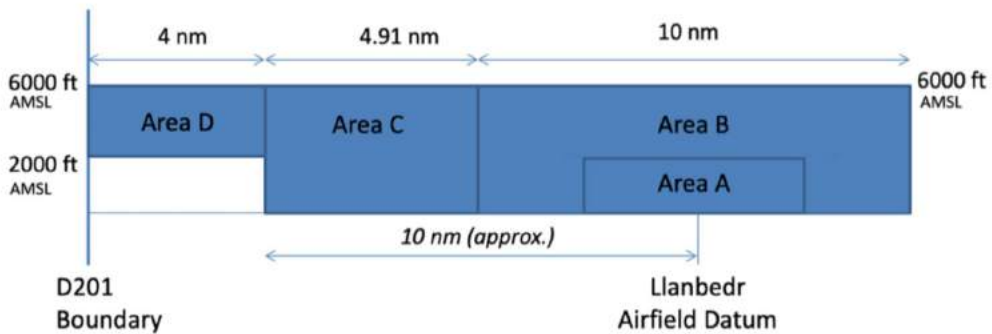
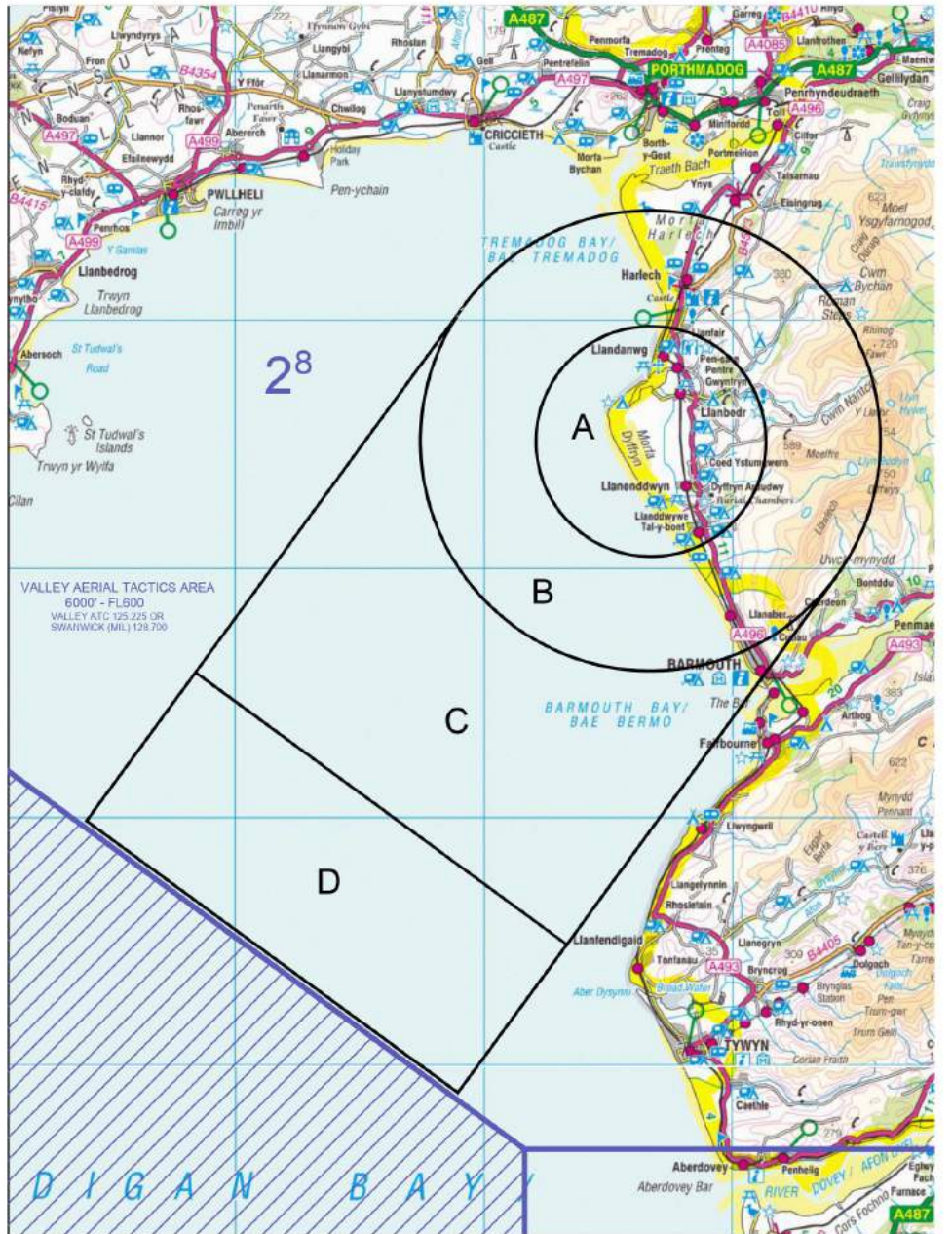


Figure 1 – Draft airspace design Option #1 for ACP-2019-58, Llanbedr Danger Area (DA)



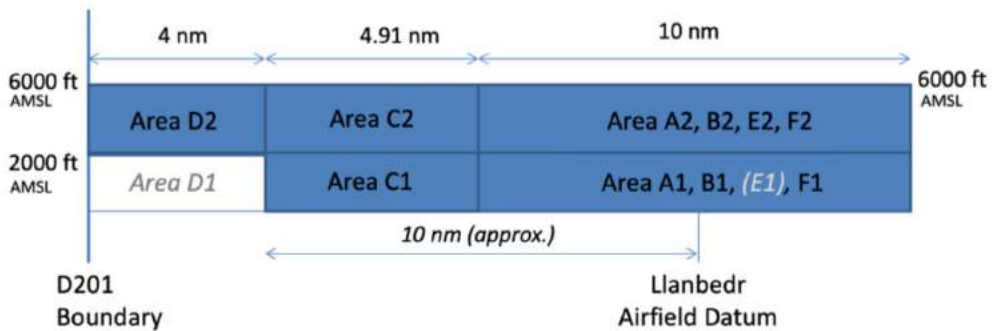
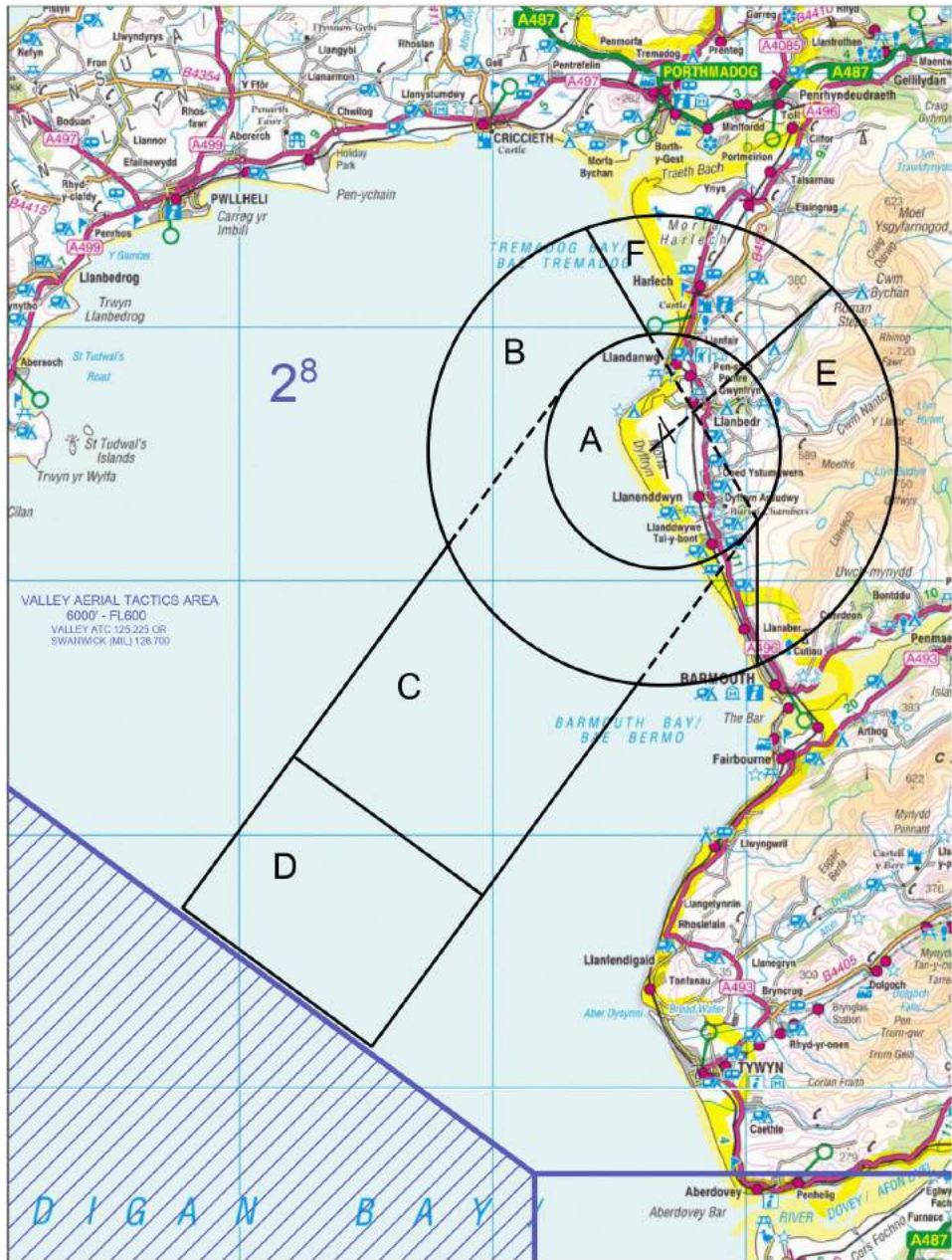


Figure 2 – Draft airspace design Option #2 for ACP-2019-58, Llanbedr Danger Area (DA)



## 2. Stakeholder Responses

The feedback received on the design options from the various stakeholders and interested parties are included here as supporting evidence.

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8. Herefordshire Gliding Club & BGA
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10. British Helicopter Association
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12. Shell Island
13. Llanbedr Pilot [REDACTED]
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15. Snowdonia Society
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19. Warton Aerodrome
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23. Snowdonia Enterprise Zone Advisory Board
24. London Gliding Club
25. National Trust
26. North Wales Fire and Rescue
27. Natural Resources Wales
28. National Police Air Service
29. MOD
30. Bailey and Partners
31. The Guild of Air Traffic Control Officers
32. Llanbedr Community Council

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**1. Welsh Government Aviation Team**

Thanks, very comprehensive and exciting! I'll have to go to my colleagues to ensure we have a WG response if necessary, so get back to you on that. Couple of really mundane and quite frankly boring points, the descriptions are "cylinder" which is fine but the design diagrams show circles for A and B, or am I reading it wrong? Secondly and this really is being pedantic, the use of the Llanbedr datum could be understood to be height rather than altitude now appreciate that they are virtually the same but just to be aware.

Other point to ask is further to our previous conversation, who is managing this for you through the CAA? Only ask because it is a nightmare, having spent over a year trying to get a relatively minor/admin ACP through the system.

Regards

[REDACTED]

Additional response 25/06/20

Great that explains it the design that is, being cautious and honestly trying to help, whilst you may have notionally 29 feet below the ATZ, this of course will fluctuate in relation to traffic above on SAS, now I haven't got most info around me but emphasise the Transitional Level for the area, so that if QFE/QNH are used there is documented vertical distance should this be necessary. Sorry, seen too many air misses based on differences in pressure settings.

Should you and [REDACTED] wish I could make intro's but your call.

Regards

[REDACTED]

Additional response 02/07/20

To whom it may concern.

Responses are in regard to technical issues on the above only, acknowledging the requirements to develop a series of restricted airspace for the establishment of novel air platforms, caution should be exercised in multiple datums in such short flying time to ensure vertical separation. Whilst Llanbedr is virtually at sea level, the use of different datums whilst conducting operations could be misunderstood by other traffic overflying the proposed DA. It may also be prudent to identify the classification of airspace within the DA's, service provided by FISO is adequate but does not provide positive control, defining the airspace will go some way to alleviating this.

Regards

[REDACTED]

## 2. Glyn Estate

Thank you for including us a stakeholder in the consultation process.

As per the designs we would be affected by being in designated Area B in Design 1 and Area F in Design 2.

This seems quite a departure from how the plans were described in the initial brief where it seemed as though the majority of the DA would be out to sea i.e. if you were to bisect Areas A and B from Option 1 in parallel with the southern perimeter of Area D.

As the designs currently stand, I am completely opposed to Option 1, and would only be supportive of Option 2 if Area F were removed from the DA altogether.

Yours sincerely,

[REDACTED]



**3. Bristow SAR Caernarfon**

Hi [REDACTED],

Thank you for the opportunity to comment on this.

No objections from Caernarfon SAR, the Bristow UAS team based at the airport, or St Athan SAR.

Many thanks,

[REDACTED]

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

#### 4. Snowdonia National Park

Dear [REDACTED],

I hope your keeping well and thank you very much for the further information received in both emails this week.

As National Park Authority and Local Planning Authority our comments are limited to ensuring that the statutory purposes of the National Park are fully considered in this process. These statutory purposes are to:

- To conserve and enhance the natural beauty, wildlife and cultural heritage of the National Parks;
- To promote opportunities for the public understanding and enjoyment of the special qualities of the Parks.

It's not completely clear at this stage from the documents how much consideration has been given to this, although no doubt this will become more apparent as the process evolves.

There are many statutory nature conservation sites around the airfield including a nearby SSSI and Special Area of Conservation (SAC), which are of national significance. It may also be worth noting that having the acronym SAC referring to 2 different things on this site may become confusing!

It is pleasing that many of the issues raised during the previous consultation were highlighted in the subsequent paper. However, I would re-iterate that the proposal needs to ensure all relevant planning permissions/lawful use certificates have been sought/are in place. I believe that in November 2009 under reference NP5/62/LU338 an application for a certificate of lawful use (existing use) was refused for 'Continued Use of Land and Buildings as Airfield for the landing of aircraft and departure of aircraft including related operational activities thereat'. I am conscious this issue probably needs some consideration in any emerging documents.

The previous report stated that "Ancillary to these activities will be the ongoing support to military aircraft training at RAF Valley, consistent with the heritage and established use of the site. Further ancillary activities will also include General Aviation and Leisure Flying." I believe these issues may need exploring further before proceeding.

Many thanks again for the further consultation.

Regards,

[REDACTED]

**5. Gwynedd Council**

QUESTIONNAIRE IN RELATION TO:

Llanbedr Aerodrome (Danger Area) ACP-2019-58

Representative Organisation:

(Please insert details of the Organisation you are replying on behalf of)

Gwynedd Council

1. The design of airspace is appropriate due to the need described and in order to provide a safe environment for airspace users. (See: Statement of Need.)		
Your response:	Agree	Disagree
The Statement of need predicates the need for this airspace change on the use of the airfield for the development of novel aircraft. It is creating the conditions for this civil use of the site which we as an authority have committed to support (in order to create high value jobs in the locality), and therefore agree that the change in airspace facilitates the future development of the facility. As a safety requirement, the establishment of this airspace change is necessary.		
2. The design must allow access to sufficient area to accommodate the wide range of anticipated different types of air vehicle requiring to use it for the range of RDT&E purposes, but could be sub divided		
Your response:	Agree	Disagree
Other comment: No comment		
3. The design must minimize the impact to other airspace users by activation only when required based on need.		
Your response:	Agree	Disagree
Other comment: No comment		
4. The airspace should be as accessible as possible to other users and be managed in accordance with Flexible Use of Airspace (FUA) principles as far as is practicable (Efficiency and Airspace Sharing)		
Your response:	Agree	Disagree
Other comment: No comment		
5 The design should be in accordance with current airspace regulation and use a pre existing designation of airspace with established parameters (Conformity, Simplicity and Safety)		



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Your response	Agree	Disagree
Other comment: No Comment		
6. Please let us know if there are any day time or night time constraints that you consider the CS could take into account when making this application.		
The opinion of the local Community Councils is clearly important in this matter, but we would remind the CS that all relevant Public Protection requirements must be met (in terms of noise levels etc), and planning issues discussed with Snowdonia National Park Authority  Public Protection issues should be discussed in detail with the relevant Gwynedd Council officers		
7. Please provide any details of any issues or constraints due to local General Aviation Operations that you believe may have an impact on the airspace design		
Your response No Comment		
8. Please provide details of any constraints the introduction of this design may have on gliding, microlight flying, hang gliding, paragliding or model flying.		
Your response No comment		
9. Are there any local development projects, or existing particularly noise sensitive areas, that the CS should be aware of?		
The opinion of the local Community Councils on this matter is clearly important in this issue but would remind the CS that all relevant Public Protection requirements must be met (in terms of noise levels etc), and planning issues discussed with Snowdonia National Park Authority  Obvious noise sensitive areas would include relevant settlements and noise sensitive properties in the vicinity of the airfield, and potentially nature conservation areas.  Public Protection and Bio-diversity issues should be discussed in detail with relevant Gwynedd Council officers		
10. Please advise us of any other issues or constraints you feel the CS could consider when designing its new airspace.		
Our key economic concern is that any developments enhance the development of the site as a centre of excellence for novel aircraft and space technology development. In particular the proposed improvements to be made to site infrastructure through secured European funding, for which Gwynedd Council is acting as Lead Body		

## 6. Snowdonia Flight School

I have observed both options and I prefer option 2 over option 1 for the following reasons:

1. The width of C and D is reduced in option 2 and I believe this is good as I cannot see the reason for it to be so wide as in option 1. If the unmanned experimental aircraft needs the width of D and C as outlined in option 1 then I worry about their wider safety. Also, I genuinely believe we should be trying to keep as much G classified airspace as possible.

2. Although greater segregation increases complexity it also assists in terms of flexibility and this is a design aim I am in favour of. Thus, one can switch off and on zones and allowing zones to be used by non-unmanned experimental aircraft when not required.

I would also suggest that F1 is also not included or not used within the danger area as is the case with zone E1 and my reason for this is that F1 is the most built up area containing Llandanwg and Harlech. I would suggest experimental unmanned aircraft operating at a low level in this area is unwise and by not using this zone it allows GA to use this area as an approach path.

I am concerned that if the danger area is active for significant periods of time it will basically restrict GA flying and cause the flight school to cease to exist at Llanbedr, but if it's only active when strictly necessary and all users of the airfield get a "fair" share of "air time use" then it could work for the benefit of all and the flight school could continue to flourish. Time will tell. Looking at it another way I think any scheme can work but it's how you use the scheme that makes the difference.

Best Wishes

[REDACTED]

[REDACTED]

## 7. UKFSC

Design option #2 would appear to offer the most proportionate and flexible airspace construct and should be the preferred option.

[REDACTED]

[REDACTED]

UKFSC

(NATMAC member)



## 8. Herefordshire Gliding Club & BGA

Thank you for adding option #2. I believe that the extra flexibility this provides will be very useful as it will allow you to only activate the volume of airspace that is required for any particular operation and leave the remaining volumes available for use by other traffic. It leaves volume E1 out of the danger area and allows A2, B2, E2, F1 and F2 to be left out when not needed. These are the volumes most likely to be used by gliders.



**9. Dyfren and Talybont Ward Councillor**

I have no objections.

[REDACTED]

[REDACTED]

**10. British Helicopter Association**

The British Helicopter Association has the following comment:

The effect on GA and other traffic is considered just from an operation perspective under the design principles. The changes should also be considered from a safety perspective as traffic being forced to avoid active areas should not be forced into bottlenecks or over high ground.

Yours

[REDACTED]  
[REDACTED]



11. Llanbedr Pilot [REDACTED]

I did reply to the proposals some weeks ago now but basically, I did not disagree with any of it but if you need me to resend the replies I can as I'm back home tomorrow

[REDACTED]

**12. Shell Island**

Hi [REDACTED], just 1 question, will the new proposed danger area affect Shell Island trading as it has been in the past etc or not?

Stay safe,

[REDACTED]

Additional response 04/07/20

Thanks for that, will the danger area proposed have an impact on boating activities in the area on the maps as its transitioned a lot by both recreational boaters and also used for commercial fishing, as the inner area is surface start etc, as Aberporth allows no one in theirs when firing is going ahead

Stay safe,

[REDACTED]

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**13. Llanbedr Pilot [REDACTED]**

I prefer option one on the basis that it is easier to assimilate, reducing cockpit workload.

Provided that flexible use of airspace principals translates to specific periods throughout the day rather than having the whole day NOTAMed.

Option two. I have concerns regarding low level UAV operations in areas A-F.

Yours sincerely,

[REDACTED]



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**14. Barmouth Council**

I have forwarded your email to all councillors and those that responded all agreed that option 2 was the best option.

There were no negative comments regarding the plans.

Regards

[REDACTED]

[REDACTED]

**15. Snowdonia Society**

3 July 2020

Dear Sir / Madam

**Interim consultation on Design Options for Airspace Change, ACP-2019-58, Llanbedr Danger Area – Draft for Discussion**

**Consultation response from Cymdeithas Eryri Snowdonia Society**

The Snowdonia Society is a registered charity established in 1967, which for over 50 years has contributed to the work of caring for and protecting Snowdonia. The Society's object is: 'to protect and enhance the beauty and special qualities of Snowdonia and to promote their enjoyment in the interests of all who live in, work in or visit the area both now and in the future.'

The Society registered its interest in the proposals at the 'Initial Engagement' stage and we are grateful for the summary of initial responses that you recently circulated.

Thank you also for the invitation to respond at this stage to the separate 'Design Options' document. We hope that our comments, overleaf, will assist you to draft the full public consultation document that you intend to publish later this year.

Our main concern is the draft proposal for an area of inland airspace over one of the most tranquil parts of the National Park (Area E) to be used as 'an extended area for upland/mountain operational testing'. We request that draft Danger Area proposals are reconsidered in order to avoid significant harm to public enjoyment of the special qualities of this part of the National Park.

I am copying this letter to the Snowdonia National Park Authority (SNPA).

Yours sincerely

[Redacted signature]

[Redacted contact information]

**COMMENT**

The Society understands that:

*'the purpose of the ACP is not to "open up" the airspace for military training because the airspace around Llanbedr is currently established as Class G airspace and as such is already open to (and used by) all types of aviation activity, including military training'.*

We also understand that the 'Danger Area' is proposed to *'only be enabled / activated for limited periods of time to support research, development, test and evaluation [RDT&E] of novel aerospace systems and emerging future flight technology.'* Nevertheless, *'limited periods'* is not specified or proposed to be controlled and the scope of RDT&E activities is wide open - presumably depending on what commercial RDT&E programmes may be promoted. It is in this context that we are concerned about the proposal for *'extended areas for upland/mountain and coastal/lowland operational testing'*.

**Proposal for 'an extended area for upland/mountain operational testing'**

This proposal is:

- implicitly included in Option 1, taking place in an overland segment of area B from sea level to 6000ft AMSL
- explicitly included in Option 2, taking place in area E2 from 2,000 to 6,000 ft AMSL (with area E1 extending from the surface to 2000ft altitude being 'unused to keep experimental aircraft clear of the Rhinog Mountains').



## COMMERCIAL-IN-CONFIDENCE

The exceptional circumstances that led to designation of the Snowdonia Enterprise Zone (SEZ) in the Snowdonia National Park Local Development Plan (LDP) focused on the opportunities presented by offshore airspace. Paragraph 6.26 of the LDP states that:

*'Now re-branded as the Snowdonia Aerospace Centre, the site was a former Ministry of Defence owned site. The airfield has three runways of 2.3km, 1.4km and 1.3km providing access to 7,100km<sup>2</sup> of segregated airspace **over Cardigan Bay [our emphasis]**. The simultaneous access by both civil and military systems to **this [our emphasis]** significant area of segregated airspace is unique to any airfield in the UK and is the first of its kind in Europe.'*

We appreciate that, to operate in airspace over the sea, experimental aircraft will need to cross short stretches of land to and from the SEZ. However, the Design Options document appears to be the first time that proposals have been advanced to undertake commercial operations based at the SEZ in airspace over the National Park other than air corridors required to reach the sea.

The uplands under airspace area E2 (being part of area B in Option 1) are of immense environmental value and include:

- Cwm Nantcol - a popular area with a network of well used paths, many suitable for less able bodied people, and which is an important cultural landscape including the famous Capel Salem in an oasis of calm.
- Rugged upland slopes rising almost to the summits of Rhinog Fawr, Y Llethr and Diffwys, all over 2,400 ft high and therefore above the 2,000 ft baseline of area E2. This is the core of the Rhinogydd mountain range, the closest there is to 'wilderness' in the whole National Park and probably in all of Wales - an area valued not only for its unique landscape but also for its exceptional sense of remoteness and tranquility.
- The picturesque Dyffryn Ardudwy including the valley of Afon Ysgethin. This is an open landscape rich in prehistoric landmarks and famous for its ancient drove paths, remote Pont Scethin and its sense of timeless solitude.
- The long ridge from Diffwys down to Abermaw, a popular walk renowned for its extensive views and, like the core of the Rhinogydd, its tranquility above the noise and bustle of the coastlands and inland valleys.

The impacts of RDT&E involving the commercial testing of 'experimental aircraft' here would cause significant harm to public enjoyment of one of the 'jewels' of the National Park and would therefore be incompatible with the statutory purposes of national parks. The draft proposals should therefore be amended to exclude area E and the corresponding part of area B from airspace used for commercial RDT&E flying based at the SEZ.

We suggest it would assist interested parties if the main consultation document distinguishes the airspace needs of (a) commercial RDT&E activities (b) RAF pilot training that uses Llanbedr Airfield and (c) what the 'Initial Engagement' document refers to as *'further ancillary activities [including] General Aviation and Leisure Flying'*.

We guess that the proposals for use of area B in Option 1 and for areas E & F in Option 2 would apply only to commercial RDT&E flights. Conversely, we guess that RAF pilots using Llanbedr Airfield will fly over large swathes of North Wales (as RAF aircraft based at Valley do at present), thereby greatly diluting local impacts on tranquility in different parts of the National Park including the Rhinogydd.

Clarification on these points is sought as we guess that the RAF is not intending to use the Rhinogydd in particular for unusually intensive flying. In this context we also seek clarification that there is no intention for the RAF to be involved in 'near-market testing' of pilotless military prototypes.

### **Proposal for 'an extended area for coastal/lowland operational testing'**

This proposal is focused on airspace area F, including the lower zone F1 from sea level to 2,000 ft AMSL. Area F1 extends over and close to the settlements of Llanbedr and Harlech. Other interested



## COMMERCIAL-IN-CONFIDENCE

parties will doubtless respond in relation to impacts on quality of life for these local communities. They will need full information in the main consultation documentation about the details of what is proposed.

Harlech castle is a World Heritage Site (WHS) - a magnet for visitors and an important economic asset for the local tourism economy. Mitigating any damaging impact on public enjoyment and understanding of the WHS is primarily a matter for CADW to advise on. We therefore trust that Snowdonia Aerospace will liaise with CADW to assess whether the draft proposals for area F need to be amended in order to avoid unacceptable impacts on the WHS.

### Impacts on Statutory Designated Sites

We understand that at the Initial Engagement stage the National Park Authority asked for a thorough assessment of impacts on statutory designated nature conservation areas, both terrestrial and marine, in the vicinity of the Airfield. The Society expects this assessment, and any proposed mitigation measures, to be part of the main consultation.

### Planning approval

The 'Initial Engagement Stage – Responses' document states that *'Ancillary to [RDT&E activities] will be the ongoing support to military aircraft training at RAF Valley, consistent with the heritage and established use of the site [our emphasis]. Further ancillary activities will also include General Aviation and Leisure Flying.'*

To the Society's knowledge, there is at present no planning permission or certificate of lawful use for new ground development/infrastructure at the SEZ to serve military or general/leisure flying. We suggest that Snowdonia Aerospace LLP liaises urgently with the SNPA to establish the facts, what planning application(s) may be needed and how this process would dovetail with the master-planning of the SEZs development, as required by LDP policy on the SEZ.

### Job growth at the Llanbedr SEZ site

Paragraph 2 in the Engagement document refers to *'a recent Economic Impact Assessment'* which concluded that *'a mixed-use development of the nature proposed with a range of supporting facilities could contribute 515 jobs at the local level'*. This is significantly more than the projected job growth we have seen in any other report, including the economic appraisal of the SEZ produced in 2017 for Gwynedd Council. We request that the latest Economic Impact Assessment is made public as part of the main consultation, so that the assumptions and aspirations underlying the job growth estimate can be understood and critically appraised.

## 16. NATS

Thank you for allowing NATS to respond to stage 2 of the ACP process.

We would like to make the following comments on your draft designs,

1. Both designs only leave a small portion of Glass G airspace (4nm wide) to transit underneath the proposed DA. This may have the following knock on effect,
  - a. There is an increased risk of infringement into the D201J portion of airspace by both military and GA avoiding the proposed DA. This might have an impact on MOD trials being conducted within the D201 complex.
  - b. A potential flight safety risk by forcing a two way flow of traffic below portion D (in design#1) or Area D1 (in design#2). This area is only four nm wide and base level 2000ft. There could be a mix of military tracks under that portion with potential for GA interaction.
2. If the DA is active, D201 trials might be restricted as NATS Aberporth lose the ability to exit the Danger Area in the NE portion of D201J whilst conducting profile set-ups on a South Westerly run in.
3. The design calls for a maximum vertical extent of Alt 6000ft, but the Transition Altitude in the area is 3000ft. Normally, only where a DA is designed to support firing of munitions is the vertical extent represented as an Alt. For everything else, it is normally a Flight Level if above the Transition Altitude.
4. Airspace Containment
  - a. The purpose of this DA is to segregate the activity from other airspace users but fails to mention how each design does this.
  - b. The lateral dimensions within each design does not explain why it has to be that wide or that altitude. If the DA is being used for containment, then
    - i. what navigational accuracy is associated to these nominal routes,
    - ii. how far are they from the edge of the DA, and
    - iii. why is this considered the minimum necessary to protect others.
5. As to date there is no LOA in place for NATS Aberporth to agree transfer of control if the UAV platforms are entering the D201 complex. NATS Aberporth would expect it to be at the boundary of D201J.

Regards

██████████

**NATS**

████████████████████  
████████████████████  
████████████████████

**17. Space Flight Academy**

**Re: Design Options for Airspace Change, ACP-2019-58, Llanbedr Danger Area (DA) – draft for discussion**

Thank you for submitting the Design Option draft for Spaceflight Academy Ltd's consideration as a stakeholder.

We have no additional technical contribution to submit but, as a preference, we are fully supportive of Option 1.

Option 1 offers the greatest operational flexibility to afford SAC / Spaceport Snowdonia the potential to become the UK's leading test and launch facility for the advancement of Space and aerospace technology, a vital asset for Wales and the UK as a whole.

Kind regards,

[Redacted signature]

[Redacted signature block]

**COMMERCIAL-IN-CONFIDENCE**

18. [REDACTED]

Thank you for your e-mail and attachments which I have forwarded to the Community Councils for comments.

Quite a few have come back to me stating that the information contained is very technical and are wondering when would it be possible to hold a meeting with the Community Councils along the Ardudwy coast line. I know one was supposed to be held in April but due to the virus had to be cancelled, but now that restrictions are being lifted on Monday would it be possible to hold a meeting in one of the hangers as suggested by yourself so as to keep to social distancing quite soon.

I am aware that this is a very peculiar time we are all in at the moment and hopefully things will only get better.

If holding such a meeting is possible you could let me know a suitable date and time and then I would be able to inform all the representatives of the Community Councils involved. They would then have the choice if they want to hear first-hand what is going on in the airfield to attend the meeting or not.

I look forward to hearing from you.

Regards,

[REDACTED]



**19. Warton Aerodrome**

Thank you for the opportunity to comment on the design options for the Llanbedr Danger Area, ACP-2019-58.

BAE Systems Warton flying operations take place in airspace covering much of the northern part of the United Kingdom, including in northern Wales and to/from Royal Air Force Valley and Aberporth Range. Furthermore, Warton-based air traffic control provides services to aircraft operating in the North Wales Military Training Area, which includes to those based at Warton and often to those operating from/to RAF Valley.

We note that the ACP covers a requirement for airspace up to 6000ft; in the main our operations tend to be above 10,000ft in that area but there are occasional requirements for overland/sea operations below that level. Moreover, there are a number of danger areas adjacent to the Llanbedr proposal which are notified by NOTAM – this makes it extremely important to ensure the accuracy of such NOTAMs and that they are unambiguous.

In considering the 2 design options put forward by Llanbedr, we do not object to either providing there is a robust mechanism for the notification of activation and that there is an ability to transit such airspace, of course subject to novel aerospace systems activity. In that regard, the provision of a DAAIS or DACS is considered essential. However, our preference would be for Design Option #2 which shows greater use of FUA whilst providing the required segregation for the established activity.

Regards

[Redacted]

[Redacted]

## 20. BAE Systems

Thank you for including BAE SYSTEMS as a reviewer of Airspace Change Proposal ACP-2019-58. BAE SYSTEMS Air Traffic Control, Flight Operations and Flight Test have completed a review of the proposed changes and in summary have **no objections** to the proposals as presented in either Option 1 or Option 2 of ACP-2019-58. However, BAE SYSTEMS would like to offer the following as **observations** against each option for consideration in any forthcoming airspace change.

- **Option 1**

- This is considered the proposal which would be simplest to understand from a GA aviation perspective in terms of both horizontal and vertical extent. As illustrated, it presents the least potential for inadvertent transitions / incursions of active airspace.
- The area from Surface to 2000ft in sector D is noted in the text as an area where GA and RAF Valley traffic could transit underneath an operating UAS. We are assuming any relevant UAS safety case would have to be sufficiently robust for this situation to occur.
- As presented in Option 1, the transit corridor out to the Aberporth Danger Area, D201 is considered to be wider than necessary. Whilst this is favourable from purely a T&E flight trials perspective for operations of UAS over a larger sea area, if the corridor exists merely as a transit corridor to permit access to the existing D201 Aberporth Danger Area, then an alternative option could be considered to reduce the width of the corridor. This could be similar to that indicated in the diagram below by the amber box and already proposed as part of your Option 2.



Figure 1 – Draft airspace design Option #1 for ACP-2019-58, Llanbedr Danger Area (DA)

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- Option 2
  - Whilst this solution offers the greater flexibility and from a BAE SYSTEMS perspective is considered the favourable option, it is clearly more complex from both a horizontal and vertical perspective, which may lead to misinterpretation by the GA community, which in turn could lead to an increased number of inadvertent airspace incursions. It could possibly be simplified by combining the 2x vertical constraints (layers 1 & 2) into a single layer but we accept that this will reduce the “flexible use of airspace” criteria that is being sought.
  - The area from Surface to 2000ft in sector D1 is noted as an area where GA traffic and RAF Valley traffic could transit underneath an operating UAS. As per option 1 observations noted above, we are assuming any relevant UAS safety case would have to be robust enough to cater for manned flight operations to take place underneath the UAS conducting T&E activities.

If you have any questions on the above comments / observations please do not hesitate to contact us. The points of contact are as follows:

[Redacted contact information]

Regards,

[Redacted signature]



## 21. Snowdonia Sky Sports

Apologies for the delay, I did see your second email, but we have had numerous discussions with the club about the impact your design proposals will make on the established flying around Harlech. However, the below is our agreed response to your draft designs for the ATZ and DA for Llanbedr airfield.

In response to your proposal to re-establish an ATZ and Danger Area (DA) at Llanbedr airfield and your request for input from individuals and bodies likely to be impacted by these changes, Snowdonia Sky Sports (SSS) is disappointed that your design has not taken into account the main points of our telephone communication and CAA response form. This explained that paragliding and hang-gliding activities have taken place for over 30 years at Harlech ridge and the new DA, as currently proposed, would put an end to hang gliding and paragliding at Harlech! When the old ATZ at Llanbedr was present, i.e. without the proposed unreasonably large, circular danger area existing, paragliding and hang gliding took place without any issues.

SSS understands that overland testing may be required but it's rather incredible that the proposed DA (test area) should extend over the town of Harlech and surrounding ridge. This area (F1 and F2) affects two established take-off and soaring areas at Harlech cliffs and Harlech Merthyr Farm. These sites have been flown for many years and even when the old ATZ was current. Harlech ridge is frequently flown by local and visiting pilots and to impose a new DA, and particularly the area described as F1 and F2 from option 2, seems totally inappropriate for the local Harlech residents, let alone visiting paragliding and hang-gliding pilots. However, if option 2 could be modified so that the areas F1 and F2 would be unused for experimental aircraft and represented by an unfilled (free airspace) NE outer sector of the DA, it would allow paragliding and hang gliding to continue uninterrupted, if somewhat restricted. We have been informed that there is no real reason to have a circular danger area, other than to be a simple solution when drafting the proposal. However, such a simple circular DA, centred upon the airfield centre point, would bring to an end 30 years of freedom to soar the Harlech ridge by gliders of all sorts, without the added inconvenience of having to establish if there is any UAV activity first. Bearing in mind that people who fly Harlech are not just locals but people who will often travel from 50 miles or more and often plan extended stays around weather forecasts not whether there may or may not be some UAV testing.

Furthermore, the East area of option 1 DA and areas E1/E2 of option 2 would prevent gliding in the Rhinogiau as the current proposal of area E1 would prevent Paragliders and hang gliders going above 2,000' ASL. Although not desirable, pilots would be able to navigate around the DA to the E if they had access to their longstanding take-off points on Harlech ridge. This area is of secondary importance to us but would be nonetheless a loss if it were to be included in the danger area.

SSS therefore asks that the proposed Llanbedr Danger Area is modified to take into account the paragliding and hang-gliding activities that currently take place around Harlech and the surrounding area so that flying activities are unaffected in areas F1 and F2.

Whilst SSS appreciate the need for Llanbedr Aerospace to re-establish an ATZ, we feel that the existing recreational flying activities have not been catered for so far in this consultation process. We therefore oppose the danger area in the form suggested and we look forward to further discussions to hopefully enable some workable compromise to be reached.

[REDACTED]

[REDACTED]



## 22. Cyclopsair

Hello,

I have had the opportunity to review the proposals and the Options 1 and 2 for the proposed Danger Area (and sub-divisions) to facilitate the RDT&E of novel aerospace systems at Llanbedr aerodrome. I support the application and the proposed development of the airspace and believe it will be very useful for such testing and that it also observes the Flexible Use of Airspace Principles. I would suggest that Option 1 is the more practicable due to the complexity of the layout of Option 2 - specifically areas E and F and their exact boundaries.

The text "*It is anticipated that the novel aerospace system will be equipped with a transponder when in Areas B to F*" is noted. It would seem a sensible step for the CAA SARG to consider the wider implementation of a mandatory ADS-B requirement as a necessary safety step for General Aviation users and others such as microlights for use in airspace where radar coverage is non-existent or minimal.

Regards,

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



**COMMERCIAL-IN-CONFIDENCE**

**23. Snowdonia Enterprise Zone Advisory Board**

Annwyl Syr/Madam

Diolch am y cyfle i roi sylw pellach ar yr opsiynau ar gyfer newid awyrofod Parth Perygl Llanbedr.

Nid oes gennyf sylwadau manwl i'w rhoi. Nodaf yn gyffredinol

- yr angen i sicrhau fod Swyddog Cyngor Gwynedd sydd yn ymwneud a chynllunio am argyfyngau yn ymwybodol o'r argymhellion ac yn medru rhoi sylwadau arno

- Yr angen i leihau unrhyw ymyrraeth di-angen ar drigolion lleol (e.e. sŵn ayyb)

Yn gywir

[REDACTED]

[REDACTED]

*Dear Sir/Madam*

*Thank you for the opportunity to comment further on the options for the Llanbedr Danger Area.*

*I have no detailed comments. I note the allowing general points*

- *The need to ensure that Gwynedd Council's emergency planning officer is aware of the proposal and has opportunity to comment on it*

- *The need to minimise any un-necessary interference on local people (e.g sound etc)*

*Yours sincerely*

[REDACTED]

[REDACTED]

**COMMERCIAL-IN-CONFIDENCE**

**24. London Gliding Club**

QUESTIONNAIRE IN RELATION TO:

Llanbedr Aerodrome (Danger Area) ACP-2019-58

Representative Organisation:

(Please insert details of the Organisation you are replying on behalf of)

London Gliding Club

1. The design of airspace is appropriate due to the need described and in order to provide a safe environment for airspace users. (See: Statement of Need.)		
Your response:	Agree Yes	Disagree
Other comment:		
2. The design must allow access to sufficient area to accommodate the wide range of anticipated different types of air vehicle requiring to use it for the range of RDT&E purposes, but could be sub divided		
Your response:	Agree Yes	Disagree
Other comment: The second proposal, Option two, would appear to give greater flexibility meeting the needs of both the UAVs and other airfield users.		
3. The design must minimize the impact to other airspace users by activation only when required based on need.		
Your response:	Agree Yes	Disagree
Other comment: As stated above option two with the greater flexibility offered by areas F, E and B appears to be more optimal in this respect.		
4. The airspace should be as accessible as possible to other users and be managed in accordance with Flexible Use of Airspace (FUA) principles as far as is practicable (Efficiency and Airspace Sharing)		
Your response:	Agree Yes	Disagree
Other comment: he FUA principle must be adhered to minimize inconvenience to other airfield users.		
5 The design should be in accordance with current airspace regulation and use a pre existing designation of airspace with established parameters (Conformity, Simplicity and Safety)		
Your response	Agree Yes	Disagree
Other comment:		

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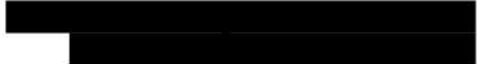
<p>6. Please let us know if there are any day time or night time constraints that you consider the CS could take into account when making this application.</p>
<p>Your response None from our perspective although as we use Llanbedr occasionally for gliding when we are there operations before 11.00 and after 19.00 would impact us less.</p>
<p>7. Please provide any details of any issues or constraints due to local General Aviation Operations that you believe may have an impact on the airspace design</p>
<p>Your response In Proposal one area B may have some impact and in proposal two areas F, E and B will have some impact on local flying. The options afforded by the two height bands and in the proposal two by the division into areas F, E and B may mitigate this to some extent.</p>
<p>8. Please provide details of any constraints the introduction of this design may have on gliding, microlight flying, hang gliding, paragliding or model flying.</p>
<p>Your response In Proposal one area B may have some impact and in proposal two area F, E and B will have some impact because gliders need to use the ridges to the north and west of Llanbedr to seek out lift. The options afforded by the two height bands and in the proposal two by the division into areas F, E and B may mitigate this to some extent.</p>
<p>9. Are there any local development projects, or existing particularly noise sensitive areas, that the CS should be aware of?</p>
<p>Your response Not relevant to this stakeholder.</p>
<p>10. Please advise us of any other issues or constraints you feel the CS could consider when designing its new airspace.</p>
<p>Your response please provide details. None</p>



25. National Trust



Ymddiriedolaeth  
Genedlaethol  
National Trust



Snowdonia Aerospace LLP  
Llanbedr Airfield  
Llanbedr  
Gwynedd  
LL45 2PX

Dear 

**Re: ACP-2019-58**

Many thanks for approaching the National Trust for comment on the draft design options for ACP-2019-58.

A key consideration for the National Trust would be to avoid new airspace concentrating air traffic in or towards environmentally sensitive sites either as a result of traffic operating inside this area or from the traffic which has to avoid this new airspace. In this regard we observe no significant differences between the two designs.

We appreciate that design option #2 presents a more efficient and flexible use of airspace and that this might be preferred by other airspace users. We would be interested to understand the effect of area E1 remaining unused in this design and the reason for its incorporation in the option 2 design.

It has also been noted that the statements covering environmental clauses are quite loose – we would be interested to see these firmed up and more detailed. The use of “where possible” could be a cause for concern when we are considering the environmental significance of the Snowdonia National Park so further information to understand the potential impact here would be favourable.

We appreciate the opportunity to input and be part of any future discussions.

Yours sincerely,



**26. North Wales Fire and Rescue**

Good afternoon

Further to your design options document and your consultation email which you require any comments to be returned by today.

We have no preference to either option as they are both similar in relation to the airfield, and do not impact on our premises within that geographical area.

Kind regards

[Redacted signature block]

**27. Natural Resources Wales**

We have received your consultations via my colleague [REDACTED].

We would appreciate the opportunity to better understand the proposal before we respond.

We are primarily concerned with the Sustainable Management of Natural Resources. As such we need to consider the likely impact your proposals would have on the Sites of Special Scientific Interest; Special Conservation Area and Special Protection Area as well as any section 7 Habitats & Species.

Whilst we undertake the consenting of activities within the boundary of an SSSI for activities listed on the Operations Likely to Damage the Special Interests. We are not certain of the lead Permit for your proposal and are uncertain as to who would be the competent authority to undertake the Habitat Regulation assessment associated with any permit.

It would be very helpful if we could have an opportunity to discuss the proposal and the process you are following so we could respond as appropriate.

Regards

[REDACTED] Team leader  
[REDACTED] Natural Resources Wales  
[REDACTED]  
[REDACTED]  
[REDACTED]

Siaradwr Cymraeg

[www.cyfoethnaturiol.cymru](http://www.cyfoethnaturiol.cymru) / [www.naturalresources.wales](http://www.naturalresources.wales)

**28. National Police Air Service**

Classification: OFFICIAL

Good afternoon [REDACTED],

I hope all is well with you and yours. Your proposal will have little or no impact on National Police Air Service (NPAS) Operations. NPAS flights within the Llanbedr are fairly occasional and the aircraft would be working your frequencies. No comment to add to your proposal.

Best regards

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



## 29. MOD

Please accept this as the MOD response for Stage 2 engagement.

### Process:

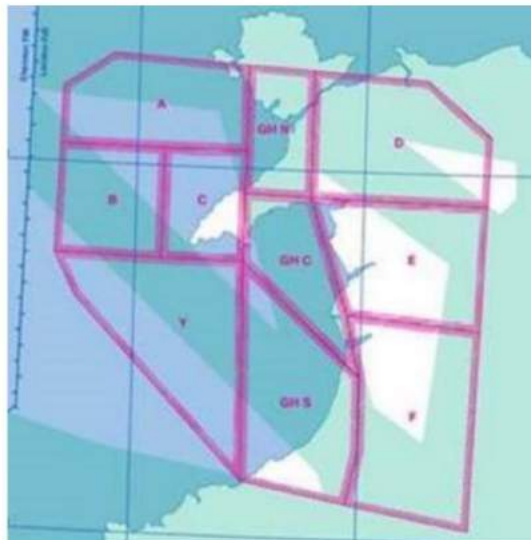
- I was surprised to see that you are approaching Stage 1 and Stage 2 of the ACP on the same gateway, whilst I appreciate this information was on the CAA portal, any change to Airspace in the vicinity of RAF Valley may well have an impact on the MOD's ability to deliver flying training. Therefore, more transparency from you, as the ACP sponsor, would have been appreciated. Apologies if I have missed this in either the Stage 1 or Stage 2 engagement paperwork.

### Timeliness for engagement:

- Furthermore the MOD believe that the time allowed (2 weeks) for Stage 2 engagement was unusually short. I think that more proactive engagement in form of virtual meetings may well have answered some questions for the wider MOD audience. There are more than answers than anything else in this response.
- I would request that, prior to full consultation, ongoing engagement takes place.

### Context:

- Following the reduction and pending closure of RAF Linton-on-Ouse, all MOD advanced FJ training is now conducted from RAF Valley. The Texan aircraft is set for a 40% increase to 14 airframes and 7,200 flying hours per annum by 2022/23.
- We are estimating that 50% of the flying hours in the Texan are general handing sorties which will routinely operate to a base level of 4,000ft. The MOD use the Valley Area Training Areas to tactically separate aircraft on sorties, whilst the base of the VATAS is FL100, it is still a useful tool for illustration purposes. GH C as shown below is commonly used by the Texan.
- Please note the potential impact on the low flying system as used by the operators from RAF Valley is not yet understood.



- The NWMTA (down to the surface) is also used by United States Air Force (Europe) aircraft based from RAF Lakenheath. Unfortunately, due to time constraints, I have not been able to consider responses from the USAFE representatives. Please note this also includes the potential impact on the low flying system.

## COMMERCIAL-IN-CONFIDENCE

- The NWMTA (down to the surface) is also used by MOD FJ from RAF Coningsby and RAF Marham. Unfortunately, due to time constraints, I have not been able to consider responses from the relevant teams. Please note this also includes the potential impact on the low flying system.

### **Design Principles informing options:**

- I notice that your draft design principles have, under the operational category, “Impact on military aircraft training should, where possible, be minimised via operating procedures in line with Flexible Use of Airspace principles”. How have you used this DP to inform your airspace options? Furthermore the MOD would hope that your design principles as presented are not shown in priority order. Do you have a priority?

### **Airspace Management:**

- Noting the design principle for the MOD. How do you intend on ensuring FUA in the best possible way? Noting that they will be activated on an “as-and-when-required basis”, how often do you propose the areas are activated? And by what means do you propose the airspace will be activated? How will you hand airspace back if the UAS fails to get airborne? The MOD would require an LOA with RAF Valley to ensure that peak Valley operational times are avoided. The MOD would also prefer a DACS over a DAAIS. Furthermore, with the limitations of a FISO, how would you propose to ensure that a UAS remains within the confines of the DA? What is your containment policy?

### **Airspace Options:**

- Noting that both airspace options are for Danger Areas. Did you consider the acceptability of a Transponder Mandatory Zone or a Radio Mandatory Zone? Or a change in classification of airspace?
- Whilst more complex, the MOD would prefer the more dynamic Option 2. What UAS have you used to come up with the design? Noted in your design that the areas may be activated between 2000’ and 6000’ – would you propose to use altitudes between or would it be one or the other? What proportion of the time do you think the airspace will be activated above 3000’? The MOD would require a LOA to ensure any activation above 4000’ is deconflicted with Valley GH C (as per the VATAs) operations.

### **Procedures:**

- I welcome the fact that you have had a dialogue with the Danger Area Airspace Manager, and that you envisage only activating C and D when accessing D201. I also note that you are considering an LOA with D201 – we would view this as crucial. How would you gather information ensuring that activation protocols were in line with FUA principles. If this is not the case, safe separation against D201 operations would need to be considered. As you are proposing a FISO for your operations, the MOD would like to fully understand how you would propose coordination?
- How would you ensure lost link procedures remain within the confines of the proposed airspace? As you are only proposing using a FISO are there any more safety barriers you would consider employing?

I have attached the response I sent you for your Design Principle engagement. Some of the questions above I asked as part of the engagement at this stage. Furthermore, I raised some of the points above, including details for Texan operations in the DP engagement. Please confirm why you have not addressed these or discounted my points.

Please do not hesitate to contact me if you have any questions.



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**30. Baileys & Partners**

Dear Sirs

We are in receipt of the design options and your letter dated 6<sup>th</sup> July but received earlier today (referred to as "additional note").

The design options are technical in nature but we wish for the purposes of making a reply to sustain the main thrust of our clients concerns as contained in the attached document which we have submitted to you under consultation ACP-2020-02 (attached).

In summary these were;

- Impact on local and visitor safety in and around the airfield.
- Impact on health and well- being of locals and visitors in the area.
- Impact on local economy – cost benefit analysis. If this genuinely is intended to create local jobs, let's see a plan of this and please ensure the plan realistically also considers what impact this proposal may have on existing jobs namely in tourism in the locality.
- That these proposals do not infringe on neighbouring property rights and the quiet enjoyment of those properties are not prejudiced.
- That these proposals do not adversely impact on the value of local businesses and homes.

I would be grateful if you could confirm receipt in due course.

Regards



[www.baileysandpartners.co.uk](http://www.baileysandpartners.co.uk)



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**31. The Guild of Air Traffic Control Officers**

Dear Sirs,

Thank you for the opportunity to comment on the ACP for the Llanbedr Danger area.

The Guild of Air Traffic Control Officers (GATCO) is a UK-wide professional organisation which promotes the highest standards in all aspects of air traffic management and is dedicated to the safety of all who travel or gain their livelihood in the air, with membership drawn from both civilian and military controllers. We are heavily involved in the work of the International Federation of Air Traffic Controllers' Associations (IFATCA), which includes representations to ICAO and SES, amongst others.

This letter constitutes our formal response to the consultation. Apologies for the late response.

GATCO is in favour of Airspace design option #2 for the following reasons: we believe that the further divisions of area B into areas A, B, E and F 1 and 2 provides greater flexibility for

airspace users, in accordance with design principles 3 and 10. Furthermore the divisions will minimise environmental impact on the land areas (design principle 7).

Many thanks and best regards



GATCO



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**32. Llanbedr Community Council**

To the attention of Mr [REDACTED]

Thank you for your latest correspondence regarding Llanbedr Danger Area. Although it is very complicated, the consensus is that the 2nd section seems to be the best option.

We are however very conscious of safety issues with flights over the village, and there is some concern about the numerous planned flights from RAF Valley.

The flying of drones, close to built-up areas would also be a matter of concern for the Councillors at Llanbedr.

With regards to social distancing and no face to face meetings are been held at the moment due to the continuous pandemic, we would appreciate it, that when matters can move on safely , that a public meeting will be arranged for the Ardudwy area regarding the proposed set up at the Airfield, so that everyone is kept informed.

Thank you and hopefully all is well with you.

Regards

From  
[REDACTED]

### 3. Additional Note to Stakeholders

The following additional note was sent to all Stakeholders on 7<sup>th</sup> July 2020 in both Welsh and English language and an action was identified for continued engagement to further refine the details and operating procedures that will inform the Letters of Agreement with these other stakeholders. Furthermore, some stakeholders (mostly non-aviation) felt unable to comment pending further clarification. We must also consider how future engagement/consultation materials are developed to suit a range of audiences, such as how technical information will be communicated in an accessible way to non-aviation stakeholders

As an immediate follow-on activity, SAC will also write back to all respondents with a thank you letter and seek to identify opportunities for further engagement/consultation that will address the action items described above.

**ACP-2019-58 Dewisiadau Dylunio – nodyn ychwanegol**

6ed Gorffennaf 2020

Yn dilyn cwestiynau a godwyd yn lleol ynghylch y papurau Dewisiadau Dylunio a ddsbarthwyd ar 22ain Mehefin – yn ymwneud ag Ardal Perygl arfaethedig – rydym yn cyflwyno'r nodyn ychwanegol hwn.

Nid yw caniatâd ar gyfer gofod awyr yn golygu caniatâu yn awtomatig i awyrennau newydd, gwahanol ac arbrofol hedfan ynddo. Cyn y caiff hedfan o gwbl yn y DU mae'n rhaid i wneuthurwr neu weithredwr y math hwn o awyren gyflwyno achos diogelwch gweithredol i'r Awdurdod Hedfan Sifil (AHS).

Mae'r achosion diogelwch hyn yn dechnegol iawn ond byddant yn cynnwys ym mhle y bydd yr awyrennau yn cael hedfan, ac ar ba uchder. Yn aml byddai'n ofynnol i ddrôn bach hedfan 'o fewn terfynnau'r maes awyr' yn unig. Pe byddai unrhyw gerbyd awyr di-griw angen teithio ymhellach, byddai'n ofynnol llunio rhaglen datblygu hediad a dynodi ardal o fewn y gofod awyr newydd arfaethedig. Waeth sut y diffinir y gofod awyr arfaethedig, yr achos diogelwch gweithredol fyddai yn pennu ym mhle y byddai'r cerbyd awyr yn cael ei hedfan. Byddai hyn yn berthnasol i bob dronau, nid cerbydau awyr newydd, gwahanol ac arbrofol yn unig.

Y pwynt allweddol yw mai un elfen yn unig o Achos Diogelwch Gweithredol ehangach yw'r gofod awyr arwahân a ddiffinnir gan yr Ardal Perygl.

Roedd pryder bod y gofod awyr ar lefel arwyneb neu lefel daear. Er y caiff gofod awyr fel hyn ei ddiffinio ar lefel daear, mae deddfau penodol yn gwahardd neu yn rhwystro hedfan dros ardaloedd poblog ac yn deddfu bod yn rhaid i awyrennau gadw 500 troedfedd oddi wrth unrhyw berson, llong, cerbyd neu adeilad. Yn gyffredinol golyga hyn y byddant 500 troedfedd uwchben lefel daear. Yn yr un modd, mae'n rhaid i unrhyw ddrôn yn y gofod awyr gadw pellter, ond 150 metr yw'r canllaw (492 troedfedd). Fodd bynnag, mae'r gofod awyr wedyn yn cael ei rannu a'r rhan/ nifer o rannau angenrheidiol yn unig fyddem yn eu ddefnyddio ac i uchder penodol. Byddai'n anhebygol i unrhyw hediad fyddai'n gadael y maes awyr fod lai na 1,000 troedfedd uwchlaw lefel daear.

Nid yw'n debygol y bydd yr adran ar yr ochr ddwyreiniol yn cael ei defnyddio'n aml, fodd bynnag, mae'r adran hon yn bwysig iawn i ni ar gyfer y dyfodol fel amgylchedd gwahanol i arddangos hedfan diogel dros dir uchel ac ardalodd mewndirol isel. Byddai hyn gydag awyrennau wedi eu profi yn unig ac yn osgoi hedfan dros unrhyw dref neu bentref

Byddai mesurau lliniaru o safbwynt hedfan ar ochr ddwyreiniol maes awyr Llanbedr yn cynnwys:

- a) Defnydd anaml iawn
- b) Byddai'n eithriad i awyren fod lai na 1,000 troedfedd uwchlaw lefel daear
- c) Cymeradwyaeth Achos Diogelwch AHS
- d) Osgoi hedfan dros ardaloedd adeiledig
- e) Cynnal o leiaf lleiafbwynt rheoliad pellter oddi wrth bobl ac adeiladau.
- f) 'Ardaloedd osgoi' eraill i'w cytuno gyda'r Cymunedau ac Unigolion.

  
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**ACP-2019-58 Design Options additional note**

6<sup>th</sup> July 2020

Following questions raised locally arising from information in the Design Options papers circulated 22<sup>nd</sup> June for a proposed Danger Area we offer this additional note.

The grant of airspace does not automatically allow new, novel and experimental aircraft to fly in it. To be able to fly at all in the UK the manufacturer or operator of this type of aircraft has to submit an operational safety case to the Civil Aviation Authority.

These safety cases are very technical but will include where the aircraft is allowed to fly, and to what altitude. A common requirement for a small drone could well be to fly only 'within the aerodrome boundary'. For any unmanned aerial vehicle requiring to travel further a flight development programme would be specified and an area within the new proposed segregated airspace would be designated. No matter how the new proposed airspace is defined the operational safety case would determine where the aircraft was to be flown. This would apply to all drones not just new, novel and experimental aircraft.

The key point is that the segregated airspace defined by the Danger Area is only one element of a wider Operating Safety Case.

There was concern that the airspace was from the surface, or ground level. Although airspace like this is defined from the surface there are specific laws that prohibit or restrict flight over congested areas and additionally aircraft must remain 500ft from any person, vessel, vehicle or structure. This generally means they will be a minimum of 500ft above ground level. Any drone in the airspace similarly must keep clear but 150 metres is the reference (492ft). However the airspace is eventually split up we would only ever activate the bit that was required, or several bits, and to a height / altitude required. It would be unlikely that any flight departing the airfield would be at less than 1,000ft above ground level (agl).

The section on the East side is unlikely to be used often, however, it is really important to us for the future as a different environment to demonstrate safe flying over high ground and inland lowland areas. This would only be with aircraft that were proven and flying over any town or village would be avoided.

The mitigation against flight east of Llanbedr airfield would include:

- a) Very low frequency of use
- b) It would be exceptional for an aircraft to be less than 1,000ft agl
- c) CAA Operational Safety Case approval
- d) Avoidance of overflight of built up areas
- e) Maintenance of at least the minimum regulation distances from people and buildings
- f) Additional 'avoidance areas' to be agreed with the Community and Individuals



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