



ACP-2021-030
Radnor BVLOS TDA

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Abbreviations

Abbreviation	Meaning
ACP	Airspace Change Proposal or Airspace Change Portal
AGL	Above Ground Level
AMSL	Above Mean Sea Level
ATPL(A)	Air Transport Pilot's Licence (Aeroplane)
ATPL(H)	Air Transport Pilot's Licence (Helicopter)
ATSU	Air Traffic Service Unit
ATZ	Aerodrome Traffic Zone
BOCAS	Base of Controlled Airspace
BVLOS	Beyond Visual Line of Sight
CAA	Civil Aviation Authority
CADS	Centralised Aviation Data System
CUAS	Counter Unmanned Aerial System
DAAIS	Danger Area Activity Information Service
DACS	Danger Area Crossing Service
EOP	Emergency Operating Procedure
EVLOS	Extended Visual Line of Sight
GA	General Aviation
LoA	Letter of Agreement
MESA	Minimum Enroute Safety Altitude
NATMAC	National Air Traffic Management Advisory Committee
NOTAM	Notice to Airmen
OEM	Original Equipment Manufacturer
SA	Situational Awareness
SoN	Statement of Need
TDA	Temporary Danger Area
UAS	Unmanned Aerial System

Section One - Introduction

The Sponsor

ACP-2021-030 is sponsored by Nexus Nine Ltd. The Sponsor has a history of safely operating UAS within the Radnor site and more widely in the UK. The Sponsor operates both fixed and multi-rotor platforms, exclusively in the sub-25 kg category. Nexus Nine was granted Enhanced Permissions by the CAA in October 2020 which includes reduced separation, increased height, EVLOS and BVLOS permissions. The cadre of personnel at Nexus Nine includes former CAA UAS Inspectors, active ATPL(A) and ATPL(H) holders, flying instructors, GA operators and certified test & evaluation personnel.

The Need

The sponsor is seeking segregated airspace via a TDA to conduct BVLOS UAS operations from its test site at Radnor. An initial application for a TDA was submitted on 5 April 2021.

The application SoN is as follows:

“The Sponsor intends to conduct both BVLOS training and ██████████ test and evaluation activity in and around the area of Radnor Range. Due to the substantial terrain within the range complex and its surrounding area it is necessary to conduct a series of test flights to establish operating ranges and heights for a variety of UAS platforms. This is coupled with the identification of potential locations to site signal rebroadcast stations, thus ensuring signal continuity. Whilst initial testing can utilise EVLOS mitigations, the operating ranges, scale and type of terrain within the intended area make it impractical for all analysis. The results of this short testing period, scheduled to begin in October 2021 for up to 90 days, will inform a subsequent application for Trial Airspace and a potential permanent airspace change request within the same locality.

Whilst airspace use will be kept to a minimum, a suitable means of segregating these BVLOS UAS tests from other air users is required to mitigate against the risk of mid-air collision.”

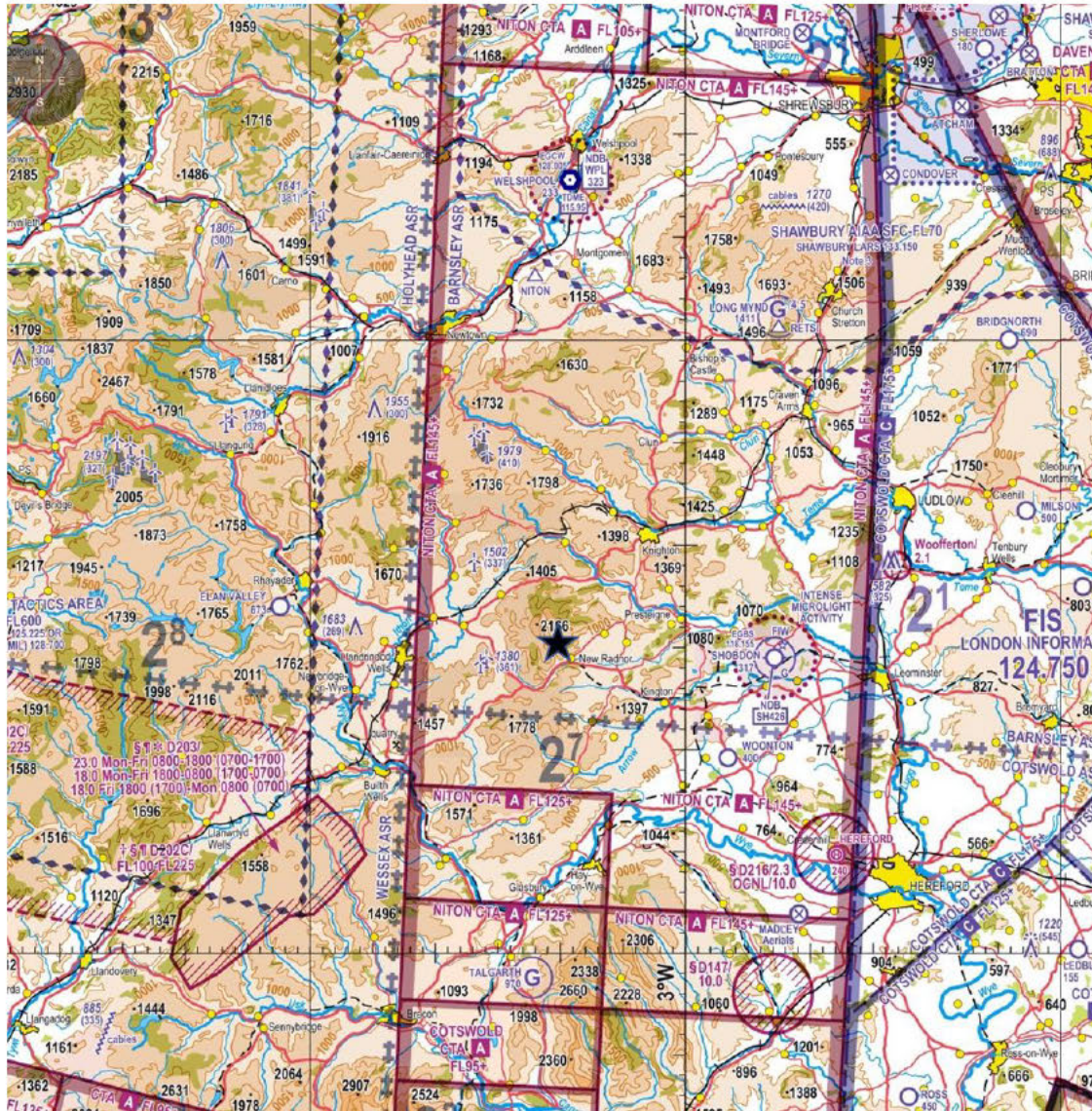
Due to a delay in case assignment it was noted that the proposed October 2021 timeline was unachievable; the Sponsor amended this to follow on from a concurrent ACP. An initial assessment meeting was conducted on 5th July 2021 where the CAA deemed that the SoN did meet the requirements of the CAP 1616 process and was suitable to proceed to the next stage. The requirements of the Targeted Engagement were outlined to the Sponsor by various section representatives from the CAA.

The Location – Radnor Range, New Radnor, Radnorshire

Radnor Range originally opened as a test facility in the 1920s where it has a long history of conducting munitions and rocket motor evaluations. The current owners, Radnor Range Limited, took over in 2006 continuing its vital work within the explosives test arena. The Sponsor has conducted UAS operations out of the Radnor site for approximately 18 months, having identified its potential for both UAS training and for test and evaluation of CUAS systems.

Radnor Range sits within a Y-shaped valley, surrounded by terrain of approximately 1100' above the valley floor, in rural East Wales. The A44 provides access to Radnor Range and lies 1nm immediately South of the Range. The nearest hamlet is that of

New Radnor 1.25nm to the South-East, with the nearest significant urban area being the town of Kington 6nm South-East.
 Radnor Range is located in Class G airspace with the nearest airfields being Shobdon some 11nm to the East and Welshpool 22nm North; BOCAS above Radnor is at FL145.

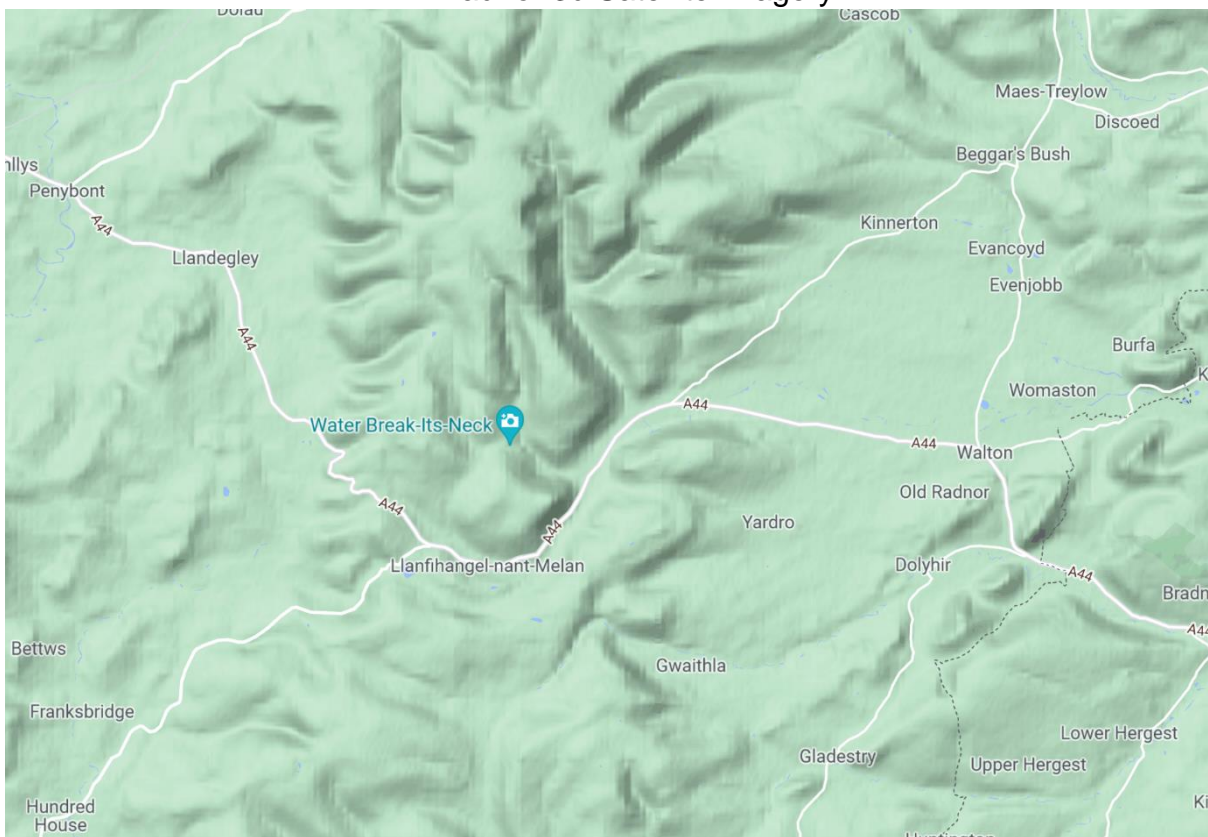


Initial Proposal

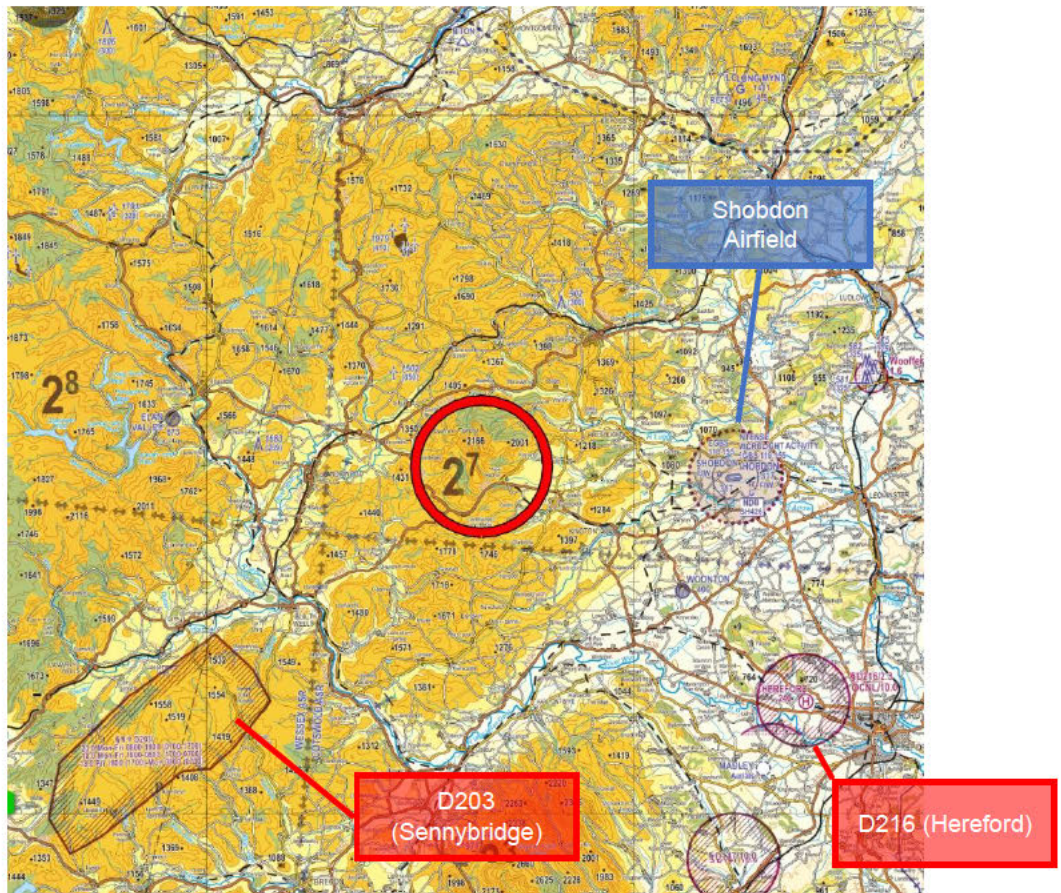
The Sponsor initially proposed a 3nm TDA centred on Radnor Range (N52°14.89 W003°10.77), active from the surface to 3500' AMSL. Whilst the TDA would be valid in the AIP for 90 days, the Sponsor plans on using it for approximately 18 of those 90 days. The TDA would be activated by NOTAM. A map of the proposed TDA and its proximity to surrounding airspace is given below. The TDA sits under controlled airspace (base FL145). Nearest lateral airspace is that of Shobdon's ATZ 11nm East and Sennybridge Danger Area (D203) 13nm South-West.



Radnor 3d Satellite Imagery



Radnor Local Area



Radnor Initial Proposed TDA & Surrounding Airspace

Section Two – Targeted Engagement Strategy

Aviation Stakeholders

Both national and local Stakeholders were approached as part of the Sponsor's Targeted Engagement strategy. The CAA's NATMAC list was used to identify a number of national organisations that would reflect the variety of aviation users within the area. This was coupled with a more local approach encompassing 2 civilian airfields and a military helicopter base located nearby.

The Sponsor submitted a proposed list of targeted Stakeholders to the CAA Engagement Team to seek guidance on their suitability. At their suggestion a number of additional Stakeholders were included to a total of 18 aviation representatives.

The initial list of contacted Stakeholders is as follows:

Stakeholder	Type
658 Sqn, Army Air Corps	Local
Aircraft Owners & Pilots Association	National
Airspace4All	National
Babcock Mission Critical Services Onshore (HEMS)	National
British Helicopter Association	National
Cardiff Airport	Local
General Aviation Alliance	National
Heliair (Pipeline patrol)	National
Helicentre (Pipeline)	National
Maritime & Coastguard Agency	National
Ministry of Defence DAATM	National
National Grid (Powerline)	National
National Police Air Service	National
National Air Traffic Service	National
PDG Helicopters (Railtrack patrol)	National
Shobdon Airfield	Local
Specialist Air Services (HEMS and Children's Air Ambulance)	National
Western Power (Powerline)	National

It should be noted that for those national Stakeholders, concurrent engagement was conducted in support of ACP-2021-029 (Moreton-In-Marsh BVLOS UAS TDA). This was to minimise the burden of providing feedback to 2 separate, yet similar, ACPs on 2 different occasions. This was well received by those busy national organisations.

The Sponsor also received a number of enquiries via the CAA Airspace Portal. Each enquiry was added to our record of Stakeholders and their thoughts regarding this ACP were discussed. All feedback received is included in our submission.

Local Community Stakeholders

Local community engagement is not a requirement under the CAP 1616 Targeted Engagement. However, the Sponsor thought it important to include the local community surrounding Radnor to advise them of the potential for UAS activities and

address any concerns they might have as a result of the ACP. Radnor Range Ltd have a good working relationship with the local community, hence the Sponsor was keen to maintain this with good communication. Consequently, the Parish Council of New Radnor was contacted for their thoughts. Due to the scheduling of Council meetings, the Sponsor extended the feedback period to facilitate New Radnor's input; their feedback is included in our submission.

Engagement Period

The Sponsor elected to complete an 8-week continuous Engagement Period from 16th August to 10th October 2021. The Sponsor believed this duration of engagement was proportionate to the nature of the ACP and was sufficient to allow all potential Stakeholders to have the opportunity to respond. This period also allowed the Sponsor to undertake meaningful, in-depth engagement, so Stakeholders' thoughts could shape the final submission for this ACP.

All engagement materials were distributed via publicised email addresses on either the NATMAC Distribution List or respective organisation websites. An example of the engagement material can be found at Appendix A; for local community Stakeholders the proposal was explained in a more appropriate, less aviation-orientated manner. For those organisations that had not responded by 13th September 2021 (approximately halfway through the Engagement Period), a hastener was sent out encouraging engagement.

Airspace Change Portal

Initial documentation was uploaded to the Airspace Change Portal prior to commencing the Engagement Period. Due to a technical difficulty, the Sponsor did not upload a copy of the Stakeholder Engagement Letter until 31st July 2021, approximately 2 weeks into the Engagement Period. However, with 6 weeks still remaining of the Engagement Period, the Sponsor did not feel that Stakeholders were denied the opportunity to reply using the portal; indeed, many did use this method across both ACPs.

One Stakeholder requested that a copy of the presentation given at the Assessment Meeting was uploaded to the Portal. This was not originally uploaded by the Sponsor as they believed it would cause confusion to Stakeholders. Such confusion related to the presentation referencing up to 3 sequential ACPs for the Radnor location as part of a medium-term plan that the Sponsor outlined to the CAA.

Nonetheless, and although not mandated, in the interests of transparency the redacted presentation was uploaded on 26 September 2021 (2 days after the request) and with 15 days of the Engagement Period remaining. The Sponsor would wish to highlight that all relevant information regarding this ACP was contained within the original Stakeholder Engagement Letter and the CAA approved Assessment Meeting minutes.

A redacted version of this Final Airspace Submission will be uploaded to the Airspace Change Portal once it has been submitted to the CAA. Names and contact details of Stakeholders will be protected.

Feedback

A feedback form was included at the end of the Stakeholder Engagement Letter. Whilst some Stakeholders utilised this form, others chose to write their feedback in email form. All engagement replies were collated for inclusion into this report.

Feedback has been categorised by the typical groups who replied to the Sponsor. This aims to provide generalised thoughts and concerns from each representative group, thus ensuring a balanced view.

Sponsor Engagement

The Sponsor very much saw the Targeted Engagement as a two-way process. Some Stakeholders contacted by the Sponsor had no concerns with the ACP; others had taken the time to detail a number of issues the ACP presented for their organisation and/or the wider aviation community.

The Sponsor endeavoured to fully understand these issues and suggest suitable mitigations to alleviate some of the drawbacks this ACP might bring alongside planning considerations already made by the Sponsor. Indeed, as can be seen from the final ACP design, the Sponsor has endeavoured to show flexibility and, to some degree has compromised their capability, in order to minimise disruption to other aviation users. It was however, clear that compromises could not be met with all Stakeholders. Notwithstanding this, the Sponsor wishes to thank all respondents to this ACP for their invaluable input into the process.

Section 3 – Summary of Feedback

Introduction

This section seeks to categorise the different Stakeholders consulted and give generalised feedback of the concerns and issues that the Stakeholder raised with respect to ACP-2021-030. Whilst all feedback received from every Stakeholder is enclosed at Appendix B, the Sponsor has identified consistent themes or flight safety related issues that it feels should be raised within each Stakeholder group.

The Sponsor will demonstrate solutions or proposed mitigations to the Stakeholder concerns as well as detail agreements that will be put into place, should this ACP be approved.

Measuring Feedback

A measure of the impact of this ACP can come from the volume of responses. Notwithstanding this, the Sponsor has endeavoured to understand the consequence of this ACP on those airspace users. The Sponsor is in no doubt, any additional airspace will have a detrimental affect on the freedoms of all Stakeholders. In measuring the impact of this ACP on each Stakeholder group the Sponsor seeks to address 2 criteria:

1. Does this ACP create unreasonable disruption to the Stakeholder?

And perhaps more crucially,

2. Does this ACP present an unacceptable Flight Safety risk to the Stakeholder?

Stakeholders

Emergency Services

Stakeholder	Contact Means	Stakeholder Responded
██████████ HEMS Babcock	Direct	Yes
██████████ HEMS Specialist Air Services	Direct	Yes
██████████ National Police Air Service	Direct	Yes
██████████ Maritime & Coastguard Agency	Direct	Yes

Method of Engagement

Initially via email, with some telephone conversations with HEMS Babcock to facilitate understanding of the operating procedures of their aircraft and onboard mission capabilities. A record of telephone decisions was formalised in a subsequent email to ensure a full record is maintained.

Both Specialist Air Services and the Maritime & Coastguard Agency confirmed that there would be no impact on their operations; their confirmatory emails are at Appendix B.

Key Issues

1. Access to the TDA in the event of a HEMS tasking
2. Access to the TDA in the event of an NPAS tasking

Sponsor Response

1. The Sponsor has agreed, with HEMS Babcock, a robust system for requesting access to the TDA, the cessation of UAS operations, clearance into the area and reestablishment of the TDA post HEMS operations. This process involves the HEMS Air Desk contacting the published operator's contact mobile/satellite phone to coordinate access. This process will be formalised into an LoA to ensure all parties understand their responsibilities.
2. NPAS aircraft are equipped with onboard communication systems that will enable them to call the designated operator mobile/satellite phone directly. UAS activity will cease until the NPAS tasking has been completed and the aircraft has departed the area. This process will be formalised into an LoA to ensure all parties understand their responsibilities.

Disruption to the Stakeholders

Due to the remote location and low population density of the Radnor site, it is exceptionally unlikely that a tasking will occur in this locality. Given the distances emergency services aircraft must transit to get to the TDA, the Sponsor assesses there will be ample time for the co-ordinated cessation of UAS activity. The nearest aviation asset is the Air Ambulance located at Welshpool, with an approximate 10-minute transit time to Radnor. The Sponsor estimates that it would take 6 minutes to recover a UAS from the furthest extremity of a 3nm TDA. Consequently, little or no delay is anticipated for emergency service aircraft accessing the TDA.

At a maximum of 3nm radius, the TDA may require emergency service aircraft to route around the TDA if transiting to a tasking. At 120kt cruise speeds it is calculated that routing around the TDA will add 90 seconds to transit times over a direct routing.

Mitigations:

1. LoAs with Babcock HEMS and NPAS to clarify procedures for accessing TDA.
2. Detail of procedure available to HEMS Air Desk and Remote Pilot.
3. Provision of a DAAIS to aid awareness for HEMS/NPAS task planning.

Flight Safety risk to the Stakeholders

The Sponsor has agreed a robust means of segregating UAS activity from emergency service aircraft. A clear LoA between the Sponsor and emergency service operators will ensure that all parties understand their responsibilities to allow swift, yet safe access to the TDA. Outside the TDA, there is 5nm of lateral separation between the eastern edge of the TDA and Shobdon Airfield, and 10nm separation between the south-western edge of the TDA and Sennybridge Danger Area (D203). The sponsor believes these lateral distances allow suitable separation, thus there is no significant increase in risk of mid-air collision with local traffic.

HEMS and NPAS crews have onboard electronic flight bags with the ability to interrogate the NOTAM system whilst airborne, thus minimising the risk of

inadvertently infringing the TDA. Sponsor EOPs detail actions required in the event of an airspace infringement.

National Air Traffic Services

Stakeholder	Contact Means	Stakeholder Responded
National Air Traffic Services	Direct	Yes

Method of Engagement

All communication via email from NATMAC contact list. A hastener was sent to the Stakeholder on 13th September 2021, but no response was received. Notwithstanding this, the Sponsor also contacted London Information by email with respect to the provision of a DAAIS for the proposed TDA; their response is at Appendix B.

Key Issues

1. Provision of a DAAIS.

Sponsor Response

1. London Information has agreed to provide a DAAIS for the proposed TDA. A NOTAM must also be submitted by the Sponsor.

Disruption to the Stakeholders

No impact envisaged.

Flight Safety risk to the Stakeholders

No impact envisaged.

Ministry of Defence

Stakeholder	Contact Means	Stakeholder Responded
Sqn Ldr █████ SO2 Airspace Strategy, DAATM	Direct	Yes
Sqn Ldr █████ SATCO, RAF Benson	Direct	Yes
Training Officer, 658 Sqn Army Air Corps	Direct	Yes

Method of Engagement

Initial Stakeholder Engagement email to DAATM with additional discussion raised as part of ACP-2021-029 (Moreton-In-Marsh) by SATCO, RAF Brize Norton. Consequently SATCO, RAF Benson requested clarification regarding co-ordination with National Standby crews. The Training Officer at 658 Sqn was initially contacted by telephone (9 Sep 21), due to an ongoing relationship they already have with Radnor Range Ltd. The ACP was

discussed with no issues raised; the Training Officer requested a copy of the Engagement Letter which was emailed to him. No further correspondence was received from 658 Sqn.

Key Issues

1. Access to the TDA in the event of a National Standby or operational tasking

Sponsor Response

1. As can be seen from the email trail, the MoD is content with a general principle to route around the proposed TDA in most instances. It is exceptionally unlikely that a National Standby or operational tasking will require access within the TDA. Notwithstanding this, if required, the MoD will contact the on-site pilot via the published mobile/satellite number to arrange the collapse of the TDA, much in the same way as the emergency services.

Disruption level to the Stakeholders

658 Sqn, AAC already have an active working relationship with Radnor Range Ltd with established lines of communication. Particularly, given the distance from National Standby aircraft bases, it is assessed that routing changes around the TDA will cause negligible disruption. Similarly, for access to the TDA, helicopters will have ample opportunity for the TDA to be collapsed prior to their arrival.

Flight Safety risk to the Stakeholders

The Sponsor believes that with the low density of MoD traffic operating in this locality there is no significant additional flight safety risk regarding this ACP. MoD aircraft already deconflict from emergency services and other military users utilising the CADS online system enabling them to identify other low-level aviation users. The MoD do not typically operate in the same height band as GA, but nonetheless have ample lateral separation to deconflict if required.

Commercial Operators

Stakeholder	Contact Means	Stakeholder Responded
██████████ Heli Air Limited	Direct	Yes
██████████ Heli Centre Pipeline Inspections	Direct	Yes
██████████ National Grid	Direct	Yes
██████████ PDG Helicopters (Railtrack Patrol)	Direct	No
██████████ Western Power	Direct	No

Method of Engagement

All communication via email; there were few issues with the Stakeholders that replied, hence engagement was relatively brief. A hastener was sent to the 2 non-respondents on 13th September 2021, but no response was received.

Key Issues

1. None identified.

Sponsor Response

1. None required.

Disruption level to the Stakeholders

No pipeline or high voltage assets in this location.

Flight Safety risk to the Stakeholders

Stakeholders are unlikely to even transit through this geographical area.

Local Airfields

Stakeholder	Contact Means	Stakeholder Responded
██████████ Operations Manager, Shobdon Airfield	Direct	Indirect
██████████ Senior Air Traffic Control Officer, Cardiff Airport	Direct	Yes

Method of Engagement

All communication via email. Whilst no formal feedback was received from Shobdon Airfield, the Sponsor believes some GA operators from the site contacted us as a result of the dissemination of information by the airfield. Such correspondence has been associated to their respective GA organisations later in this report. As can be seen from dialogue with Cardiff Airport, whilst initially contacted to evaluate the potential impact for their operations, the Sponsor additionally approached them to request they consider the feasibility of providing a DAAIS for the TDA.

Key Issues

1. Provision of DAAIS.

Sponsor Response

1. It was agreed that Cardiff would be unable to provide a suitable DAAIS. Due to the distances involved, intermediate terrain and limitations of their communications and radar systems the Sponsor agreed to find an alternative DAAIS provider.

Disruption level to the Stakeholders

No issues raised by Shobdon and sufficiently displaced from Cardiff as to not affect their operations.

Flight Safety risk to the Stakeholders

Shobdon-based traffic will likely be in contact with Shobdon Radio or may contact London Information as the DAAIS provider. Either ATSU will provide SA as to other traffic operating in the locality.

National General Aviation Bodies

Stakeholder	Contact Means	Stakeholder Responded
████████ Aircraft Owners & Pilots Association	Direct	Yes
████████ British Helicopter Association	Direct	Yes
████████ Airspace4All	Direct	No
████████ General Aviation Alliance	Direct	Yes
████████ British Gliding Association	ACP Portal	Yes

Method of Engagement

Initially, 4 national aviation bodies were contacted by email. Replies were received from 2 of the organisations. A hastener was sent on 13th September 2021 to bodies who had, as yet, not responded. Unfortunately, the Sponsor was unable to fully reply to one Stakeholder due to the Engagement Period ending.

A video conference was held between AOPA, a local Stakeholder and the Sponsor to discuss issues with ACP-2021-029. The Sponsor took this opportunity to equally seek feedback from AOPA as to their stance regarding ACP-2021-030. No concerns were raised by AOPA regarding this ACP.

As a result of seeing the ACP on the CAA's ACP Portal, the British Gliding Association (BGA) contacted the Sponsor directly by email.

Key Issues

1. Alleged breach of CAP 1616 - Delayed upload of Assessment Meeting Presentation. The GAA highlight that the Assessment Meeting supporting presentation was not uploaded by the Sponsor until 26 September 2021.
2. Alleged breach of CAP 1616 – The contents of the Assessment Meeting presentation differ significantly from the ACP.

Sponsor Response

1. The Sponsor's adherence to CAP1616 will be determined by the Regulator.

Disruption level to the Stakeholders

Whilst the TDA may cause some disruption to Stakeholders, it is anticipated that the estimated 5% utility of this TDA, combined with the design changes outlined in Section 5, will significantly reduce this.

Flight Safety risk to the Stakeholders

No Flight Safety risks were identified as a result of engagement with National GA Body representatives.

Local General Aviation Users

Stakeholder	Contact Means	Stakeholder Responded
██████████ Herefordshire Gliding Club	Indirect	Yes
██████████ British Hang Gliding & Paragliding Association	ACP Portal	Yes
██████████ British Microlight Aircraft Association	ACP Portal	Yes
██████████	Unknown	Yes
██████████ Glider Pilot	Unknown	Yes
██████████ GA Pilot	ACP Portal	Yes

Method of Engagement

All engagement with the above Stakeholders was conducted via email. As can be seen above, a number of users utilised the CAA ACP Portal as a means of contacting the Sponsor regarding this ACP.

All Stakeholder engagement received within the Engagement Period has been included at Appendix B. Unfortunately, due to some queries being received in the final couple of days, the Sponsor was unable to reply before the Engagement Period closed.

Key Issues

1. Impact on recreational users. A number of Stakeholders raised concerns at how the TDA might impact their operating areas and was seen as an airspace 'grab'.
2. Concerns over electromagnetic effects for Stakeholders operating near the TDA.
3. Lack of engagement with some Stakeholder groups. Some Stakeholders felt that the Sponsor should have engaged more widely for this ACP.
4. Alternative locations are available. Stakeholders identified that other areas are available for UAS test, such as Llanbedr, where they viewed this activity could be conducted.
5. Typographical errors in Stakeholder Engagement Letter. Stakeholders identified that Moreton-In-Marsh had been incorrectly inserted into a piece of documentation.
6. Alleged breach of CAP 1616 - Delayed upload of Assessment Meeting Presentation. The GAA highlight that the Assessment Meeting supporting presentation was not uploaded by the Sponsor until 26 September 2021.
7. Provision of a DAAIS.
8. Alleged breach of CAP 1616 - Delayed upload of Stakeholder Engagement Letter. Some Stakeholders felt the upload of the Stakeholder Engagement

Letter to the ACP Portal on 31st August 2021 had reduced the length of the Stakeholder Engagement Period to 6 weeks.

Sponsor Response

1. The Sponsor acknowledges that any introduction of additional airspace will have an impact on Stakeholders. The TDA has planned activity of 18 days (out of a possible 90) will not cause significant disruption in this rural location. This impact is further reduced by the TDA being planned in winter months when GA activity is at its annual seasonal low. Nonetheless, the Sponsor has amended the TDA design to further reduce the impact for airspace users during its short periods of activity. Details of the revised design can be found in Section 5.
2. The Sponsor clarified that there would be no electromagnetic effects as a result of UAS activity in the proposed TDA.
3. As outlined to the Regulator, the Sponsor has somewhat unique requirements for some of their business activities. These make other, commercially available sites unsuitable due to their geography, safety aspects, suitability as test sites and availability.
4. The Sponsor accepts these comments as fair and accurate. We apologise for the location error used once in the Stakeholder Engagement Letter.
5. Although not confirmed at the time of engagement, a DAAIS provider (London Information) has been secured for this proposed TDA.
6. The Sponsor's adherence to CAP1616 will be determined by the Regulator.

Disruption level to the Stakeholders

The Sponsor is cognisant that an element of disruption would be caused to Stakeholders as a result of this TDA. The Sponsor is committed to accurate and timely issuing of NOTAMs to ensure the airspace is available to other air users outside planned times of operation. The Sponsor is more than happy to work with local Stakeholders to deconflict, where possible, with significant sporting competitions.

Mitigations:

1. Low TDA usage. With only 18 of a possible 90 days of activity planned for the TDA, this amounts to 20% utility. During this period the Sponsor will responsibly schedule activity via the NOTAM system to ensure that within those periods the airspace is utilised and disruption is not unnecessarily caused. Accounting for a daily schedule, the Sponsor estimates utility of the TDA will be approximately 5% within the 90-day window.
2. Provision of a DAAIS. London Information have agreed to provide a DAAIS, should the TDA be approved. This will enable timely and accurate information to be available to Stakeholders. This will be coupled with a contact telephone number available during periods of operation; this will be published via the NOTAM.
3. Amending the TDA design. Having understood the concerns of some Stakeholders, the Sponsor has created a more flexible design of TDA. This

will enable the Sponsor to meet their test objectives, but moreover, further reduce the impact on other air users. Details of the amendments can be found in Section 5.

- Continued Stakeholder Engagement. The Sponsor will publish activity as far in advance as practical, but also would welcome the chance to engage with organisations such as the BHPA, BMAA and Herefordshire Gliding Club. This may enable the timely deconfliction of planned GA events.

Flight Safety risk to the Stakeholders

Whilst there are a number of local Stakeholders within the Radnor area, this remains a relatively low-density area of aviation activity. The Sponsor believes there is adequate lateral separation from features such as Shobdon Airfield, D203 and D216. The nature of the hilly/mountainous terrain in this location also leads transiting GA to utilise altitudes of approximately 3500', thus requiring a good VFR day to transit the area.

Community Engagement

Stakeholder	Contact Means	Stakeholder Responded
New Radnor Parish Council	Direct	Yes

Method of Engagement

Radnor Range Ltd sits within a largely rural area. The only habitation of notable size within the bounds of the proposed TDA is the village of New Radnor. The Sponsor approached the Clerk to New Radnor Parish Council to understand any potential impacts on the local community. Due to Parish Council meeting schedules, the next available opportunity for discussion of our proposal was outside the Engagement Period. The Stakeholder requested to submit a response on 15th October 2021 which the Sponsor gratefully accepted.

Key Issues

- None identified.

Sponsor Response

- None required.

Disruption level to the Stakeholders

No issues raised by the Parish Council. The Sponsor also highlights that flight near the village of New Radnor would be avoided in any instance.

Flight Safety risk to the Stakeholders

Not applicable.

Section 4 – Other Considerations

Environmental Impact

Under the requirements of CAP 1616 the Sponsor is required to make a noise impact assessment as a result of operations within the proposed TDA. Other environmental factors such as CO² emissions, local air quality and tranquillity are not required in this strand of the CAP 1616 process.

Drone Flyover Noise Exposure

The Sponsor intends to operate a variety of both fixed and multi-rotor platforms within the TDA at a variety of heights. Rather than assessing the implications of each platform the sponsor has taken the data provided by the CAA with relation to drone flyover noise exposure and applied it to our platform that is deemed to be the loudest. Whilst specific data is not available for each individual platform, the Sponsor believes the data available is comparable to that of our Vulcan Raven Octocopter, which is of similar dimensions and weight.

The formulas for Noise Exposure (L_{Aeq16h}) and Sound Exposure Level (SEL_{avg}) is given by:

$$L_{Aeq16h} = SEL_{avg} + 10 \times \log_{10} N - 47.6$$

Where SEL is the average Sound Exposure Level for operations between 0700-2300
N is number of operations between 0700 and 2300.

$$SEL = L_{ASmax} + (2.4 + 0.03897 \times height - 0.0000541 \times height^2)$$

Our Vulcan Raven has a L_{ASmax} of 64.1 at 400 feet. Whilst we might reasonably expect to conduct 20 sorties within a day, it should be noted that these will not all be conducted by this larger platform, nor will they all be conducted in the same direction. The Sponsor has, therefore, adjusted the flyover events to a reasonable worst case average of 8 events per day to reflect this ability to both 'spread' the operating area and fly quieter platforms. Our calculated L_{Aeq16h} at 400' operating height is therefore:

$$L_{Aeq16h} = 64.1 + (2.4 + 0.03897 \times 400 - 0.0000541 \times 400^2) + 10 \times \log_{10} 8 - 47.6$$

$$L_{Aeq16h} = 34.86 \text{ dB}$$

Furthermore, since the Sponsor intends to fly the platforms BVLOS, it is reasonable to expect operating heights to regularly be in excess of 400'. Consequently, an adjusted SEL value is:

$$SEL = L_{ASmax} + 10 = 64.1 + 10 = 74.1$$

$$\text{Therefore } L_{Aeq16h} = 35.53 \text{ dB}$$

Since the Sponsor will be operating multi-rotor platforms a +10 dB tonal adjustment must be made.

$$L_{Aeq16h} = 45.53 \text{ dB}$$

With a calculated Sound Exposure Level (SEL) for a single event at 74.1 dB this is equivalent to that of a vacuum cleaner when directly overflying at 400 feet. The averaged noise exposure level of 45.53 dB equates to a suburban area at night when directly overflown at 400 feet.

Flying Neighbourly

Radnor is a long-established munitions testing site with explosives regularly being tested on site. Consequently, the local population is used to the noise that such tests bring. The Sponsor assesses that the impact of drone operations is likely to be less intrusive than the ongoing munitions testing.

Notwithstanding this, the Sponsor will set up and publicise, an email address for the local population to be able to feedback to the Sponsor any adverse effects of the UAS activities. This will enable the Sponsor to consider planning around particularly sensitive areas, whilst still achieving the aims of the TDA.

Notwithstanding the calculated figures above, the Sponsor has no specific requirement to fly close to any areas of habitation, livestock or infrastructure. The Sponsor intends to conduct operations over open space, away from people, with the aim to cause least nuisance to the local population. Given Radnor's rural location, this is assessed to be easily achievable. Nonetheless, at Appendix F the Sponsor has identified both small areas of habitation and isolated dwellings within the proposed 3nm TDA. Where transits close to dwellings are not avoidable it is the intention of the Sponsor to reduce the SEL to the recommended CAA level of 65 dB. This will be achieved by increasing either lateral or vertical separation from the dwelling, or a combination of both. By utilising the inverse square law for noise dissipation, doubling the displacement from the dwelling the SEL is reduced by 6 dB. Consequently the Sponsor will reduce SEL levels to below 65 dB by utilising the lateral and/or vertical displacements shown below:

Vertical Separation		Lateral Separation		SEL (dB)
Feet	Metres	Feet	Metres	
1200	365	0	0	64.6
1000	305	664	203	64.6
800	244	895	273	64.6
600	183	1040	317	64.6
400	122	1132	345	64.6
200	61	1184	361	64.6
0	0	1200	365	64.6

A diagram representing how this is achieved is shown at Appendix F. It should be noted that these are reasonable worst case scenarios with our loudest platform in still wind conditions. Consideration will be given to reducing these distances commensurate with the noise footprint of smaller (quieter) platforms.

Effect on Transiting Aircraft

CAP 1616 also requires an assessment on the noise effect of transiting aircraft having to route around the TDA, therefore causing choke points to develop with associated increases in noise. In order to assess this, the Sponsor conducted a Traffic Flow Study. Flying windows on weekdays between the hours of 0900 and 1700 were examined (likely UAS operating times). This aimed to assess how many aircraft would have infringed the proposed TDA on a given day, in given weather conditions. It therefore follows that if the TDA were approved, then a similar number of aircraft would have to route around the TDA, thus causing disruption to the aircraft and associated noise to the local population. The Sponsor used the historical trace feature of the Flightradar 24 package to conduct this analysis. This uses transponder traces to identify aircraft positions and altitudes at any given time. Whilst not all aircraft might be fitted with a transponder, the Sponsor believes this is a fair representation of aviation patterns for transiting powered aircraft and many gliders. The Sponsor elected to conduct this study based in September 2021; this was for a number of reasons:

1. Higher volumes of GA activity. Being in the summer months, the Sponsor assesses that more traffic would be airborne, when compared to the proposed TDA timings in the winter of 2021/22. This gives a reasonable, worst-case scenario.
2. Reduced effect of lockdown. With many restrictions still in place due to Covid 19 during the winter of 2020/21, the Sponsor felt this would give an unrepresentative view of traffic patterns if analysis were conducted during this time period. Consequently, by using the summer of 2021, a better representation could be achieved.
3. Better weather. The terrain around Radnor sits up to 2200' AMSL, requiring aviators to have good weather conditions to operate in the area – thus biasing towards the summer. Traffic modelling without the restrictions of winter cloud, visibility and icing conditions provided a better representation of aviation activity.

Two dates in September 2021 were chosen. One was chosen for good weather conditions that would not have hindered aviation. Crucially, good weather would mean that aircraft would have been able to transit above the TDA (3500' AMSL) if they had chosen to. This gives an indication as to whether the TDA would affect normal traffic flow.

A second date was chosen when cloud bases would have likely prevented VFR traffic from transiting above the TDA, yet would have allowed legal VFR transit above

500' AGL. Consequently, traffic modelled here would have to route around the TDA if it were in place, with associated disruption and noise impact.

Dates were chosen as the first dates in September that met the above criteria. With no historical local weather available at Shobdon or Welshpool, historical data for Cardiff Airport, some 50nm South of Radnor, was utilised. This is the nearest suitable location and sits on a similar longitude. The Sponsor does acknowledge that the terrain may have an impact on local weather conditions but does not envisage this unduly skewing results.

The results of the study are shown below:

Good Weather Day – Tues 7th September 2021

Time	Callsign	Type	Flight Level
1429	GBHAA	C152	030
1449	GAVOZ	PA28	030

Total affected traffic in 8-hour window: 2

Moderate Weather Day – Weds 1st September 2021

Time	Callsign	Type	Flight Level
1301	VYT779	Texan	FL007
1316	VYT72	Texan	FL008
1509	VYT77	Texan	FL011

Total affected traffic in 8-hour window: 3

Based on the results of this study the Sponsor assesses that there would be a negligible impact on both disruptions to transiting traffic and additional noise footprint for local residents.

DACS Vs DAAIS

In addition to the Sponsor's views, a number of Stakeholders raised the question as to whether a DACS would be provided for TDA applications. It had been raised by the CAA Case Officer that other TDAs seeking to employ a DACS had encountered difficulties, which in turn disrupted aviation users as they found they were unable to cross TDAs, despite the DACS provision. The Sponsor investigated the requirements of a DACS in terms of infrastructure (especially given the terrain for antennas), training, likelihood of infringement and, most importantly risk of collision with UAS. It is the Sponsor's firm view that, for a TDA only likely to be active for 18 days and 6nm in diameter, that the provision of a DACS is not warranted. The Sponsor believes that the relatively open airspace offers ample space for transiting traffic to route around the TDA with minimal disruption. This is reinforced by the requirement, should a DACS be offered, for the Sponsor to recover their UAS and collapse the TDA prior to aircraft crossing the airspace. The Sponsor believes this

TDA collapse process would cause a greater delay to other aviation users than simply routing around. Additional risks for reinstating the TDA post-crossing do not meet the reward for this short duration ACP, in the Sponsor's view.

The Sponsor investigated a number of locations for the provision of a DAAIS. Shobdon was ruled out due to terrain masking of radio signals on the Western side of the TDA and their operating hours. Cardiff, whilst having a rebroadcast antenna, has poor radar coverage north of the Brecon Beacons making it unsuitable. After discussions, an agreement was reached with London Information for the provision of a DAAIS for the TDA.

Section 5 – Final Proposal Design

Overview

The purpose of this TDA is to enable the Sponsor to test and evaluate the performance and operating ranges of each of its platforms in the BVLOS environment. With most platforms operating up to 10km (5.4nm) the Sponsor believes a maximum radius TDA of 3nm is reasonable and allows a full understanding of platform capabilities.

The Sponsor has endeavoured to responsibly and respectfully understand the concerns and impact for all Stakeholders when submitting their final design. It is clear that procedures must be put into place to ensure all Emergency Services aircraft can have unhindered access to the TDA as swiftly as possible. Moreover, the frequent local GA user community should not be disrupted any more than is reasonable during this short-duration ACP. The Sponsor has taken on board feedback from both this ACP alongside meaningful engagement suggestions from ACP-2021-029 (Moreton-In-Marsh), with the aim of minimising disruption.

TDA Dimensions

The Sponsor proposes two concentric TDAs of differing radius; one at 1.5nm and one at 3nm. The 3nm radius allows the Sponsor to test their platforms at suitable range to understand their operating capabilities in the environment. However, some testing will only require shorter range operations. By utilising two different radii, the Sponsor is able to keep as much airspace free for the GA community as possible, activating the larger of the two TDAs only when required. The Sponsor believes the risk of lateral airspace incursion, due to confusion of TDA radius, is outweighed by the reduced impact to airspace users. The severity of an airspace incursion is also mitigated by the Sponsor's CAA approved Operating Safety Case.

Each TDA would still have a ceiling of 3500' due to surrounding terrain. This also reduces the likelihood of confusion for other airspace users around the two TDA parameters.

Validity and Activation

Whilst the TDAs would be valid in the AIP for 90 days, the Sponsor plans on using them for approximately 18 of those 90 days. Additional dates may be utilised within the 90-day window of validity if flying has been lost due to, for example, weather. The TDAs would be activated by NOTAM and the Sponsor would schedule these both simply, to avoid confusion, yet sympathetically, so as not to block out airspace when activity is not taking place. An example might be 0900 to 1130 and 1300 to 1530 thus enabling a 5-hour flying day with a break in the middle.

A telephone/satellite phone number will be provided for the on-site Remote Pilot for the duration of daily activity.

DAAIS

A DAAIS will be provided by London Information on 124.75 for the duration of activities. If planned flying is curtailed or cancelled then London Information will be informed to ensure the airspace is made available to other airspace users.

Letters of Agreement

LOAs will be written for HEMS Babcock and NPAS to ensure swift, safe access to the TDA.

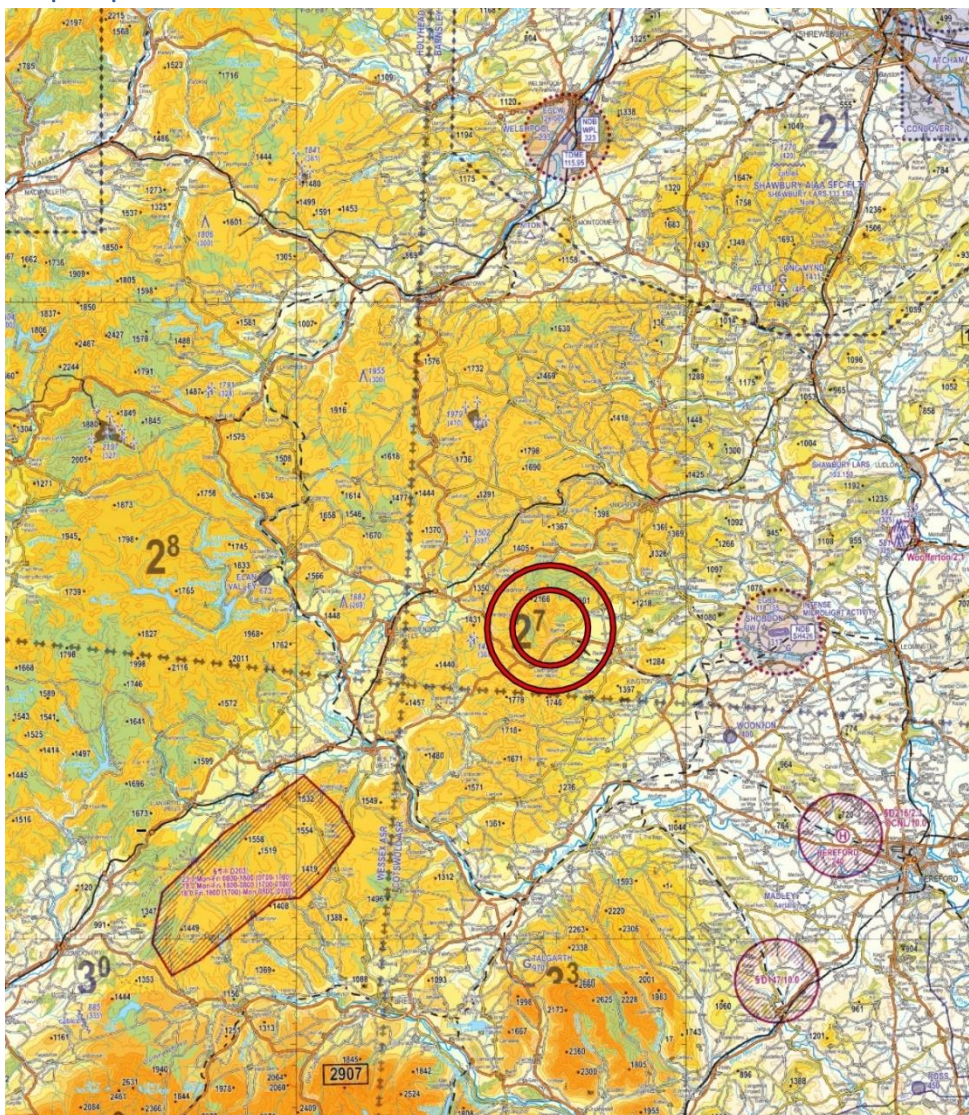
Stakeholder Feedback

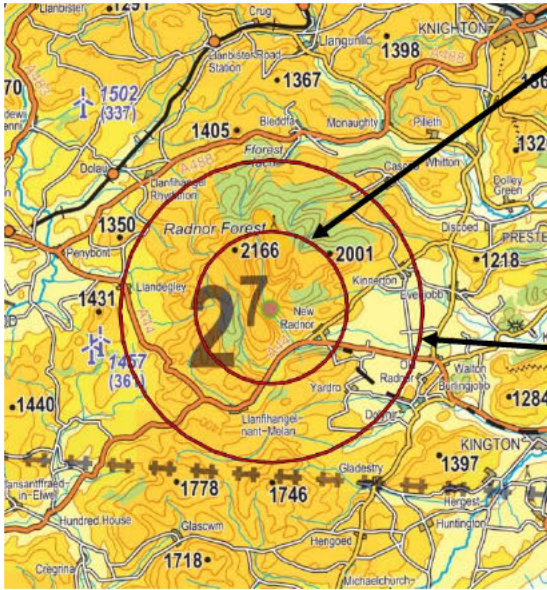
The email address radnorfeedback@nexusnine.co.uk will be publicised for Stakeholders to feed back to the Sponsor during the TDA activity window. Where possible, the Sponsor will engage with local GA organisations and UAS operators regarding proposed TDA activation times.

Complaints

The Sponsor is committed to responsible utilisation of airspace in a professional manner. Should a Stakeholder wish to raise a formal complaint regarding UAS activity, they may do so utilising the email address radnorcomplaints@nexusnine.co.uk. All Stakeholders raising a complaint will be replied to and the Sponsor will discuss potential solutions. A record of all complaints will be held by the Sponsor.

Map Representations





TDA 1

1.5nm centred on Radnor Range (N52°14.89
W003°10.77)

Surface to 3500' AMSL.

Activated by NOTAM.

DAAIS: London Information 124.75

TDA 2

3.0nm centred on Radnor Range (N52°14.89
W003°10.77)

Surface to 3500' AMSL.

Activated by NOTAM.

DAAIS: London Information 124.75

Section 6 – Renewed Stakeholder Engagement

Re-engagement Philosophy

The Sponsor had initially intended for the TDAs to be utilised in the early part of 2022. However, due to unforeseen circumstances, it became clear that, whilst the business case for the TDA remained, the timeline was not achievable. Cognisant of commitments the Sponsor had made with many local aviation stakeholders to deconflict from peak summer periods of GA activity, the Sponsor elected to delay the TDA by approximately 12 months to the winter/spring of 2023. The Sponsor did though identify that there was the potential for new impacts, 12 months on, to be missed if Stakeholders were not re-engaged. Consequently, the Sponsor opened a short 'Re-engagement Window' to update Stakeholders and identify any further issues as a result of the revised timeline.

Stakeholder Update Period

The Sponsor opened a 1-month re-engagement period between 8th Sep to 7th Oct 2022. Upon consultation with the Regulator, it was agreed this should target local Stakeholders as these were the users most likely to be affected and many had already had useful input into the submission thus far. The Sponsor also saw this as an opportunity to engage with those Stakeholders who had replied during the latter period of original Stakeholder engagement – thus opening the opportunity for further discussions. Consequently, the letter at Appendix D was distributed to the following Stakeholders:

Stakeholder	Contact Means	Stakeholder Responded
██████████ Herefordshire Gliding Club	Email	No
██████████ British Hang Gliding & Paragliding Association	Email	Yes
██████████ British Microlight Aircraft Association	Email	Yes
██████████ Shobdon Airfield	Email	No

Update Period Feedback

As the table above shows, the Sponsor was able to conduct meaningful engagement with a number of Stakeholders, some of which led to further engagement with more local BHPA groups; the Sponsor saw this as particularly worthwhile in striking up new local points of contact for the future. A copy of Update Period Stakeholder replies can be found at Appendix E which includes the answering of questions raised by the BMAA at the end of the previous Stakeholder Engagement Period.

Key Themes

As a result of this renewed Stakeholder engagement, the Sponsor has identified the following 3 main themes from the Stakeholders, although other issues that were raised are already covered by the initial submission to the CAA in Section 3 Summary of Feedback.

CAP1616 Process

- Lack of engagement with some Stakeholder groups. Some Stakeholders felt that the Sponsor should have engaged more widely for this ACP.
- Typographical errors in Stakeholder Engagement Letter. Stakeholders identified that Moreton-In-Marsh had been incorrectly inserted into a piece of documentation.
- Alleged breach of CAP 1616 - Delayed upload of Stakeholder Engagement Letter. Some Stakeholders felt the upload of the Stakeholder Engagement Letter to the ACP Portal on 31st August 2021 had reduced the length of the Stakeholder Engagement Period to 6 weeks.

Sponsor Response

The Sponsor believes all of these concerns are discussed and documented as part of the initial CAA submission. The Sponsor reaffirms their belief that they have complied with the CAP1616 process but, again, acknowledges that the error in uploading the initial Stakeholder Engagement Period Letter and a typographical error was avoidable.

Use of Segregated Airspace

- Disruption to non-transponding local air users as a result of segregated airspace. Other, non-transponding airspace users are denied access to the TDA airspace during periods of activity. Safety concerns that BVLOS UAS require segregated airspace to avoid potential conflict with manned aircraft.

Sponsor Response

The use of segregated airspace for BVLOS UAS activity is mandated by the Regulator; this is to ensure the safety of all aircraft until suitable Detect and Avoid technologies are mature enough. Whilst any disruption is regrettable, the Sponsor wishes to highlight that this is no more detrimental to non-transponding aircraft than those with a transponder and that the requirement for segregated airspace is a legal requirement for operations of this nature.

Shape of TDA

- Larger proposed TDA encompasses areas utilised by local paragliding clubs. Reducing the north-western and north-eastern sectors would allow greater flexibility to Shepherd's Trump and Bache Hill operating areas to prevent the loss of flying sites.

Sponsor Response

The original ACP has been significantly modified as a direct result of consultation with local Stakeholders to mitigate the impact of issues such as those raised above. The Sponsor has already committed to reduced frequency of activation for the larger

TDA and this is still constrained within the 18-day expected period of total activity. The Sponsor has asked for BHPA activity dates to best deconflict UAS activity from planned GA activity with the intention that the airspace should remain open to all as much as possible. This ethos is maintained by our intention to operate in winter 2023 when all GA activity is at its seasonal low.

Any TDA presents an increased likelihood of incursion due to its abnormal presence in airspace populated by regular and irregular users. Therefore, the Sponsor is reluctant to further complicate the ACP by additional dissection or creation of an irregular shaped TDA as we believe this would further increase the likelihood of an incursion. The Sponsor remains firmly of the view that safest means of operation and greatest flexibility for all users is achieved by deconflicting UAS activity where possible. The Sponsor committed to meeting with local Stakeholders in our reply of 13th Oct 22 and reaffirms its willingness to deconflict; we await the Stakeholder's response.

Updated Stakeholder Engagement Conclusion

Re-engagement with local Stakeholders has proven a worthwhile process to both strengthen links within the local aviation community and to understand the effects of the ACP. Many of the issues raised by the Update Stakeholder Engagement Period have already been raised by the previous engagement; this assures the Sponsor that both adequate engagements have been conducted and that the previous engagements have captured the major issues this ACP raises. The Sponsor again assures Stakeholders of their understanding that this proposal will have an impact on local air users and we reaffirm our commitment to utilise the TDA responsibly, if approved. Notwithstanding this, the Sponsor does not believe that the Updated Stakeholder Engagement Period has raised new significant issues that would lead them to alter the proposal outlined in Section 5.

The Sponsor renews their desire for active discussion with local Stakeholders to minimise disruption, where possible.

Appendix A – Radnor Stakeholder Engagement Letter

Nexus Nine Ltd,



16th August 2021

Airspace Change Proposal (Temporary Danger Area)

Engagement Period: 16th August – 10th October 2021

Dear Sir/Madam,

We write to you with reference to an application for a Temporary Danger Area for the conduct of Unmanned Aerial System (UAS) activity. This letter forms part of the Civil Aviation Authority (CAA) Targeted Engagement Process which aims to understand your views and the potential impact for your organisation or airspace users, as a result of this proposal. We hope to develop and shape our application to best suit all aviation stakeholders as a result of your input into our consultation process.

Airspace Change Proposals (ACPs)

All ACPs are vetted and managed by the CAA in line with strict processes documented in CAP 1616. This document outlines the requirements of us as a Sponsor, who we must engage with and the thresholds we must meet if our application is to be successful. A copy of CAP 1616 can be downloaded from the CAA's website and all stages of these applications are made available to the public via the Airspace Change Portal (<https://airspacechange.caa.co.uk>).

About the Sponsor

This ACP is sponsored by Nexus Nine Ltd. As an organisation, our core activities focus around the independent test and evaluation of UAS and [REDACTED] systems on behalf a number of customers including the UK Government. Furthermore, we conduct training of UAS Remote Pilots in Enhanced Operations including Beyond Visual Line of Sight flight to ensure the safe integration of UAS amongst the busy airspace of the UK. Our aviation expertise comes from a background of both manned and unmanned pilots and engineers focussed on the safe delivery of UAS operations in the national interest.

Sponsor Requirement and Opportunities

To date, our test and evaluation activities have taken place within the boundaries of the disused airfield at Moreton-In-Marsh. This has enabled us to conduct short-range testing of [REDACTED] systems over a number of years. We have flown a variety of different types of UAS with great success and have a strong safety record. However, as technology in both UAS and [REDACTED] develops, we see the need to be able to expand the scale and range of testing to provide assurance to our customers as to the effectiveness of the [REDACTED] systems under test. As a result of this, we need to understand the capability of our platforms to operate Beyond Visual Line of Sight (BVLOS) within the Radnor area. Such evaluations will include looking at command and control operating ranges, effect of local electromagnetic interference (e.g. Wi-Fi signals etc) and topography. Under current CAA regulation, all BVLOS UAS activity must be conducted within segregated airspace – in this case a Temporary Danger Area (TDA).

Your Input

We recognise that any potential airspace change, even temporary ones, have an impact on the wider aviation community. We are committed to a flexible approach, aiming to minimise the potential adverse effects that this ACP may bring to your organisation or clients. To ensure your views are represented, and impacts mitigated, we would encourage you to raise questions and reply with the short feedback form in Appendix B.

Details of the initial application, and subsequent ACP progress can be found by searching the Airspace Change Portal (<https://airspacechange.caa.co.uk>).

We will respond to any requests for clarification or questions you might have as swiftly as we can but the engagement period will close after 8 weeks on 10th October 2021. Comments made after this date may not be included in any engagement feedback that we provide to the CAA.

We thank you for your time and look forward to hearing from you in the near future.

Best Regards

[REDACTED]

Accountable Manager

Nexus Nine Ltd

Email: [REDACTED]

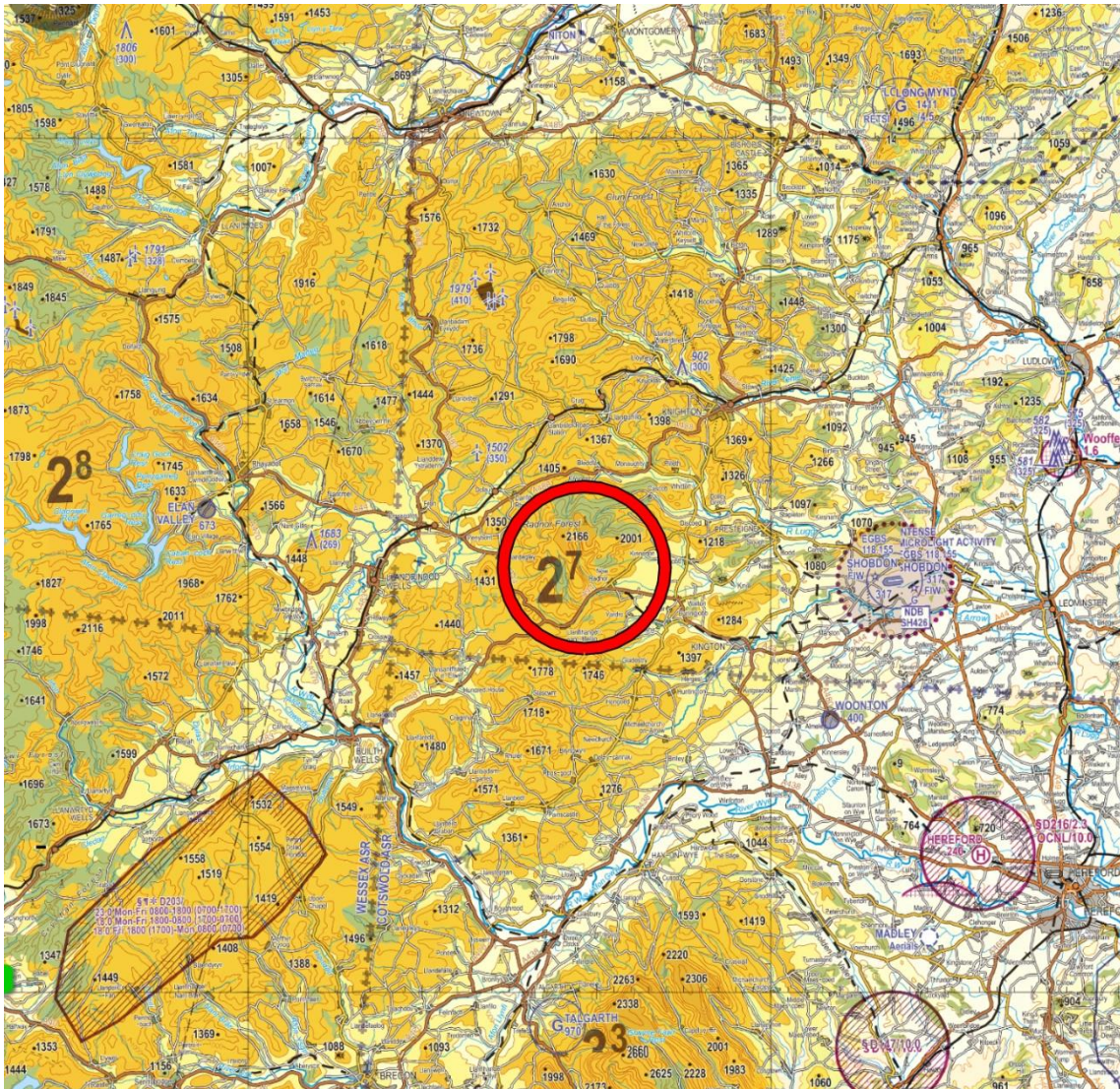
Appendix A - ACP-2021-030 (Radnor TDA)

Radnor is a commercial munitions test and evaluation facility located in an austere location within Class G airspace. It is approximately 11nm West of Shobdon airfield. This ACP application is for a TDA lasting up to 90 days centred on the munitions range with a radius of 3nm. The proposal activates the airspace from the surface to 3500' AMSL due to the height of surrounding terrain. Initial TDA activity is planned to commence from AIRAC 2204 (21 Apr 22).

The TDA will be activated by NOTAM via the NATS system, aiming to give at least a weeks' notice of intended activity. Options for the provision of a Danger Area Activity Information Service (DAAIS) are currently being reviewed and the Sponsor would provide a mobile number for PPR co-ordinated activity within the TDA where it is practical. UAS operations would always immediately cease upon requests to enter the TDA by Emergency Services aircraft.

It is anticipated that the TDA will only be utilised during weekday daylight hours in blocks of up to 3 days at a time. We will aim to conduct 2 'blocks' of activity per month, totally approximately 18 days of activity during the 90-day TDA validity period. We would though, reserve the right to amend this plan.

A map of the suggested TDA is given below:



TDA Origin: N52° 14.89 W003° 10.77
Radius: 3nm
Vertical Extent: SFC-3500' AMSL
Activated by: NOTAM
DAAIS: TBC

Appendix B – ACP-2021-030 (Radnor) Feedback Form

Name of Contact	
Organisation	
Postal Address	
Email Address	

Feedback Points:

Appendix B – Stakeholder Engagement Evidence

Emergency Services

HEMS Babcock

From: [REDACTED] <[REDACTED]@babcockinternational.com>
Sent: 26 August 2021 12:03
To: [REDACTED]
Subject: RE: CAUTION: External email - Temporary Danger Area Application Engagement (ACP-2021-029 & 030) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Hi [REDACTED]

All good and happy. Let me know what detail you require from us.

BW,
[REDACTED]

[REDACTED] [REDACTED] | Chief Pilot
UK Aviation | Aviation
Babcock International Group
Babcock Onshore | Building Se32-33 | Gloucestershire Airport | Cheltenham | Gloucestershire | GL51 6SP
Tel: +[REDACTED] |
[REDACTED]@babcockinternational.com
www.babcockinternational.com

babcockTM

 Please consider the environment before printing this email

From: [REDACTED] <[REDACTED]>
Sent: 18 August 2021 16:44
To: [REDACTED]@babcockinternational.com>
Subject: RE: CAUTION: External email - Temporary Danger Area Application Engagement (ACP-2021-030 & 030) (UNCLASSIFIED)

[REDACTED]
Great to chat yesterday, and hopefully a little more productive than email bat & ball. As discussed a brief summary of how we intend to instil a robust process to facilitate HEMS safe access to the TDA in the event of a tasking:

- NOTAMS will be issued via the NATS system well in advance which should come through to your crews via their ACANS ipads. This will have the mobile number for our on-site pilot.
- More accurate NOTAM timing will be phoned through to our DAAIS provider (tbc) which should enable better SA if your crews have the time to contact the ATSU.
- Our team will ensure all your Air Desks receive an email of the TDA details, contact phone numbers and planned times of operation for them to keep handy.
- Assuming the worst case – an airborne retask to a job within the TDA then we envisage the following happening:
 - HEMS aircraft contacts the Air Desk to explain they will need to enter the TDA
 - Air Desk contact our flying team (via mobile number provided) to get UAS activity stopped
 - Nexus will recover our platforms to launch point and advise the air desk that UAS activity has ceased
 - HEMS have freedom of manoeuvre in the TDA as long as is required

- o Ideally Air Desk call our team once the tasking is complete but it is our responsibility to ensure the HEMS aircraft is clear before resuming UAS flying
- You mentioned your exemption to enter airspace regardless of co-ordination, so long as your Captain believes it is safe. We'll brief our team on this, needless to say if they see the aircraft they'll cease flying. I'd just raise the point of caution that some of our platforms weight up to 25kg and would do some significant damage to a helo so we should aim for the controlled cessation of UAS Ops before your guys enter the TDA if at all possible.

Just to also expand on your couple of original questions below. Our platforms are both fixed and rotary wing weighing anything from 250g to 25kg. Platforms should have lights on, some of the OEM lighting is pretty poor so, where we can, we mount small HISLs and dayglo conspicuity tape onto the platforms to aid visibility.

Due to their size and manufacturer, most platforms do not have onboard ADS-B. We have a base station receiver which generally can be displayed on our mission systems so we can at least see your aircraft coming.

I'll check with the CAA as to whether they want that formal LoA and get back to you.

Just let me know if there are any tweaks/additions to the above that you'd be looking for.

Best Regards

██████████

From: ██████████ [babcockinternational.com](mailto:██████████@babcockinternational.com)>

Sent: 16 August 2021 13:01

To: ██████████

Subject: RE: CAUTION: External email - Temporary Danger Area Application Engagement (ACP-2021-030 & 030) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Hi ██████████

Many thanks for early sight of your two proposed TDAs at Moreton-In-Marsh and Radnor. As the operators of HEMS aircraft that regularly operate in the area of both locations our main concern would be in regards to ensuing that HEMS operations remain unimpeded. As you will be aware, as HEMS operators we only have to be content that we can enter safely rather than gain 'permission' to enter a TDA.

Therefore, if we could establish an agreement which captures the ability to ensure that we are made aware of any activation as well as a establish a clear means of gaining access into the TDA, be it as we are tasked or if re-tasked at short notice whilst airborne so that we, or our tasking desk, can establish the status of the TDA. Can you also confirm what type of UAV it will be, does it have lights / ADS-B etc.

Many thanks and I look forward to hearing from you.

BW,

██████████

██████████ ██████████ | Chief Pilot

UK Aviation | Aviation

Babcock International Group

Babcock Onshore | Building Se32-33 | Gloucestershire Airport | Cheltenham | Gloucestershire | GL51 6SP

Tel: ██████████ |

██████████ [babcockinternational.com](mailto:██████████@babcockinternational.com)

www.babcockinternational.com

[Specialist Air Services](#)

From: [REDACTED] specialist-aviation.com>
Sent: 13 September 2021 15:06
To: [REDACTED]
Subject: RE: UAS TDA Applications

Hello,

I do often respond to ACP stakeholder engagements at length when the TDA falls without our core area of Helicopter Emergency Services Activity to ensure Air Ambulances are unaffected in their ability to conduct their role. However, in this case we don't operated any of the local air ambulances to these areas. I'm guessing Babcock will be engaging on such matters.

I have no further comment – as proposed these should not have any significant impact my organisations operations.

Best regards

[REDACTED]

[REDACTED]
Group Chief Pilot

Tel: [REDACTED]

Mob: [REDACTED]

BE GREEN, READ FROM THE SCREEN



t: +44 (0) 1452 857900 e: sales@specialist-aviation.com w: www.specialist-aviation.com

Specialist Aviation Services Limited – Registered in England and Wales No:1848773
Registered office / HQ: Gloucestershire Airport, Staverton, Cheltenham, Gloucestershire GL51 6SS

[National Police Air Service](#)

From: [REDACTED] <[REDACTED]@npas.police.uk>
Sent: 17 August 2021 12:01
To: [REDACTED]
Subject: RE: Stakeholder Engagement

Hi [REDACTED]

This seems entirely reasonable and as you say it is unlikely that we would need to enter the TDA, but need to have a plan just in case.

regards

[REDACTED]

Capt [REDACTED] **MSC**
Head of Flight Operations
National Police Air Service
Mobile: [REDACTED]
Email: [REDACTED]@npas.police.uk
Web: www.npas.police.uk



From: [REDACTED] <[REDACTED]>
Sent: 17 August 2021 11:57
To: [REDACTED] <[REDACTED]@npas.police.uk>
Subject: RE: Stakeholder Engagement

[REDACTED]

Many thanks for your prompt response. I think key to both these ACPs is the swift clearance for NPAS, HEMS and SAR to be able to enter any TDA and, crucially, have the assurance that they aren't going to have a conflict with a UAS.

To place in context, I'm a [REDACTED] as my main job, so hopefully this reassures that I'm keen to get the Emergency Services piece right with the priorities where they should rightly lie. Ultimately though, I'm sure you'll agree, the safety of your people is our over-riding consideration.

If I might clarify how we envisage the interaction working and then if you could come back to me with any issues from your specific setup – I appreciate how busy the cockpit is during tasking!

- NOTAMS should be issued well in advance and will be visible via normal NATS means as well as the usual Skydemon/Panda systems etc which will include a direct phone number.
- We're hoping to secure a DAAIS from local aviation facilities (details also published in the NOTAM), but I think this is unlikely to go as far as a DACS so the mobile number will be key. The DAAIS will clearly be advised at actual start of flying and on completion to narrow down

actual activity over pre-published NOTAM timings; they would also have the on-site mobile number readily available if your crews didn't have it.

- For transits, I'd respectfully suggest going around the TDA – at 3nm radius it'd be a minimal delay and save you a busy workload period.
- We would suggest clearances into the TDA are made via Airwave direct to the NOTAM-provided mobile phone number. This provides assurance to your Capts that the UAS are out of your way.
- Once entry is requested, in general we'd look to immediately recover our UAS to point of launch – despite the slight time delay (absolute max of 8 mins at 3nm range but for most platforms max 4 mins), this is for several key reasons which its worth explaining...
 - Landing the UAS out in the field still takes time to recce (if there is a camera fitted) and risk assess - for a 3nm TDA I think an RTB will be more expeditious
 - At longer ranges and low level we're likely to lose connectivity to the platform if we try and land it away from base – in this case it would activate a software safety default to RTB anyway but this would be done at a sanctuary height, slower and likely cause you greater delay
- The CAA will not allow UAS Beyond Visual Line of Sight (BVLOS) to operate in the same airspace as manned aviation. Consequently, we're unable to offer a simple height/lateral deconfliction, irrespective of weather. As soon as our operators can see our platform, the rules change and we take visual clearance from you, enabling the crews to crack on with the tasking.
- Once the UAS is in sight of our operators, or on the ground, we'd let the NPAS pilot know (I'd suggest they stay on the Airwave line) and your aircraft could safely enter. This sounds pretty protracted but we've done this in the past down at Predannack so our team are pretty swept up with the safety processes.
- We wouldn't resume BVLOS until we'd received a positive clearance that your aircraft had left the TDA. Ideally for us, this would be to the mobile phone again but if that's difficult with your crew setup then it could be co-ordinated via the DAAIS – ultimately this is going to be a slow-time activity with the onus on us to ensure all of our safety protocols are back in force before re-activating the TDA.

Realistically, given the 2 locations and duration of activity, I think it's incredibly unlikely for you to get a tasking to the area whilst we're flying but we obviously need to cover off the eventuality with a robust process.

I'd be grateful for your thoughts.

Best Regards

██████

From: ██████, ██████ <██████████@npas.police.uk>

Sent: 16 August 2021 14:11

To: ████████████████████

Subject: Stakeholder Engagement

Dear ██████

I have added our feedback to the attached document.

Best regards

██████

Capt ██████████ MSC

Head of Flight Operations

National Police Air Service

Mobile: ██████████

Email: ██████████@npas.police.uk

Web: www.npas.police.uk



Appendix B – ACP-2021-030 (Moreton-In-Marsh) Feedback Form

Name of Contact	Capt [REDACTED]
Organisation	National Police Air Service
Postal Address	NPAS, PO Box 9 WYP HQ Laburnum Road Wakefield WF1 3 QP
Email Address	[REDACTED]npas.police.uk

Feedback Points:

In the event that an NPAS aircraft needed to enter the TDA to attend an incident we would need either a DAAIS or an alternative means by which the crew could contact the UAS operator from the aircraft, in order to agree separation (usually achieved by the UAS landing).

Maritime & Coastguard Agency

From: [REDACTED] <[REDACTED]@mcga.gov.uk>
Sent: 20 September 2021 11:41
To: [REDACTED]
Subject: RE: ACP

Good morning [REDACTED]

Please see attached your Stakeholder Engagement document.
I have completed the feedback sections for each proposal and I assess that there should be little or no day-today impact on SAR helicopters.
Please don't hesitate to contact me if you need anything else.
Regards

[REDACTED]

From: [REDACTED]
Sent: 15 September 2021 07:47
To: [REDACTED]
Subject: ACP

Good morning [REDACTED]
I'm sorry that you have not yet received a reply reference your ACP engagement.
I have this scheduled to look at on Friday morning and you should have a reply by COP Friday.
Regards

[REDACTED]

[REDACTED]
Aviation Policy Lead
Stakeholder and Policy

[REDACTED]
[REDACTED]
[REDACTED] [mcga.gov.uk](mailto:[REDACTED]@mcga.gov.uk)




HM Coastguard

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

To Search, To Rescue, To Save
www.gov.uk/mca

 Maritime & Coastguard Agency

Appendix B – ACP-2021-030 (Moreton-In-Marsh) Feedback Form

Name of Contact	[REDACTED]
Organisation	Maritime and Coastguard Agency
Postal Address	Joint Rescue Coordination Centre Kites Croft Business Park Fareham PO14 4LW

Email Address	██████████mcga.gov.uk
----------------------	-----------------------

Feedback Points:

The proposed TDA should have little or no impact on the day-to-day operations of SAR helicopters.

National Air Traffic Services

London Information

From: [REDACTED] <[REDACTED]@nats.co.uk>
Sent: 05 October 2021 12:34
To: [REDACTED]
Subject: RE: UAS TDA DAAIS

Hi [REDACTED]

As long as it's all NOTAM'd (which I'm sure they are) then no problem.

Many Thanks,



NATS

[REDACTED]
Manager ATM Procedures
Ops and Integration for NATS Airports

M: [REDACTED]
E: [REDACTED]@nats.co.uk

NATS Swanwick

www.nats.co.uk



NATS Internal

From: [REDACTED] <[REDACTED]@nats.co.uk>
Sent: 05 October 2021 12:29
To: [REDACTED] <[REDACTED]@nats.co.uk>
Subject: RE: UAS TDA DAAIS

Hi,

As long as it is NOTAMed then that's fine.

Cheers



NATS Internal

From: [REDACTED] <[REDACTED]@nats.co.uk>
Sent: 05 October 2021 09:41
To: [REDACTED] <[REDACTED]@nats.co.uk>
Subject: FW: UAS TDA DAAIS

Hi [REDACTED],

Can you pass this onto the FIR for their opinion on whether they are happy to provide a DAAIS please? I suspect they'll be fine with it but don't want to just answer without checking first.

Many Thanks,



NATS

**Manager ATM Procedures
Ops and Integration for NATS Airports**

M:

E: nats.co.uk

NATS Swanwick

www.nats.co.uk



NATS Internal

From: <

Sent: 29 September 2021 11:11

To: < nats.co.uk>

Subject: UAS TDA DAAIS

Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.



I hope this finds you well.

I've been given your email address by the CAA as a good point of contact for consideration of DAAIS provision. To paint the picture, we currently have an Airspace Change Proposal in with the CAA for 2 TDAs; one located at Moreton-In-Marsh (Cotswolds) [ACP-2021-029] and one at Radnor (near Hereford) [ACP-2021-030]. We would anticipate these TDAs, if approved, to be active for a period of up to 18 days, probably in daylight hours in blocks of about 3 days at a time. This is to facilitate the testing of UAS Beyond Visual Line of Sight testing at each of the locations.

I was wondering if you might consider IF London Information might provide a DAAIS during these periods of activity and would be grateful to hear your thoughts. As a little background I've attached our stakeholder engagement material to provide you with a bit more information on the ACPs themselves.

Thank you for your time.

Best Regards



Ministry of Defence

DAATM

From: [REDACTED] Sqn Ldr (DAATM-Airspace Strategy SO2) <[REDACTED]@mod.gov.uk>
Sent: 15 September 2021 15:08
To: [REDACTED]
Subject: RE: Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

[REDACTED]

Thank you for your engagement regarding ACPs 2021-029 and 2021-030. Having consulted across Defence aviation stakeholders, the MOD has no objection to either proposal.

Kind regards,

[REDACTED]

[REDACTED] | Sqn Ldr | SO2 Airspace Strategy | Defence Airspace and Air Traffic Management |
Aviation House | 1E Beehive Ringroad | Crawley | West Sussex | RH6 0YR | Civilian Telephone: [REDACTED]
[REDACTED]
MOD Net: DAATM-AirspaceStrategySO2 | E-Mail: [REDACTED]@mod.gov.uk

From: [REDACTED] Sqn Ldr (DAATM-Airspace Strategy SO2) <[REDACTED]@mod.gov.uk>
Sent: 14 September 2021 10:49
To: [REDACTED]
Subject: RE: UAS TDA Applications

Hi [REDACTED]

I'm collating the MOD response for your ACPs and had actually given my stakeholders until today to provide feedback to me. So far there have been no specific objections to either TDA, but I will provide the official response tomorrow.

Kind regards,

[REDACTED]

[REDACTED] | Sqn Ldr | SO2 Airspace Strategy | Defence Airspace and Air Traffic Management |
Aviation House | 1E Beehive Ringroad | Crawley | West Sussex | RH6 0YR | Civilian Telephone: [REDACTED]
[REDACTED]
MOD Net: DAATM-AirspaceStrategySO2 | E-Mail: [REDACTED]@mod.gov.uk

From: [REDACTED] <[REDACTED]>
Sent: 13 September 2021 15:17
To: DAATM-AirspaceConsultation (MULTIUSER) <DAATM-AirspaceConsultation@mod.gov.uk>
Subject: UAS TDA Applications

Dear Sir,

We contacted you on the 16th August 2021 regarding 2 proposals for Temporary Danger Areas in the Moreton-In-Marsh and Radnor areas; this formed part of our CAA Engagement Period from 16th Aug to 10 Oct 2021.

As we approach the halfway point I just wanted to check in with you as, according to my records, I have not as yet received a response from your organisation. It may be that any response may have gone astray or that you've not had to the opportunity to reply as yet. I attach a copy of the original Engagement Letter in case it is not immediately available to you but we look forward to hearing your thoughts.

Best Regards

██████████
Accountable Manager
Nexus Nine Ltd
Email: ██████████

From: ██████████ <██████████>
Sent: 16 August 2021 11:25
To: DAATM-AirspaceConsultation (MULTIUSER) <DAATM-AirspaceConsultation@mod.gov.uk>
Subject: Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

Dear Sir/Madam,

Engagement Period: 16th August – 10th October 2021

Please find attached a letter outlining two independent applications submitted to the Civil Aviation Authority for non-concurrent Temporary Danger Areas at Moreton-In-Marsh and Radnor. We would be grateful if you might have the opportunity to review this document, raise any questions you might have and provide vital feedback with respect to these proposals via the enclosed form.

I look forward to engaging with you in this matter.

Best Regards

██████████
Accountable Manager
Nexus Nine Ltd
Email: ██████████

RAF Benson

From: [REDACTED] Sqn Ldr (BEN-OpsWg-ATC-SATCO) <[REDACTED]@mod.gov.uk>
Sent: 16 September 2021 13:43
To: [REDACTED]
Subject: RE: TDA Engagement (ACP-2021-029 & 030)

Hi [REDACTED]

Thanks for getting back to us. I've spoken to some aircrew colleagues and they are all in content with your proposal below – we appreciate your cooperation with this. If there's anything further you ever need from us please just get in touch.

Kind regards,

[REDACTED]

Squadron Leader [REDACTED] [REDACTED] | SATCO | Royal Air Force Benson | Wallingford | Oxon | OX10 6AA | Mil: [REDACTED] | Email: [REDACTED]@mod.gov.uk

From: [REDACTED] <[REDACTED]>
Sent: 15 September 2021 17:13
To: [REDACTED] Sqn Ldr (BEN-OpsWg-ATC-SATCO) <[REDACTED]@mod.gov.uk>
Subject: RE: TDA Engagement (ACP-2021-029 & 030)

[REDACTED]

Many thanks for your feedback; it all helps to shape our understanding of the airspace user requirements.

Your points regarding NS/OAT are important ones and sensibly we should treat access in the same way as we would for HEMS/NPAS etc. I'd suggest the most 'efficient' solution might be for transiting crews to navigate around the TDA, especially since its only 3nm radius, but we should allow for the contingency of needing to enter the TDA on tasking. Our processes vary for NPAS & HEMS based on their setup, for NS I'd suggest a simple call to the NOTAM contact details (which will be manned at all times during UAS activity) with requested 'cold' times should allow you the access required.

Could you foresee this providing you with an adequate solution or does this raise issues for you?

Best Regards

[REDACTED]

From: [REDACTED] Sqn Ldr (BEN-OpsWg-ATC-SATCO) <[REDACTED]@mod.gov.uk>
Sent: 14 September 2021 15:24
To: [REDACTED]
Subject: FW: TDA Engagement (ACP-2021-029 & 030)

Good afternoon,

I was forwarded the email below from [REDACTED] re proposed TDAs to facilitate UAS BVLOS activities.

The only point from Benson would be a request that the CAA stipulate UK NS/Operational Air Traffic sorties are included under the definition of Emergency Services in the following quote from the

proposal: "UAS operations would always immediately cease upon requests to enter the TDA by Emergency Services aircraft".

If you require any further detail please do not hesitate to get in touch.

Kind regards,

██████████

Squadron Leader ██████████ ██████████ | SATCO | Royal Air Force Benson | Wallingford | Oxon | OX10 6AA | Mil: ██████████ | Email: ██████████ [mod.gov.uk](mailto:██████████@mod.gov.uk)

From: ██████████ Sqn Ldr (BZN-OSW-ATC-SATCO) <██████████@mod.gov.uk>

Sent: 31 August 2021 17:10

To: ██████████

Subject: FW: TDA Engagement (ACP-2021-029 & 030)

Good Evening RAUWG Members,

I have been asked to send this email and attachment to members of the RAUWG to assist with the engagement from Nexus Nine. If you have any questions or queries please direct them to ██████████ at NexusNine.

Regards,

██████████

Sqn Ldr ██████████ | SATCO | RAF Brize Norton | Carterton | Oxfordshire | OX18 3LX |
Mil: ██████████ | Fax: ██████████ | E-mail: ██████████ [@mod.gov.uk](mailto:██████████@mod.gov.uk)

RAF Brize Norton's Mission: Prepare for and deliver global Air Mobility Operations.

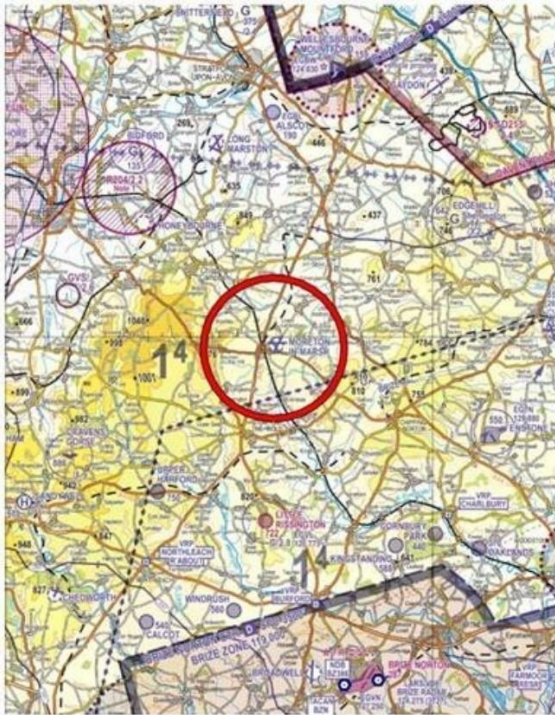
RAF Brize Norton's Vision: Make Brize Better Together by Sustaining Operational Excellence whilst we Deliver Together Safely and make Brize a Better Place to Work and Live.

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All,

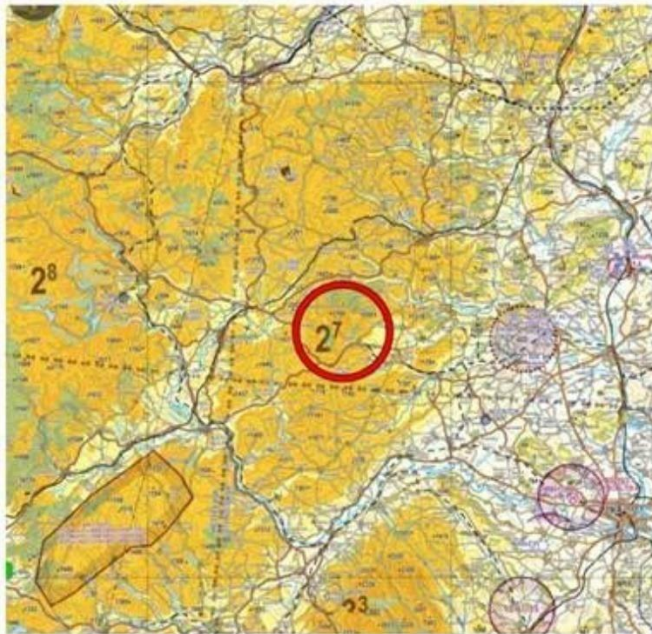
PSA and below for information on two proposed TDAs to facilitate UAS BVLOS activity. Please engage as required across your AOR and provide feedback on any negative impact on ability to operate **by COP Tue 14 Sep**.

Moreton-in-Marsh TDA (start 2 Dec 21 for 18 out of 90 days)



TDA Origin: N51°59.67 W001°41.06
Radius: 3nm
Vertical Extent: SFC-2500' AMSL
Activated by: NOTAM
DAAIS: TBC

Radnor TDA (start 21 Apr 22 for 18 out of 90 days)



TDA Origin: N52°14.89 W003°10.77
Radius: 3nm
Vertical Extent: SFC-3500' AMSL
Activated by: NOTAM
DAAIS: TBC

658 Sqn, AAC

From: [REDACTED]
Sent: 10 September 2021 11:04
To: [REDACTED]@mod.gov.uk
Subject: Radnor Drone TDA Application
Attachments: 20210810 Radnor Stakeholder Engagement.docx

[REDACTED]

Good to chat today, as discussed please find attached our engagement information relating to the TDA application at Radnor and a feedback form at the end. Happy to field any questions/suggestions via email as you get a feel for how this might affect what you need to do.

Cheers

[REDACTED]

[REDACTED]
Accountable Manager
Nexus Nine Ltd

Commercial Operators

[Heli Air](#)

From: [REDACTED] <[REDACTED]@heliair.com>

Sent: 14 September 2021 18:25

To: [REDACTED]

Subject: Re: UAS TDA Applications

Hi [REDACTED]

Apologies for not responding sooner. The site at Radnor will not affect our flight operations, the Moreton-in-Marsh one potentially will. The Fire Training College is a good geographical feature for students to look for when practicing navigation exercises. As you are only planning to operate a few days per month we can work around this without causing us any problems. Our students and pilots would normally be on frequency with Brize and should be checking the NOTAMS prior to flight, but a confirmation message from Brize highlighting the activity may be a good idea.

Kind regards

[REDACTED]
Director : Chief Pilot

Heli Air Limited

[REDACTED]
[REDACTED]
Email: [REDACTED]@heliair.com
www.heliair.com



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Heli Air Ltd

Registered Office: Wellesbourne Airfield, Loxley Lane, Wellesbourne, Warwickshire CV35 9EU
Registered Number: 2028932

From: [REDACTED] <[REDACTED]>
Date: Monday, 13 September 2021 at 14:55

To: [REDACTED] <[REDACTED]@heliair.com>
Subject: UAS TDA Applications

Dear Sir,

We contacted you on the 16th August 2021 regarding 2 proposals for Temporary Danger Areas in the Moreton-In-Marsh and Radnor areas; this formed part of our CAA Engagement Period from 16th Aug to 10 Oct 2021.

As we approach the halfway point I just wanted to check in with you as, according to my records, I have not as yet received a response from your organisation. It may be that any response may have gone astray or that you've not had to the opportunity to reply as yet. I attach a copy of the original Engagement Letter in case it is not immediately available to you but we look forward to hearing your thoughts.

Best Regards

[REDACTED]
Accountable Manager
Nexus Nine Ltd
Email: [REDACTED]

Appendix D – ACP-2021-030 (Radnor) Feedback Form

Name of Contact	██████████
Organisation	Helicentre Aviation
Postal Address	Leicester Airfield, Gartree Road Leicester LE2 2FG
Email Address	██████████ flyheli.co.uk

Feedback Points:

Thank you for the notification of the proposed TDA at Radnor. From the details you have sent I do not see the TDA effecting our operations.

[National Grid](#)

From: [REDACTED] <[REDACTED]>
Sent: 25 August 2021 21:39
To: [REDACTED] <[REDACTED]@nationalgrid.com>
Subject: RE: EXT || Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

[REDACTED]

Many thanks for this feedback. Should any potential issues arise, please don't hesitate to contact us.

Best Regards

[REDACTED]

From: [REDACTED] <[REDACTED]@nationalgrid.com>
Sent: 17 August 2021 19:47
To: [REDACTED]
Subject: RE: EXT || Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

Hi Matthew,
National Grid have no HV assets in those 2 areas so I do not see a conflict with our aerial survey powerline patrols.

[REDACTED]
Chief Pilot, Helicopter Unit
Electricity Transmission Engineering Services
[nationalgrid](#)
M +44 [REDACTED]
E [REDACTED]@nationalgrid.com
National Grid Stores, Old Milton Rd, Didcot, UK OX117HH
Follow us on Twitter | YouTube | LinkedIn | Flickr
[Please consider the environment before printing this email.](#)

From: [REDACTED] <[REDACTED]>
Sent: 16 August 2021 11:25
To: [REDACTED] <[REDACTED]@nationalgrid.com>
Subject: EXT || Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

Dear Sir/Madam,

Engagement Period: 16th August – 10th October 2021

Please find attached a letter outlining two independent applications submitted to the Civil Aviation Authority for non-concurrent Temporary Danger Areas at Moreton-In-Marsh and Radnor. We would be grateful if you might have the opportunity to review this document, raise any questions you might have and provide vital feedback with respect to these proposals via the enclosed form.

I look forward to engaging with you in this matter.

Best Regards

[REDACTED]
Accountable Manager
Nexus Nine Ltd

Local Airfields

Shobdon

From: Airfield Manager <airfieldops@shobdonairfield.co.uk>

Sent: 15 September 2021 13:41

To: [REDACTED]

Subject: RE: Radnor TDA Application

Dear [REDACTED]

Thank you for your email.

I have copied in our ATSU Manager, [REDACTED] and he will be responding.

Best regards,

[REDACTED]

[REDACTED]

Airfield Operations Manager



Home of the Herefordshire Aero Club Ltd

T: 01568 708369 F: 01568708508

www.shobdonairfield.co.uk



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Herefordshire Aero Club Ltd, Registered Office Shobdon Airfield, Leominster, Herefordshire HR6 9NR
Registered in England, No. 746513

From: [REDACTED] [\[mailto:\[REDACTED\]\]](mailto:[REDACTED])
Sent: 13 September 2021 15:05
To: Airfield Manager <airfieldops@shobdonairfield.co.uk>
Subject: Radnor TDA Application

Dear Sir/Madam,

We contacted you on the 16th August 2021 regarding a proposal for a Temporary Danger Area in the Radnor area; this formed part of our CAA Engagement Period from 16th Aug to 10 Oct 2021.

As we approach the halfway point I just wanted to check in with you as, according to my records, I have not as yet received a response from your organisation. It may be that any response may have gone astray or that you've not had the opportunity to reply as yet. I attach a copy of the original Engagement Letter in case it is not immediately available to you but we look forward to hearing your thoughts.

Best Regards

[REDACTED]
Accountable Manager
Nexus Nine Ltd
Email: [REDACTED]

Cardiff

From: [REDACTED] <[REDACTED]>
Sent: 29 September 2021 11:19
To: [REDACTED] <[REDACTED]@nats.co.uk>
Subject: RE: Radnor TDA Application (ACP-2021-030)

[REDACTED]

Many thanks for getting back to me on this. I'll log that Cardiff have no issue with the proposal for the purposes of our report to the CAA.

DAAIS restrictions completely understood; it's a pretty long way North for you guys so very grateful that you've considered it – ultimately it's a pretty remote location for most service providers.

Best Regards

[REDACTED]

From: [REDACTED] <[REDACTED]@nats.co.uk>
Sent: 29 September 2021 10:51
To: [REDACTED]
Subject: Re: Radnor TDA Application (ACP-2021-030)

Hi [REDACTED]

We've kicked this about for a couple of days.

Your proposed ops will not affect Cardiff. As you say, it's just too far away and too low.

And for the same reason we would not be able to provide a DAAIS – With the Brecon Beacons in the way, we have very poor RT coverage there at that low level.

We suggest Shawbury or Shobdon might be an alternative?

But thanks for letting us know.

All the best.

[REDACTED]

NATS

[REDACTED]

Blue Watch
Cardiff Airport

D: [REDACTED]
M: [REDACTED]
E: [REDACTED]@nats.co.uk

From: [REDACTED] <[REDACTED]>
Sent: Wednesday, September 22, 2021 6:49:26 PM
To: [REDACTED] <[REDACTED]@nats.co.uk>
Subject: Radnor TDA Application (ACP-2021-030)

[REDACTED]

Apologies for the delay in getting in touch, I seem to consistently miss you on shift. I'm one of the [REDACTED] [REDACTED] but we've also chatted on [REDACTED] I wanted to engage with you on a different, although UAS related, topic for an ACP we have proposed to the CAA for Beyond Visual Line of Sight work out of Radnor – just NE of Sennybridge. My gut instinct says that this will be a little far away and too low to influence operations at Cardiff but thought it prudent to get your thoughts directly. I attach the targeted stakeholder engagement literature that we have published for national and regional stakeholders (e.g. Shobdon) for your information. We'd be grateful if you might review it and see if this is likely to have an impact on Cardiff so we can discuss any potential issues and amend our proposal accordingly.

I'd also be grateful for your thoughts on the potential for Cardiff to provide a DAAIS for this TDA. As the literature suggests, we'd anticipate 18 days of activity over the 90 day validity period but would consider Cardiff as the most appropriate ATSU to guide GA on activity. Is this something that you might consider providing for us?

I'd be grateful for your thoughts.

Best Regards

[REDACTED]

National GA Bodies

[British Helicopter Association](#)

From: [REDACTED] <[REDACTED]>
Sent: 25 August 2021 21:41
To: 'ceo' <ceo@britishhelicopterassociation.org>
Subject: RE: Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

[REDACTED]

Many thanks for your feedback; we've already had discussions with NPAS and HEMS. We await feedback from the SAR helicopters too.

Best Regards

[REDACTED]

From: ceo <ceo@britishhelicopterassociation.org>
Sent: 16 August 2021 13:23
To: [REDACTED]
Subject: RE: Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

[REDACTED]

The BHA has no objection in principle to the 2 applications as long as there is a manned emergency telephone number for the use of the emergency service helicopters.

Yours

[REDACTED]

CEO BHA

From: [REDACTED]
Sent: 16 August 2021 11:25
To: ceo <ceo@britishhelicopterassociation.org>
Subject: Temporary Danger Area Application Engagement (ACP-2021-029 & 030)

Dear Sir/Madam,

Engagement Period: 16th August – 10th October 2021

Please find attached a letter outlining two independent applications submitted to the Civil Aviation Authority for non-concurrent Temporary Danger Areas at Moreton-In-Marsh and Radnor. We would be grateful if you might have the opportunity to review this document, raise any questions you might have and provide vital feedback with respect to these proposals via the enclosed form.

I look forward to engaging with you in this matter.

Best Regards

[REDACTED]

Accountable Manager
Nexus Nine Ltd
Email: [REDACTED]

General Aviation Alliance

From: GAA Programme Manager <Prog.Man@gaalliance.org.uk>

Sent: 14 October 2021 16:32

To: [REDACTED] <[REDACTED]>

Subject: RE: ACP-2021-030 RADNOR BVLOS UAS TDA STAKEHOLDER RESPONSE

Caution: External Message

Hi [REDACTED]

Thank you for your email acknowledgement.

- your email dated 10th October 2021 falls within our Engagement Period and, therefore will be included in our report to the CAA

Thank you for this assurance. We trust that this email exchange will also be included.

- It is extremely disappointing that a national representative body such as the GAA could have had an invaluable input into shaping these two ACPs and your members' views could have been better represented.

Firstly, I am merely a part time paid official of the GAA and therefore I have passed your email and this response on to the members for their due consideration.

It would probably be wise for Nexus Nine to be wary of commenting upon others use of the stakeholder engagement system when:

- Nexus Nine delayed the posting on to the CAA CAP 1616 portal of the key "Assessment Meeting Presentation" document. It was eventually posted on 26Sep2021, some 6 weeks into the 8 week engagement period, and over 9 weeks after the associated meeting minutes were posted. We believe this delay in posting of the document to be a breach of CAP 1616.
- There was no notification to stakeholders of the "Assessment Meeting Presentation" document's existence – the GAA found out about the document on the 08Oct2021, registered that it fundamentally altered the engagement and responded with 2 days. Would it have been preferable to call foul to the CAA and seek an extension of the engagement period? We thought not.
- There are significant differences between the stakeholder engagement document and the "Assessment Meeting Presentation" document, as commented upon in our email of 10Oct2021. At best this reflects badly upon the skills of the producers of the stakeholder engagement document and at worst it makes the stakeholder document disingenuous. Either way we regard this as a serious breach of CAP 1616.

We look forward to the responses to our email of 10Oct2021.

Regards

[REDACTED]

[REDACTED]
Programme Manager
General Aviation Alliance

Email: prog.man@gaalliance.org.uk

From: [REDACTED] <[REDACTED]>

Sent: 14 October 2021 15:09

To: [REDACTED] <Prog.Man@gaalliance.org.uk>

Subject: RE: ACP-2021-030 RADNOR BVLOS UAS TDA STAKEHOLDER RESPONSE

Mr [REDACTED]

Thank you for your recent emails.

Nexus Nine, as the Change Sponsor for ACP-2021-029 and ACP-2021-030, initially contacted your organisation on the first day of our Engagement Period (16th August 2021). Your organisation was carefully selected, amongst others, from the CAA's NATMAC Distribution List as a key representative of Stakeholders in this area; particularly as you rightfully list those organisations that you speak on behalf of. Distribution email addresses came directly from the CAA and we fully outlined the duration of this 8-week engagement process in our attached Stakeholder Engagement Letter.

Having heard nothing from your organisation by approximately half way through our Engagement Period, I sent a hastener to your organisation on 13th September encouraging you to take advantage of the remaining 28 days to make your representations to us and ask any questions.

Having provided a clear 56-day Engagement Period, your organisation elected to make first contact with us 29 minutes before our Engagement Period closed, on a Sunday evening with an extensive list of questions. By any stretch of the imagination, we firmly believe this is entirely unreasonable request for any organisation.

Nonetheless, your email dated 10th October 2021 falls within our Engagement Period and, therefore will be included in our report to the CAA.

It is extremely disappointing that a national representative body such as the GAA could have had an invaluable input into shaping these two ACPs and your members' views could have been better represented.

Regards

[REDACTED]

From: [REDACTED] <Prog.Man@gaalliance.org.uk>

Sent: 14 October 2021 13:07

To: [REDACTED] <[REDACTED]>

Subject: RE: ACP-2021-030 RADNOR BVLOS UAS TDA STAKEHOLDER RESPONSE

Caution: External Message

Dear Sir,

> please acknowledge receipt of this e-mail with an indication of when the full answer can be expected.

We are concerned that we have apparently heard nothing?

Regards

[REDACTED]

[REDACTED]
Programme Manager
General Aviation Alliance

Email: prog.man@gaalliance.org.uk

From: [REDACTED] <Prog.Man@gaalliance.org.uk>
Sent: 10 October 2021 23:31
To: [REDACTED] <[REDACTED]>
Subject: ACP-2021-030 RADNOR BVLOS UAS TDA STAKEHOLDER RESPONSE

Dear Sir,

Due to the vagaries of e-mail, unless you are able to respond immediately to the points raised, please acknowledge receipt of this e-mail with an indication of when the full answer can be expected.

This response is on behalf of the General Aviation Alliance to your attached stakeholder engagement on ACP-2021-030 Radnor BVLOS UAS TDA.

Please forgive any repetition of details that you already know. The GAA (www.gaalliance.org.uk) is an independent group and partnership of organisations representing, as far as possible, UK General Aviation (GA), and Sports and Recreational Aviation interests (S&RA). Its objective is to promote and protect the cost-effective use of GA and S&RA aircraft, and their owners, pilots and the associated operations, and to actively participate in the formulation of regulations and actions that may affect their interests so as to ensure the welfare and the free and safe movement of these aircraft, pilots, owners and the associated operations. By using the GAA as a consultee you can be sure that an appropriate person within all of the following organisations will be kept informed of the progress of your ACP and thereby reach the vast majority of UK GA operations:

BBAC - British Balloon and Airship Club

BGA - British Gliding Association

BHPA - British Hang Gliding and Para Gliding Association

BMAA - British Microlight Aircraft Association

BMFA - British Model Flying Association

BPA - British Parachute Association

HCGB - Helicopter Club of Great Britain

LAA - Light Aircraft Association

PPL/IR Europe - European Association of Instrument Rated Private Pilots

RAeC - Royal Aero Club of the United Kingdom

The individual organisations may choose to also submit their own responses directly to you.

It is important to state that the GAA is not anti-drone

The GAA finds that it must object to the proposed TDA for the following reasons:

1. The provided stakeholder engagement documentation is disingenuous in that there is no mention that the application is a precursor to a permanent TDA application. All that the documentation says is, "This ACP application is for a TDA lasting up to 90 days Initial TDA activity is planned to commence from AIRAC 2204 (21 Apr 22)."

Whereas the "Assessment Meeting Presentation" (copy attached), which was posted on to the CAP 1616 Portal over 7 weeks after the event and with only 2 weeks of the stakeholder engagement remaining shows a plan for "Permanent Segregated Airspace 2022+"

2. Both the CAA and GAA have a common position that unless drones and manned aviation can fully integrate both sides will suffer from significant limitations – segregation is NOT the way forward. This proposal is entirely about segregation with no indications of any movement at all to integration.

3. We find it hard to believe that each flight needs the over 9 cubic nm as enclosed by the proposed TDA.

a. Surely the TDA could be sub-divided so as to only activate the airspace actually needed?

b. Merely drawing a circle on a map will inevitably encompass airspace that is not needed and is indicative a poorly planned application.

4. We find it unbelievable that flights will occupy an entire day yet there are no indications as to what time windows will be used for NOTAMs to activate the TDA beyond “It is anticipated that the TDA will only be utilised during weekday daylight hours in blocks of up to 3 days at a time”.
5. If the espoused position of only weekday flying is true then the TDA need only be promulgated as “Monday to Friday excluding Bank Holidays”.
6. The documents states, “we see the need to be able to expand the scale and range of testing to provide assurance to our customers as to the effectiveness of the Counter UAS systems under test”
So as to minimise risks to third parties on the ground we fail to see how counter drone measures can be deployed on drones other than when they are above land controlled by Nexus Nine. Why then are the lateral dimensions of the proposed TDA so far from land that they can directly manage? Maybe this links in with point 2 above.
7. The offering of a Danger Area Activity Information Service (DAAIS) as a mitigation is pointless as all a DAAIS can offer is exactly what the GA pilot can, and has a duty to, pick up from various sources prior to take off. If the TDA is to go ahead it needs to have a Danger Area Cross Service (DACS).
8. The document says, “the Sponsor would provide a mobile number for PPR co-ordinated activity within the TDA where it is practical.”
At best this proposed mitigation displays an ignorance that once a TDA has been activated by NOTAM the only way that a GA flight can access it without a risk of prosecution is by DACS, and at worst it is disingenuous.
9. In the “Assessment Meeting Presentation” it clearly states that the finally desired result is “Permanent Segregated Airspace 2022+”. The GAA cannot accept that this is an acceptable result.
10. The document talks about evaluating the “effect of local electromagnetic interference”. Surely if it is sufficient to act as a counter to drones it will also potentially have an impact upon GA aircraft.
11. There are already Danger Areas established within the UK for both drone and electromagnetic work. Why can these not be used?

Regards

█

█

Programme Manager
General Aviation Alliance

Email: prog.man@gaalliance.org.uk

British Gliding Association

From: [REDACTED]
Sent: 27 September 2021 13:04
To: [REDACTED]
Subject: Radnor BVLOS UAS TDA

[REDACTED]
We've looked at the Radnor BVLOS UAS TDA ACP and discussed it with local gliding stakeholders. There are no significant issues that we are aware of.

The BGA has advised the Herefordshire gliding club at Shobdon to respond to you direct. You should hear from [REDACTED] who is aware of the detail including stakeholder engagement at that Shobdon airfield.

Kind regards

[REDACTED]
Chief Executive Officer

British Gliding Association
8 Merus Court
Meridian Business Park
Leicester LE19 1RJ

T 0044 [REDACTED]
www.gliding.co.uk



Registered in England 422605

Local General Aviation Users

[Hereford Gliding Club](#)

From: [REDACTED] <[REDACTED]>
Sent: 01 October 2021 11:33
To: [REDACTED] <[REDACTED]>
Subject: Re: Radnor BVLOS UAS TDA

[REDACTED]

Many thanks for your reply. It's great to hear this solution has the potential to work for you, we only hope the weather is kind to you for your gliding.

Permanent airspace in this location remains firmly within our business plan, but as you suggest, we have not yet submitted an ACP for this. Whilst the potential results of TDA testing will provide important data for us to shape a proposal, this ACP will take a very different path within CAP 1616. We would expect permanent airspace ACPs to take 18 to 24 months to process which would include a fresh, wider and longer stakeholder engagement period. Your organisation would be a natural stakeholder when the time comes.

Hope this clarifies.

[REDACTED]

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From: [REDACTED] <[REDACTED]>
Sent: Wednesday, September 29, 2021 2:33:29 PM
To: [REDACTED] <[REDACTED]>
Subject: RE: Radnor BVLOS UAS TDA

[REDACTED]

Thanks for your speedy response.

Our ability to fly is, as you say, sometimes limited by the weather. For this reason we are very keen not to suffer any unnecessary restrictions imposed on those days when the weather is suitable.

Your confirmation that you will not be emitting any interference to affect our operations is very reassuring.

Your suggestion of having a smaller radius TDA and only activating the larger TDA infrequently would be much appreciated. I look forward to seeing that reflected in your proposal to the CAA.

I note that the Assessment Meeting Presentation states that for the "run" stage of the timeline there will be:
Permanent Segregated Airspace

- Robust and safe test & training environment
- Activated by NOTAM
- 2022+

Will this be addressed by a future ACP?

Best Regards

[REDACTED]

From: [REDACTED] <[REDACTED]>
Sent: 29 September 2021 11:58
To: [REDACTED] <[REDACTED]>
Cc: [REDACTED] <[REDACTED]@gliding.co.uk>; [REDACTED] <[REDACTED]@airfieldops@shobdonairfield.co.uk>
Subject: RE: Radnor BVLOS UAS TDA

[REDACTED]

Thank you for taking the time to reply to our proposal. Moreover, may I also add you are one of the very few organisations that have taken this as an opportunity to engage with us to discuss potential solutions to the issues that you have raised as opposed to a flat out opposition. We're very grateful for this and are keen to reduce any impact you might have on ongoing gliding activities whilst equally achieving the objectives of our important Government work.

Initially, to place our plans in a little context, hopefully some of the points you rightly raise will be put at ease. The TDA has been requested so we can conduct some testing of UAS in the Beyond Visual Line of Sight arena. We anticipate using the TDA for up to 18 days (approx.) but this is also likely to be in the early part of 2022 when I'd imagine your ability to fly is limited by weather etc.

Furthermore, whilst we have expertise in the Counter UAS world, there will be no CUAS systems tested during the TDA period – it is simply to see how high and far we can operate various platforms in and around Radnor. As you'll no doubt be aware, the terrain here is quite challenging – we expect connectivity with our platforms to be reduced and hence the purpose of our TDA work is simply to identify the limits of those platforms. Consequently, this might give you good news in that we will not be emitting any interference to affect your operations – this is also tightly controlled by OFCOM who we regularly work with in other areas.

Since the purpose of our TDA is to test how far and high we can fly, we're keen to utilise a reasonably large TDA during our expected 18 day period of testing; this is how we derived the 3nm/3500' proposal. However, I think we'll run into connectivity range issues pretty quickly since there is much high ground to block our signals. Obviously if this is the case there would be little benefit for us in having a full 3nm TDA if we physically cant use it, and more importantly for you, we'd be restricting your gliding activities for no benefit.

What I might suggest is that we actually propose to the CAA 2 TDAs at Radnor, both centred around the Radnor Range valley. One would be smaller, perhaps 1.5nm radius up to 3500' which would allow us the ability to conduct the majority of our testing. We'd then request a second TDA out to the full 3nm and 3500' which we would activate even more infrequently – this would enable us to conduct our proposed longer range tests. If we found early on that our range is limited to within the smaller TDA then clearly we wouldn't use the larger one but we hope you understand that it's incredibly useful for us to fully understand the effectiveness of our systems in this environment. Our maximum altitude is reasonably high at 3500', this is to allow us to test a reasonable height above the highest terrain and gives us the ability to see how range is extended at greater altitude due to the increased 'line-of-sight'. Each TDA would be activated by NOTAM so for most of the time the airspace will remain as Class G, only being utilised when we're flying.

I hope this suggestion would significantly reduce the likelihood of our testing having an impact on your activities, but we couldn't honestly rule out this possibility. We genuinely have no interest in causing you disruption for no gain in our evaluation and would always carefully consider the implication of airspace activations on the GA community. I'd be very grateful to hear your thoughts on this proposal so we can work to a mutually agreeable solution.

Best Regards

[REDACTED]

From: [REDACTED] <[REDACTED]>
Sent: 28 September 2021 17:53
To: [REDACTED]

Cc: [REDACTED] <[REDACTED]@gliding.co.uk>; [REDACTED] <airfieldops@shobdonairfield.co.uk>
Subject: FW: Radnor BVLOS UAS TDA

Hi [REDACTED]

I attach a feedback form for your attention.

[REDACTED]

Appendix B – ACP-2021-030 (Radnor) Feedback Form

Name of Contact	[REDACTED]
Organisation	Herefordshire Gliding Club
Postal Address	Shobdon Airfield Shobdon HR6 9NR
Email Address	[REDACTED]

Feedback Points:

Dear [REDACTED]

Thank you for the opportunity to engage with Nexus Nine Ltd regarding your application for a Temporary Danger Area at Radnor. I am writing on behalf of Herefordshire Gliding Club Ltd which operates from Shobdon Airfield and is a member of the British Gliding Association (BGA). Gliders have flown from Shobdon for 50 years and the club was established to make use of the exceptional soaring opportunities that arise in the lee of Radnor Forest in the prevailing winds. The part of the proposed TDA most commonly used for gliding is the Radnor valley – i.e. the quadrilateral defined by Yardro, Kinnerton, Evenjobb and Walton. Usage is from 2500' AMSL upwards. Reducing the radius of the TDA in the SE quadrant from 3nm to 2nm would greatly reduce the impact on gliding. Alternatively shifting the centre of the TDA a mile to the NW would be equally helpful to us.

The proposal gives no details about the counter UAS systems under test. Gliders use GNSS (e.g. GPS) for navigation and to record flight paths to validate sporting achievements. Gliders carry complex electronic equipment. If the counter UAS systems cause interference outside the TDA this could impact gliders negatively.

If you haven't also contacted the British Hang Gliding & Paragliding Association, I suggest that you should do so. They have different requirements from us and will very likely have different concerns.

Best Regards

[REDACTED] HGC Airspace Representative

British Hang Gliding & Paragliding Association

From: [REDACTED] <[REDACTED]@BHPA.co.uk>
Sent: 09 October 2021 10:38
To: [REDACTED] <[REDACTED]@nexus-nine.co.uk>
Subject: Radnor BVLOS UAS TDA, Airspace change ACP-2021-030

Caution: This message originated externally, please use caution when clicking on links or opening attachments! When in doubt, contact your IT Department

Dear Sir / Madam,

I am writing in response to the ACP-2021-030 (Radnor TDA) Radnor UAS consultation.

On behalf of the BHPA (British Hang gliding and Paragliding Association) I would strongly object to this proposal as the immediate vicinity of Radnor is an important area for UK Hang gliding and Paragliding competitions and the proposed area actually encompasses one of the one of the main launch sites for such competitions.

Additionally, because of the terrain and airspace, this area is also one of the busier cross-country areas for free flight sports.

I am concerned that there appears to have been no attempt to consult with any of the more than 7000 active members of our association or its representatives at a club or national level.

Despite the significant and direct impact on our activities we were not consulted and I have only just been alerted by aviation colleagues in other disciplines to the ACP consultation which closes shortly so any response is limited by the brief window available.

The attempt to grab this important part of the UK airspace for private use is wrong in depriving large numbers of pilots access to an important part of the open FIR since few areas of comparable size are available to non-radio free flight traffic that is unable to operate under traffic control, wrong in seeking to deny a large section of airspace in both time and space for what is clearly short periods of actual usage and wrong in failing to directly consult those affected.

When other more suitable and less disruptive areas for UAV testing already exist it would seem entirely the wrong location for such tests which clearly do not require to be in what is to a significant number of users an important and irreplaceable section of the UK airspace.

We oppose this proposal and strongly suggest it is moved to a more suitable and less disruptive location.

[REDACTED]
BHPA Director of Competition

From: [REDACTED] <[REDACTED]>
Sent: 08 October 2021 16:00
To: [REDACTED] <[REDACTED]@nexus-nine.co.uk>
Cc: [REDACTED] <[REDACTED]@bmaa.org>; [REDACTED]@bmaa.org
Subject: ACP-2021-030 Radnor TDA

Caution: This message originated externally, please use caution when clicking on links or opening attachments! When in doubt, contact your IT Department

Dear [REDACTED]

Please see attached engagement response to your ACP-2021-030 Radnor, on behalf of the British Microlight Aircraft Association (BMAA).

Thanks, regards

[REDACTED]
BMAA Airspace Team

ACP-2021-030 RADNOR ENGAGEMENT RESPONSE

Name of Contact: [REDACTED]
Organisation: British Microlight Aircraft Association (BMAA)

Postal Address: The Bullring
Deddington
Banbury
Oxfordshire
OX15 0TT

Email Address: [REDACTED]
[REDACTED]@[bmaa.org](mailto:[REDACTED]@bmaa.org)

Feedback Points:

1. The BMAA acknowledge that this proposed TDA is in a reasonably remote area but would note that it is Class G airspace, which is increasingly being reduced by such segregated use and is also close to General Aviation airfields of:

Shobdon	5.7nm
Lane Farm	5.2nm
Woonton	7nm
Hardwicke	8nm
Elan Valley	11nm
Long Mynd gliding	16nm

(Distances from edge of proposed TDA)

As such the BMAA would like to ask if all these airfields have been engaged with sufficient time to view the information on the ACP, understand any potential impact and to respond?

2. This ACP appears to be a duplication of ACP-2021-029, other than proposed date of activation. In fact in this ACP the Sponsor Requirement and Opportunities refers to Moreton-in-Marsh:

“As a result of this, we need to understand the capability of our platforms to operate Beyond Visual Line of Sight (BVLOS) within the Moreton-In-March area”

It is confusing as to which location the sponsor wishes to carry out BVLOS operations.

Why does the sponsor need two TDAs for exactly the same use? Why cannot the use be merged, especially as the sponsor says the use of either TDA will be for 18 out of 90 days?

It seems that the sponsor is hedging its bets by applying for two TDAs at different locations in case one gets rejected.

The BMAA would maintain that ACP-2021-029 Moreton-in-Marsh is a bad location for a TDA for the reasons stated in our response to that ACP.

3. There is insufficient justification as to why BVLOS operations cannot be carried out elsewhere within existing segregated airspace, e.g. Llanbedr’s purpose designed UAV DAs, other than for the sponsor’s convenience – which would negatively impact many other airspace users.
4. The BMAA also wish to complain about the sponsor’s inadequacies in the Engagement process, some of which should be enforced by the CAA:

- a. Engagement start date was stated as 16 August but the Stakeholder Letter was not uploaded to the ACP portal until 31 August. Thus the engagement period is effectively over 2 weeks shorter than claimed.

This does not comply with CAP 1616.

- b. The sponsor admits it has not contacted all NATMAC stakeholders, as directed by the CAA in the Assessment Meeting: “Consultation and engagement: This process must encompass:

- Aviation stakeholders
- Other airspace users
- NATMAC
- Aerodromes
- Anyone directly, indirectly or potentially impacted, including elected representatives and/or environmental interest groups representing communities likely to be affected by potential impacts”

The BMAA only received the information on 31 August.

This also does not comply with CAP 1616.

- c. Assessment Meeting Presentation, dated 05 July, was not uploaded to the ACP portal until 26 September and then only because a BMAA member pointed out the omission. Thus this information was not available for most of the supposed engagement period.

[REDACTED]

From: [REDACTED] <[REDACTED]>
Sent: 28 September 2021 15:47
To: [REDACTED] <[REDACTED]>
Subject: RE: Your ridiculous TDA

Mr [REDACTED]

With a title to your email of "Your ridiculous TDA", you might perhaps see why we take a different view.

Our TDA application is for Beyond Visual Line of Sight operations which are not limited to the usual regulation. Our operations must be confined within the bounds of segregated airspace and in line with maximum operating heights and ranges of our platforms. To place into context typical platform limitations for an 'off-the-shelf' UAS are 5nm and 4500' although our largest platform can operate up to 85km and 9000'.

I hope this clarifies.

Best Regards

[REDACTED]

From: [REDACTED] <[REDACTED]>
Sent: 28 September 2021 15:23
To: [REDACTED]
Subject: Re: Your ridiculous TDA

Both

I don't see anything disrespectful or unprofessional about asking a very simple question - why you need a TDA of 2500ft vertical for your little toys - your toys are limited to a maximum height of 400 ft

On 28/09/2021 14:49, [REDACTED] wrote:
Dear Mr [REDACTED]

Your comments regarding our TDA applications have been noted and will be recorded in our report to the CAA. We would ask that if you wish to engage with us (which we welcome) on our TDA applications it is done in a professional and respectful manner. At this stage we will be making no further comment regarding your initial email but would welcome further professional communication from you in the future.

We would also be grateful to understand which ACP(s) your comments refer to (ACP-2021-029 is Moreton-In-Marsh, ACP-2021-030 is Radnor) and if you represent an organisation, business or yourself so we can accurately log your comments in our feedback report.

Best Regards

[REDACTED]

From: [REDACTED] <[REDACTED]>
Sent: 28 September 2021 09:27
To: [REDACTED]
Subject: Your ridiculous TDA

How come you need 2500 ft vertical for your little toys

██████████ FCSD

M: ██████████
--

██████████ FCSD Chartered Designer MIWFM
Fellow-Chartered Society of Designers



w: www.designcambridge.com
e: info@designcambridge.com

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██████████ Glider Pilot

Le mercredi 15 septembre 2021 à 17:59 +0100, ██████████ a écrit :

██████████
Thank you for getting in touch and we're more than happy to provide you with a little more detail as below:

[Are the various UAS being flown going to be equipped with electronic conspicuity \(EC\)? If yes, which one and whether out only, or, in and out?](#)

Generally speaking, for the platforms we operate, they are not equipped with EC devices. This is due to the relatively small size of platforms and poor integration with many Commercial Off-The-Shelf products. We have an ADS-B receiver at our base station to provide us with SA of traffic in the area, however the safe segregation of UAS from manned aviation is provided by the TDA in accordance with CAA regulation.

[Your letter mention DAAIS. Have you been able to progress this point since last month? That would provide extra granularity to the activation which is not possible via NOTAM.](#)

At present the provision of a DAAIS remains an open topic. Our envisaged provider has expressed reluctance to provide this service so we are in discussions with the CAA as to acceptable means of providing a DAAIS; this may include agencies such as London Info. Notwithstanding this, any activation NOTAMs would provide an accurate schedule – we are very much alive to the disruption for other air users by activating a TDA and hence use will be very much kept to a minimum.

[I understand that UAS VLOS or BVLOS are restricted to 400' agl. Even considering the elevation to the west of Moreton \(~800'\) or around Radnor \(~2200'\), I am not sure how the respective 2500' and 3500' of the proposed TDA was established. Could you explain how these altitudes were calculated?](#)

You rightly state Visual Line Of Sight UAS operations are limited to 500m laterally and 400' agl. Since our platforms would be operating Beyond Visual Line of Sight, the regulator mandates the use of segregated airspace to safely deconflict UAS from manned aviation – hence the requirement for a TDA. In order to conduct our assessment of BVLOS UAS operations in the Moreton & Radnor areas we have proposed the TDA altitudes of 2500' and 3500' AMSL as you describe. This offers us the ability to test up to approx. 1500' agl in each locality.

[Likewise about the diameter of the TDA, is there not room to reduce them? Could the UAS operate above the disused airfield at Moreton-in-Marsh and the operator be located further away?](#)

I'm currently evaluating the impact of the radius of the TDA. For modern UAS a 3nm radius area is covered relatively quickly but we would like the ability to test our platforms at good range to see what we can achieve in each location. A balance does need to be struck though with the impact this has on other aviation users. It may be that we amend our proposal to the CAA for 2 TDAs at Moreton – one smaller and one towards the proposed 3nm/2500' dimensions. This will enable us to segregate the airspace when we have the specific requirement for longer range/higher work, and at other times using a TDA that is less intrusive for other air operators.

[Could the UAS operate above the disused airfield at Moreton-in-Marsh and the operator be located further away?](#)

Unfortunately our testing infrastructure is located at Moreton so this is where we would need to see how far the UAS can be operated around this location, not within it. It would not be within the CAA regulation to operate the platforms from another location and remain within the rules of VLOS or Extended VLOS flight unfortunately.

I hope this clarifies your questions.

Best Regards

██████████

-----Original Message-----

From: ██████████ <██████████>

Sent: 14 September 2021 23:38

To: [REDACTED]

Subject: Questions about ACP-2021-029 and ACP-2021-030 Hello, I have some questions on your ACP before being able to provide feedback.

Are the various UAS being flown going to be equipped with electronic conspicuity (EC)? If yes, which one and whether out only, or, in and out?

Your letter mentions DAAIS. Have you been able to progress this point since last month? That would provide extra granularity to the activation which is not possible via NOTAM.

I understand that UAS VLOS or BVLOS are restricted to 400' agl. Even considering the elevation to the west of Moreton (~800') or around Radnor (~2200'), I am not sure how the respective 2500' and 3500' of the proposed TDA was established. Could you explain how these altitudes were calculated?

Likewise about the diameter of the TDA, is there not room to reduce them? Could the UAS operate above the disused airfield at Moreton-in-Marsh and the operator be located further away?

Best regards,

[REDACTED]

[REDACTED]

From: [REDACTED] <[REDACTED]>
Sent: 28 September 2021 15:36
To: [REDACTED]
Subject: RE: ACPs-2021-029 & 030

Mr [REDACTED]

Thank you for your feedback.

It might appear that there has been some misunderstanding as to our Engagement Strategy and whom we have spoken to. As mentioned, we were given the NATMAC list by the CAA immediately after our Assessment Meeting. We produced an engagement plan which for which we sought out additional guidance from the Regulator. In total 17 organisations on the NATMAC list were contacted, we have actively engaged with many of them and their views form a significant part of our engagement material. Alongside this, for Moreton-In-Marsh, we contacted 4 local airfields and 4 local parish councils for their thoughts with a similar number of local stakeholders contacted for Radnor. It is our firm belief we have engaged in line with the requirements of CAP 1616; a view that was reinforced and supported following an update meeting with our CAA Case Officer approximately 3 weeks ago.

Whilst the documentation that you have attached in your previous email will be included in our report to the CAA, it is disappointing that you have not given us the opportunity to engage with you regarding the issues that you have raised. The whole purpose of the Engagement Period is so we can understand the issues that our proposal will have for airspace users and for us to work together to shape a proposal that works mutually as well as it can. We have been very clear with the many stakeholders that we have engaged with – a TDA will cause an impact on airspace users when the airspace would otherwise remain as Class G airspace. However, others have made many constructive comments that, we believe, have shaped a better proposal that we intend to submit to the CAA. It is regrettable that your recent email suggests you are unable to engage in this way. Our Engagement Period remains open until 10th October 2021 so, if your availability changes, we would welcome the opportunity to discuss your comments.

Best Regards

[REDACTED]

From: [REDACTED]
Sent: 28 September 2021 13:35
To: [REDACTED]
Subject: RE: ACPs-2021-029 & 030

Good evening

Quite frankly I'm amazed and cannot believe that you took the CAA statement that "Consultation and engagement must encompass NATMAC" to mean that you need not seek feedback from any of the organisations. However, I will raise that separately with the CAA.

Due to the truncated engagement period I no longer have time to devote to these ACPs so my Feedback is attached.

Kind regards

[REDACTED]

[Attached Feedback Document]

ACPs-2021-029 & 030 MORETON-in-MARSH & RADNOR TDAs

Ref Docs:

1. Statement of Need ('SoN')
2. Stakeholder Engagement Letter ('Letter')
3. CAP 1616 Airspace Change ('CAP')
4. CAA Policy for the Establishment of Permanent and Temporary Danger Areas ('Policy')
5. E-mail exchange Sponsor & [REDACTED] 20-24 Sep 2021 pre-Feedback (E-mail)

NOTE. These 2 ACPs – 029 & 030 – are to all intents and purposes the same, often using significant sections of each other in the various documents. The only material difference seems to be the proposed height agl, with the Radnor one rather higher in an area of high terrain.

Therefore, this feedback addresses both ACPs and should be taken as feedback for each of them.

SUMMARY

All-in-all neither ACP deserves support because of the totally inadequate stakeholder engagement. There are additional reasons, but for the very poor engagement alone I object to ACP-2021-029 and ACP-2021-030 entirely.

1. OPERATIONAL ASSESSMENT

1.1 Justification for Change/Options Analysis

It is quite unclear to me what single issue or opportunity is being addressed by this ACP. Both Proposals are materially the same, or at least they are quite unclear in specifically how they differ.

Because of that lack of clarity it seems to me that the Sponsor has made 2 applications for TDAs in the hope that one is approved.

1.2 Operational Arrangements

There appears to have been no impact assessments undertaken on traffic flows around the proposed areas, suggesting a lack of knowledge on either likely traffic levels or the risks added by this Proposal.

No consideration seems to have been taken of and no engagement with nearby airfields.

Equally neither proposal makes any reference to any form of ATS – eg DAACS – for traffic seeking to fly across or very close to the TDAs.

1.2.1 ACP 029 - Moreton-in-Marsh The lower airspace over the Cotswolds is already heavily utilised by a wide range of air vehicles, inc balloons and paragliders, gliders, microlights, light aircraft and large military aircraft. Yet the Sponsor seems to have made no assessment of the impact of the TDA on traffic in the area.

The Proposal will locate a large 'no-fly' area in very busy Class G airspace, creating choke points between the Brize Norton CTR and Little Rissington ATZ to the S, Bidford airfield/R204 and Wellesbourne Mountford ATZ to the N.

The TDA will create choke points leading to an increased risk of airprox/mid-air collision. There is also an increased risk of airprox/mid-air collision between traffic forced to route closer to airfields and those airfields' local traffic to the N & S of the TDA.

The centre of the Moreton-in-Marsh TDA would be only just over 2nm from the edge of the Oxford AIAA so that the TDA will intrude into the AIAA by a significant amount. By its very name the AIAA requires great caution; caution which seems missing from this Proposal.

1.2.2 ACP 030 – Radnor

Again, the Sponsor has presented no evidence about the utilisation of this Class G airspace nor have they attempted to explain how there will be little or no impact on traffic at Shobden and D203.

The Radnor TDA will be only 9nm from Shobden which is an extremely busy GA airfield with gliders, helos, microlights and single/twin engine light air. While D203 is a major Army range with significant helo activity, and the range boundary is only 13nm away from the proposed TDA.

The Proposal would create choke points between TDA & Shobden, and the TDA & D203 with an increased risk of airprox/mid-air collision

2. CONSULTATION ASSESSMENT

2.1. Audience

It is clear from the e-mail exchange between ██████████ and the sponsor (E-mail, reproduced at the end of this Feedback) that only cursory attempts have been made to engage with the GA community. Despite being instructed (Minutes) by the CAA that the engagement process:

“must encompass:

- *Aviation stakeholders*
- *Other airspace users*
- *NATMAC*
- *Aerodromes”*

The sponsor declined stating: *“our suggested list of stakeholders was run past the CAA Engagement Team prior to commencing the process”*, that ‘list’ did not include the BMAA or the LAA.

Indeed, the Sponsor states of NATMAC/BMAA/LAA engagement *“it would not be appropriate for a TDA of only 90 days”*.

This clearly demonstrates the Sponsor’s lack of understanding of GA and the CAP which states that all TDAs are 90 days or less:

“a temporary change to the published (notified) airspace design (usually less than 90 days, except in extraordinary circumstances)”

The Moreton-in-Marsh TDA will be only 2nm from the Oxford AIAA, 8nm from Little Rissington, 10nm from Enstone (an extremely busy GA airfield) and 12nm from the RAF Brize Norton CTR!!

While the Radnor TDA is only 9nm from Shobden which is an extremely busy GA airfield with gliders, helos, microlights and single/twin engine light aircraft. D203 is a major Army range with significant helo activity craft and the range boundary is only 13nm away.

It is not stated by the Sponsor (no published engagement list) who local to the TDA sites has been consulted but it is of concern that that neither Oxford, the MoD, Enstone nor Shobden has been mentioned as being consulted about either Proposal.

2.2 Timescale

The engagement period started 2 weeks before the Engagement Letter was loaded onto the Portal and 6 weeks before the Presentation was loaded – both timescales are unacceptable and contrary to the policy in the CAP.

2.3 Attention to Detail

In almost all professional operations attention to detail is vital and in none more so than aviation. The Minutes for both Engagement Meetings - meetings for separate ACPs - reference the same Proposal ID as "ACP-2021-030".

In addition, the Engagement Letter for 030 – Radnor - refers to:

"As a result of this, we need to understand the capability of our platforms to operate Beyond Visual Line of Sight (BVLOS) within the Moreton-In-March area".

The spelling error (the Cotswold site is 'Moreton-in-Marsh' not 'March') is bad enough but to get the location completely wrong (this proposal is for Radnor) is inexcusable. I have an aviation trials background and in my opinion and experience such a lack of attention to detail causes serious questions about whether the TDA could be managed professionally or the trials conducted safely.

These errors and the duplication of the "Sponsor Requirement and Opportunities" in the Engagement Letters reinforce my view that these 2 Proposals are one and the same, aimed at achieving one TDA.

3. PERMANENT DANGER AREA (DA)

For both Proposals the Sponsor's stated aim is for: *"Permanent segregated airspace activated by NOTAM in 2022+."*

Over the past few years Class G airspace has been 'taken' specifically for use by RPAS operating BVLOS at West Wales Airport and Llanbedr; there is not only no justification for any further permanent DAs but there is a strong argument that the activities proposed in these ACPs should be and would best be carried out in those existing RPAS DAs.

I have no doubt that any attempt to take more Class G airspace for RPAS DAs would be strongly resisted by all the GA Community.

4. CONCLUSION

These 2 Proposals are, to all intents and purposes, the same and seem to be an attempt to use 2 'bids' to achieve one TDA.

It may be that the Sponsor has just not explained the differences clearly enough but that means that meaningful engagement with stakeholders (a key requirement of the ACP process and CAP) is impossible.

Even ignoring the duplication, the Proposals show a woeful lack of engagement despite the instructions of the CAA. This lack of engagement is further compounded by a seriously truncated engagement period which has limited my ability to study them fully. By itself, this extremely poor engagement leads me to object entirely to both Proposals.

Ignoring the engagement, the lack of assessment of traffic in the areas is also of considerable concern. The creation of choke points should always be avoided and especially so in areas of dense GA activity like Moreton-in-Marsh, while the failure to consult widely risks missing smaller airfields and is inexcusable. This lack of assessment of airspace activity or a lack of willingness to consult all users leads me to object entirely to these Proposals.

A well-presented, broadly-consulted and truly temporary Proposal might have generated support in the Radnor area although I doubt any proposal in the Moreton-in-Marsh area would ever be supported. Regrettably, in my opinion neither Proposal exhibits any of those key traits and as they are presented I object most strongly to ACPs 029 and 030.

GA Pilot
27 Sep 2021

From: [REDACTED] [mailto:[REDACTED]]
Sent: 24 September 2021 16:53
To: [REDACTED]
Subject: RE: ACPs-2021-029 & 030

Hi,

The CAA did, in fact, provide the exact list that you suggest. It was made clear to us that we did not have to engage with everyone on the list (indeed it would not be appropriate for a TDA of only 90 days) and our suggested list of stakeholders was run past the CAA Engagement Team prior to commencing the process.

I will upload a copy of the initial presentation to the Airspace Portal, all information regarding this ACP was encompassed in our Targeted Engagement material – we therefore have no plan to extend the engagement period.

I would though be grateful for a little understanding as to what your particular interest is with these ACPs so I might be able to provide you with more targeted information.

Best Regards

[REDACTED]

From: [REDACTED]
Sent: 24 September 2021 07:28
To: [REDACTED]
Subject: RE: ACPs-2021-029 & 030

Thanks [REDACTED]

I'm surprised that the CAA did not provide you with the list of NATMAC (National Air Traffic Management Advisory Committee) members but it did state (Assessment Meeting Minutes):

“Consultation and engagement

This process must encompass:

- Aviation stakeholders
- Other airspace users
- NATMAC
- Aerodromes”

NATMAC members include all the national GA Associations who should have been contacted directly, and I believe the CAA would provide contact details.

A link listing the members is below and ARPAS is also a member, as you can see from the link

<https://www.arpas.uk/arpas-uk-invited-to-join-natmac/>

I notice also from the Minutes of the Assessment Meetings that you gave a presentation to the CAA and that the CAA required the presentation to be published on the Portal (a requirement of the CAP), but I cannot see the document anywhere. Can you confirm if/when it was/will be published, and whether as a result the engagement period will be extended?

Kind regards

[REDACTED]
From: [REDACTED] [mailto:[REDACTED]]
Sent: 20 September 2021 22:29
To: [REDACTED]
Subject: RE: ACPs-2021-029 & 030

Many thanks for your reply; my apologies for my misunderstanding and I now see where you're coming from. I shall explain all I can to help you determine where the delays might have come from.

As suggested, our engagement period began on 16th August with emails sent to both local stakeholders for each ACP and a number of national stakeholders who received information on both our ACPs. Our suggested list of national stakeholders was run past the CAA where a number of additional stakeholders were added at their suggestion. I can confirm that the below national association stakeholders were contacted on 16th August using the latest contact information provided directly from the CAA Engagement Team:

Aircraft Owners & Pilot's Association
British Helicopter Association
Airspace4all
General Aviation Alliance

Whilst I cannot speak for the national bodies that represent the GA community, I might surmise that it simply took a while for our ACP email to come to the top of their inbox, and then distribute amongst the membership.

I hope this clarifies from our end for you. If you require any more information, please do not hesitate to get back in touch.

Best Regards

[REDACTED]
From: [REDACTED]
Sent: 20 September 2021 18:08
To: [REDACTED] <[REDACTED]>
Subject: RE: ACPs-2021-029 & 030

Dear Sponsor

Thanks for your prompt response.

1. Can you explain please why, if the engagement period started on 16 Aug, the engagement letter was not published for individual stakeholders like me until 31 Aug?
2. You have misunderstood my question as I represent only myself. I am, though, active in several GA organisations and would have expected to be made aware of your ACPs by some or all of them. Can you please tell me which GA bodies you contacted and when?

Kind regards

[REDACTED]
From: [REDACTED] [mailto:[REDACTED]]
Sent: 20 September 2021 17:40

To: [REDACTED]
Subject: Re: ACPs-2021-029 & 030

Dear Sir/Madam,

Many thanks for your enquiry regarding our 2 ACPs. I can confirm that our engagement period began on the 16th of August 2021 and will continue to run for the 8 week duration as stated in our literature.

In order to fully understand the timeline for your receipt of our proposal and identify if your organisation was part of our original engagement list it would be useful for you to identify whom you are representing. I will then be able to provide you with a more detailed explanation for any delays.

Many thanks

[REDACTED]
Get [Outlook for Android](#)

From: [REDACTED]
Sent: Monday, September 20, 2021 5:05:22 PM
To: [REDACTED] <[REDACTED]>
Subject: ACPs-2021-029 & 030

Dear Sponsor

ACPs 030 (Radnor) and 029 (Moreton-in-the-March) both had engagement letters issued on 31 Aug 2021 with an 8 week engagement period. Yet the closing date for submission is 10 Oct 21 – just 6 weeks after publication of the letter. Are you going to extend the deadline to end Oct to provide 8 weeks?

Unlike many other ACPs you have not provided list of organisations actually contacted, especially GA organisations. I am a member of a formal ACP Assessment Team and have received no notification of engagement from my GA organisation, can you provide a list of organisations contacted please?

Kind regards

[REDACTED]

Community Engagement

New Radnor Parish Council

From: New Radnor Community Council <newradnorcc@outlook.com>

Sent: 15 October 2021 09:59

To: [REDACTED] <[REDACTED]>

Subject: Re: Radnor Unmanned Aerial System Airspace Consultation

Caution: External Message

Dear [REDACTED]

As agreed with you previously your proposal was discussed at the Council meeting held last night and Members did not have any comment to make.

Regards

[REDACTED]

[REDACTED]

Clerk and Responsible Financial Officer

New Radnor Community Council

[REDACTED] [REDACTED]

From: New Radnor Community Council <newradnorcc@outlook.com>

Sent: 13 September 2021 20:17

To: [REDACTED] [REDACTED] <[REDACTED]>

Subject: Re: Radnor Unmanned Aerial System Airspace Consultation

Many thanks.

[REDACTED]

[REDACTED]

Clerk and Responsible Financial Officer

New Radnor Community Council

[REDACTED] [REDACTED]

From: [REDACTED] [REDACTED] <[REDACTED]>

Sent: 13 September 2021 19:00

To: New Radnor Community Council <newradnorcc@outlook.com>

Subject: Re: Radnor Unmanned Aerial System Airspace Consultation

[REDACTED]

Absolutely, no problem at all.

■
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From: New Radnor Community Council <newradnorcc@outlook.com>
Sent: Monday, September 13, 2021 6:59:05 PM
To: ■ <■>
Subject: Re: Radnor Unmanned Aerial System Airspace Consultation

Thank you ■ You just missed our Sept meeting. May I submit comments to you on 15th October, a few days after your deadline? It would be a real help as we can then discuss at our October meeting.

I look forward to hearing from you.

■
■
Clerk and Responsible Financial Officer
New Radnor Community Council

From: ■ <■>
Sent: 13 September 2021 15:36
To: 'New Radnor Community Council' <newradnorcc@outlook.com>
Subject: Radnor Unmanned Aerial System Airspace Consultation

■
Many thanks for the email address....

Please find attached details regarding a proposed temporary air danger area to conduct Unmanned Aerial Systems (drone) activity from the test range at Radnor. If you have any questions regarding this proposal, please do not hesitate to contact me but we would also welcome your feedback regarding this proposal.

Best Regards

■
Accountable Manager
Nexus Nine Ltd

From: New Radnor Community Council <newradnorcc@outlook.com>
Sent: 13 September 2021 10:23
To: ■
Subject: Fw: Contact Form message from newradnor.net/community-council/council-members/ to ■

Dear ■

You can reply to this email.

[REDACTED]
Clerk and Responsible Financial Officer
New Radnor Community Council

[REDACTED]

From: [REDACTED] <[REDACTED]>
Sent: 13 September 2021 09:26
Cc: [REDACTED] <[REDACTED]>
Subject: Contact Form message from newradnor.net/community-council/council-members/ to [REDACTED]
[REDACTED]

(Do not reply to this email. Forward your response to the sender's email address below)

(The sender has been sent a copy of this email)

Name: [REDACTED]

Email: [REDACTED]

Message: Dear Mr [REDACTED], Just wondering if the Council might have an email address? I have a proposal for some drone activity at the nearby Radnor Range I'd be grateful for your council's input on. Many thanks

Appendix C – Traffic Flow Study

Good Weather Day

Tues 7th September 2021

Summary: Cardiff saw a good weather day throughout the period with no cloud detected for the majority of the day. Freezing level estimated > 10,000' AMSL. Traffic transiting over the proposed TDA is likely to have been VFR and therefore able to fly above 3500' (max elevation of TDA) if they had wished to.

07/09/2021 09:20-> METAR EGGF 070920Z AUTO 07009KT 9999 NCD 23/17 Q1021=
07/09/2021 09:50-> METAR EGGF 070950Z AUTO 07009KT 9999 NCD 23/16 Q1021=
07/09/2021 10:20-> METAR EGGF 071020Z AUTO 07010KT 9999 NCD 24/17 Q1020=
07/09/2021 10:50-> METAR EGGF 071050Z AUTO 09009KT 9999 NCD 25/17 Q1020=
07/09/2021 11:20-> METAR EGGF 071120Z AUTO 09008KT 9999 NCD 26/17 Q1020=
07/09/2021 11:50-> METAR EGGF 071150Z AUTO 09009KT 9999 NCD 26/17 Q1019=
07/09/2021 12:20-> METAR EGGF 071220Z AUTO 09008KT 060V140 9999 NCD 27/17 Q1019=
07/09/2021 12:50-> METAR EGGF 071250Z AUTO 10009KT 070V140 9999 NCD 28/17 Q1019=
07/09/2021 13:20-> METAR EGGF 071320Z AUTO 10010KT 070V140 9999 NCD 28/16 Q1019=
07/09/2021 13:50-> METAR EGGF 071350Z AUTO 11010KT 9999 NCD 28/16 Q1018=
07/09/2021 14:20-> METAR EGGF 071420Z AUTO 10010KT 9999 NCD 28/16 Q1018=
07/09/2021 14:50-> METAR EGGF 071450Z AUTO 11009KT 9999 NCD 28/15 Q1018=
07/09/2021 15:20-> METAR EGGF 071520Z AUTO 11010KT 9999 NCD 28/15 Q1017=
07/09/2021 15:50-> METAR EGGF 071550Z AUTO 12011KT 9999 NCD 28/15 Q1017=
07/09/2021 16:20-> METAR EGGF 071620Z AUTO 13011KT 9999 NCD 27/14 Q1017=
07/09/2021 16:50-> METAR EGGF 071650Z AUTO 12010KT 9999 VCTS //CB 26/14 Q1017=

Aircraft that would have infringed the TDA laterally and vertically based on QNH 1018 (for today this is FL034 and below):

Time	Callsign	Type	Flight Level
1429	GBHAA	C152	030
1449	GAVOZ	PA28	030

Total affected traffic in 8-hour window: 2

Moderate Weather Day

Weds 1st September 2021

Summary: Cardiff saw stable cloud bases between 2500' and 3600' for the majority of the day with good visibility throughout. Freezing level estimated >10,000'. Traffic transiting over the proposed TDA is likely to have been unable to elect to fly above 3500' and maintain VFR.

01/09/2021 09:20-> METAR EGFF 010920Z AUTO 06013KT 9999 OVC034 16/11 Q1032=
01/09/2021 09:50-> METAR EGFF 010950Z AUTO 07011KT 9999 OVC036 16/10 Q1032=
01/09/2021 10:20-> METAR EGFF 011020Z AUTO 06011KT 9999 OVC032 16/10 Q1032=
01/09/2021 10:50-> METAR EGFF 011050Z AUTO 06011KT 9999 OVC031 16/11 Q1032=
01/09/2021 11:20-> METAR EGFF 011120Z AUTO 07012KT 9999 OVC026 16/10 Q1032=
01/09/2021 11:50-> METAR EGFF 011150Z AUTO 07010KT 9999 BKN028 OVC033 16/10 Q1032=
01/09/2021 12:20-> METAR EGFF 011220Z AUTO 07011KT 030V110 9999 SCT023 OVC029 16/11 Q1032=
01/09/2021 12:50-> METAR EGFF 011250Z AUTO 07012KT 9999 OVC025 16/11 Q1031=
01/09/2021 13:20-> METAR EGFF 011320Z AUTO 06013KT 9999 BKN026 OVC031 16/10 Q1031=
01/09/2021 13:50-> METAR EGFF 011350Z AUTO 04009KT 9999 OVC031 16/11 Q1031=
01/09/2021 14:20-> METAR EGFF 011420Z AUTO 05009KT 9999 OVC032 17/11 Q1031=
01/09/2021 14:50-> METAR EGFF 011450Z AUTO 04009KT 9999 OVC036 17/11 Q1031=
01/09/2021 15:20-> METAR EGFF 011520Z AUTO 05009KT 9999 OVC031 16/11 Q1031=
01/09/2021 15:50-> METAR EGFF 011550Z AUTO 06008KT 030V090 9999 OVC033 17/11 Q1031=
01/09/2021 16:20-> METAR EGFF 011620Z AUTO 08007KT 9999 OVC036 17/11 Q1030=
01/09/2021 16:50-> METAR EGFF 011650Z AUTO 06010KT 9999 OVC036 17/11 Q1030=

Aircraft that would have infringed the TDA laterally and vertically based on QNH 1030 (for today this is FL030 and below):

Time	Callsign	Type	Flight Level
1301	VYT779	Texan	FL007
1316	VYT72	Texan	FL008
1509	VYT77	Texan	FL011

Total affected traffic in 8-hour window: 3

Appendix D – TDA Stakeholder Update Letter



8th September 2022

Airspace Change Proposal ACP-2021-030 (Temporary Danger Area) Update

Update Engagement Period: 8th September to 7th October 2022

Dear Sir/Madam,

In April 2021 Nexus Nine applied for a Temporary Danger Area (TDA) at Radnor, Presteigne. Our TDA submission was made to the CAA in January 2022. It is our intention to update our proposal such that the 90-day TDA would be utilised during the period 26th January to 26th April 2023. This timeline aims to honour our existing agreements with Stakeholders to minimise disruption, particularly for local flying organisations, including our intention to only utilise the TDA for approximately 18 days of the 90-day validity period.

Whilst our schedule has changed, at present we have no plans to further alter other aspects of our submission. The January 2022 submission can be found by visiting the Airspace Change Portal (<https://airspacechange.caa.co.uk>) and searching for ACP-2021-030 or via the hyperlink [here](#).

In view of this amended timeline we would invite both new and updated engagement from Stakeholders to understand the impact of the proposed 2023 activity period. We welcome this renewed opportunity to discuss our proposal with Stakeholders and see this as an opportunity to work collaboratively with you. Equally, please feel free to forward this update to other parties you feel might be interested.

For further discussions, Stakeholder submissions can be made to the email address RadnorACP@nexusnine.co.uk. Following completion of the Update Engagement Period, an amended report will be submitted to the CAA for consideration.

Best Regards



Accountable Manager
Nexus Nine Ltd

Appendix E – Update Period Stakeholder Engagement Evidence

██████████ Herefordshire Gliding Club

From: ██████████
Sent: 08 September 2022 10:36
To: ██████████ <██████████>
Subject: Radnor UAS BVLOS TDA (ACP-2021-030)

██████████

I hope this finds you well and you've had a good summer of gliding.

Back in October last year you were good enough to provide some useful feedback to our proposed TDA at Radnor. This was collated, alongside other feedback, and included in our initial submission to the CAA in January of this year. Due to unforeseen circumstances, we have had to reschedule our proposed TDA from 2022 into the early part of 2023. Whilst other aspects of our proposal are unlikely to change, it does make sense that we re-engage with other local airspace users to understand any other potential impacts our revised timeline of 26 Jan to 26 April 2023; thus retaining our ability to adjust our proposal accordingly. I attach a letter which hopefully explains this; it has also been uploaded to the CAA Airspace Change Portal for your wider membership to view. Whilst the 90-day period does run into April, we'd look to 'front-load' our TDA activity towards the early part of the year when GA activity is somewhat quieter; this formed an important part of our mitigation for organisations such as yours due to the temporary airspace. Of particular note here is our TDA 90-day period covers Easter 2023, which I'd imagine attracts a lot of activity for your club – we'd look to minimise TDA activation during this period to avoid disruption.

I'd be grateful if you might be able advise as to the likely impact of this revised timeline. Furthermore, if you have and proposed competition dates during this period, could you let us know so we can look to deconflict?

As mentioned in the letter, our opportunity for Stakeholder feedback is open until 7th October and we'd welcome your thoughts.

Best Regards

██████████

██████████
Accountable Manager
Web: www.nexusnine.co.uk
E-mail: ██████████



Nexus Nine Ltd
Company Number: 10731020

Building 330, Westcott Venture Park, Westcott, HP18 0XB

██████████ British Hang Gliding & Paragliding Association

From: ██████████
Sent: 05 October 2022 15:10
To: ██████████ <██████████@BHPA.co.uk>
Subject: RE: Radnor UAS BVLOS TDA (ACP-2021-030)

Mr ██████████

Thank you for the reply; I'll make sure your comments are included in our updated report for the CAA's review. I've also included a few of our thoughts on those comments below for your review; please do come back to me if you wish:

Thank you for your email. My previous comments in opposition to your attempt to privatise a national sporting resource stand in their entirety and I endorse the response of the GAA and BMAA.

We would highlight this is an application for a Temporary Danger Area, valid for only 90-days and only during periods of NOTAM'd activity. Outside these short periods of activity (already estimated to be only 18 days) the airspace remains accessible to all. If approved, we apologise in advance for any inconvenience caused.

You do not seem to be even aware of non-transponder traffic let alone consider the impact of your proposals on it.

At present, the CAA mandate that all manned aviation must be segregated from BVLOS UAS traffic, whether transponding or not. We have had some particularly useful engagement with local aviation clubs to understand how this proposal might affect them and how we can mitigate against disruption. Our proposal to the CAA in Jan 22 significantly differed from our initial proposal as a direct result of Stakeholder input and the desire to minimise disruption for both transponding and non-transponding traffic. This is coupled with our existing intention to conduct this short trial during the winter when all aviation activity is at its least frequent. As my previous email suggested, we remain open to deconflicting dates of activity from your members competitions or periods of intense activity. It is our belief we are doing everything we can to mitigate the effect of this TDA on local airspace users.

Existing Commercial, Military, GA and Sporting co-exist in this area without conflict and I remain of the view that so long as BVLOS drone activity cannot co-exist with existing users without disrupting or endangering them it must be conducted within existing trial areas. The whole principle of a segregated airspace confirms the current technology is incapable of co-existing in this way.

Our application seeks to trial BVLOS operations in this area in line with a specific business requirement based at Radnor. Regrettably this cannot be fulfilled at an alternative location within an existing Danger Area – this would have been a far easier, quicker and cheaper option for us. We equally hope that BVLOS can be safely conducted outside segregated airspace in the future, but at present, we are constrained by the current regulation.

Autonomous land vehicles are tested on private sites, not by closing public roads, the parallel is clear.

I have BCC copied this to some of the local clubs but the nature of our activities mean that it could affect pilots in any part of the country and I rather doubt they will be able to respond significantly in the time limits set.

Thank you for passing this on, we look forward to working with your local clubs to deconflict, if our application is successful.

Once again, thank you for taking the time to respond.

Best Regards

█

█

Accountable Manager

Web: www.nexusnine.co.uk

E-mail: █



Nexus Nine Ltd

Company Number: 10731020

Building 330, Westcott Venture Park, Westcott, HP18 0XB

From: █ <█@BHPA.co.uk>

Sent: 05 October 2022 11:24

To: █ <█@█>

Subject: Re: Radnor UAS BVLOS TDA (ACP-2021-030)

Caution: External Message

Dear Mr █

Thank you for your email. My previous comments in opposition to your attempt to privatise a national sporting resource stand in their entirety and I endorse the response of the GAA and BMAA.

You do not seem to be even aware of non-transponder traffic let alone consider the impact of your proposals on it.

Existing Commercial, Military, GA and Sporting co-exist in this area without conflict and I remain of the view that so long as BVLOS drone activity cannot co-exist with existing users without disrupting or endangering them it must be conducted within existing trial areas. The whole principle of a segregated airspace confirms the current technology is incapable of co-existing in this way.

Autonomous land vehicles are tested on private sites, not by closing public roads, the parallel is clear.

I have BCC copied this to some of the local clubs but the nature of our activities mean that it could affect pilots in any part of the country and I rather doubt they will be able to respond significantly in the time limits set.

Yours sincerely,

On 08/09/2022 10:41, [REDACTED] wrote:
Mr [REDACTED]

I hope this finds you well.

Back in October last year you were good enough to provide some useful feedback to our proposed TDA at Radnor. This was collated, alongside other feedback, and included in our initial submission to the CAA in January of this year. Due to unforeseen circumstances, we have had to reschedule our proposed TDA from 2022 into the early part of 2023. Whilst other aspects of our proposal are unlikely to change, it does make sense that we re-engage with other local airspace users to understand any other potential impacts our revised timeline of 26 Jan to 26 April 2023; thus retaining our ability to adjust our proposal accordingly. I attach a letter which hopefully explains this; it has also been uploaded to the CAA Airspace Change Portal for your wider membership to view. Whilst the 90-day period does run into April, we'd look to 'front-load' our TDA activity towards the early part of the year when GA activity is somewhat quieter; this formed an important part of our mitigation for organisations such as yours due to the temporary airspace. Of particular note here is our TDA 90-day period covers Easter 2023, which I'd imagine attracts a lot of activity for your clubs – we'd look to minimise TDA activation during this period to avoid disruption.

I'd be grateful if you might be able to internally distribute this proposed change to your membership – particularly those local clubs you mentioned in your October email. This will allow us to best understand the impact for them and ideally deconflict with any events they might already have in their diaries.

As mentioned in the letter, our opportunity for Stakeholder feedback is open until 7th October and we'd welcome your thoughts.

Best Regards

[REDACTED]
Accountable Manager
Web: www.nexusnine.co.uk
E-mail: [REDACTED]



Nexus Nine Ltd
Company Number: 10731020
Building 330, Westcott Venture Park, Westcott, HP18 0XB

██████████ Long Mynd Soaring Club, BHPA

From: ██████████
Sent: 13 October 2022 20:13
To: chairman@longmynd.org
Subject: RE: Radnor UAS BVLOS TDA (ACP-2021-030)

Mr ██████████

Thank you so much for getting in touch, it is so useful for us to try and understand the impact for local Stakeholders of our proposal. Moreover, its important to understand how we can reduce any potential impact so we can all use the airspace together. Just for your assurance, all of your comments and this reply will feature in full in our report to the CAA to ensure your perspective is properly represented as the CAA make their decision on our application.

I think the easiest way to address your points is to copy and reply below (minus the illustrations) so we can hopefully clarify, mitigate or adjust as required...

It is useful for cross country freeflight that the timing of the TDA activity is in the earlier part of the year and encouraging that you are closing the TDA activity over Easter.

Very much reassuring; if approved, it might also be useful to get a diary of your significant club events so we can deconflict as best we can.

It is very concerning to see that Radnor Range/Nexus Nine are saying they are applying for a permanent DA. Located alongside Shobdon ATZ, and worse that it is very adjacent, this creates a large chunk of non-accessible airspace to freeflight pilots and could easily see longer free flight flights through Wales curtailed at this point. Wales is one of the few places with remaining largely open Class G airspace for freeflight pilots and this TDA or a new permanent DA would significantly change this. Our flights emanate from many hills and depending on wind direction may fly into this area. Surely there are locations that would be less of an impact to GA & freeflight?

Your view is completely understandable, and worth explaining our position and reasoning. The requirement for a permanent Danger Area (DA) at Radnor remains a business need for our client, however, at present we have not submitted an application for this. Whilst there are some existing DAs that enable drone activity, the unique requirements of our client, coupled with their capabilities at the Radnor site, mean these existing sites would not enable their requirements to be fulfilled.

We believe it is important to be open and honest with our Stakeholders; whilst this ACP only relates to a TDA, it is likely we will apply for a permanent DA at Radnor. However, it's equally important that we also make clear what we envisage this DA will comprise of. Any proposed permanent DA would only be activated by NOTAM meaning for the vast majority of time, the airspace would remain available to all, as it is now. Whilst we do not wish to prejudge the results of our proposed testing, we would also expect that the requested permanent DA would encompass a smaller volume of airspace than the TDA – we need to test and understand our limitations of operations before we can make this decision.

More concerning is the location/extent of the proposed TDA as this directly affects one of our clubs long used flying sites for both soaring and cross country, Shepherds Tump.

Our site guide for the affected hill :
http://www.longmynd.org/?page_id=282

We have used this site for many years. See the illustration below, please excuse my hastily added markings (I am trying to respond to this during work) – the black circle our potential soaring area and the arrows our usual escape to fly cross country downwind (the site takes roughly a SW wind. The main route to leave the hill on XC is directly affected by the outer edge of the TDA.

I understand just south of Shepherds Tump is another hill used by another club but an agreed cut of the corner of the TDA circle could likely allow for the uninterrupted use of both sites!

If the corner of the TDA could be cut as illustrated below, this would largely leave this flying site unaffected, allowing both the usual soaring and cross country escape downwind to continue unaffected.

There is always a concern with our sport that the wind can push us back against our will and in such case the possibility exists to be blown into the TDA, if the corner of the TDA was removed I would assume this would largely have no impact on your operations but it would make a huge difference to our operations and remove the danger of our unpowered aircraft being blown back into the TDA. It seems nonsensical to create a TDA that invites conflict and potential danger when it can be slightly adjusted to avoid both.

Your diagrams make perfect sense and your observations are equally well made. In practical sense I understand why you'd suggest 'clipping' the NW edge of the TDA but I think this equally presents us with the slightly usual prospect of a TDA with irregular dimensions. This is clearly the case at local areas such as Sennybridge, but with a TDA we already risk the TDA being unfamiliar to aviators and hence we'd see the ability to keep it as 'simple' as possible as having its own safety benefits. With our proposed activity times (which are likely to be weekday only) of only being 18 days, I'd suggest the easiest and least disruptive method is for us to deconflict from your activity. Part of this comes from the two TDAs you mention below....

What I am a little confused about, is the TDA for 1.5nm or 3nm or either depending on NOTAM? Would an application for a permanent DA be for 1.5 or 3nm? 3nm seems an excessive grab of valuable GA airspace.

This amendment to our proposal came directly from local stakeholder engagement as we understood the impact of our initial TDA dimensions for a Shobdon-based gliding club. We recognize that any additional airspace would cause disruption and that the larger that volume, the more disruption. In order to conduct our test schedule we envisage, at times, needing a TDA of 3nm. However, this would not be required at all times, hence it seemed sensible to segregate a smaller volume of airspace and reduce the disruption (1.5nm). If approved you could therefore expect the smaller TDA to be utilized far more than the 3nm TDA. This (if I'm reading your illustrations correctly) would give good, safe separation if we had concurrent drone and Long Mynd activity.

3nm is a significant volume of airspace (50% bigger than an ATZ), it is not applied for, or considered by the Regulator, lightly. To place in context though, some of our platforms have operating ranges in excess of 40nm reflecting the swift technological progress of UAS. We would also wish to highlight that the dimensions of our proposed TDA do not necessarily represent the dimensions of any future application for permanent airspace.

One further concern, there has been a well used flying site called Bache Hill towards the east of the proposed TDA, allowing for soaring in a SE wind with cross country downwind as indicated by the arrow. Whilst this is no longer a club flying site, it is still flown by paraglider pilots and there was hope to bring this again into the Club.

Understood, and duly noted. I'd hope, during the winter, this would have little impact but its clear any future plans ought to consider the impact of this site as a long-established operating area.

There are 2 sides to this of course, the TDA and the proposed permanent DA.

Of course, due to the nature of our sport we are generally against permanent GA airspace grabs that we are often unable to fly over and in attempting to fly around will often see us fall short of what could have been much longer flights on our unpowered aircraft. But in this case we are particularly concerned that actual flying sites could be lost.

In line with the points raised above, I would be very keen and grateful to have a meeting with you to discuss how we could perhaps work together for minimal disruption/conflict to both our activities, this

could apply to the TDA and the DA especially in respect to Shepherds Tump hill which on the face of it looks like a very small compromise being on the western extremity and could allow the hill to remain fully clear of your TDA and possible DA.

We couldn't agree more; we feel the more engagement we can do to understand the impact the better. We can arrange something face-to-face or a virtual meeting if it's a little more convenient. Our report is likely to be submitted to the CAA by the end of Oct to meet their assessment timeline. By means of assurance, any permanent DA application process would last anywhere between 18 and 24 months; we would request significant local Stakeholder engagement to get this right and, ultimately, it is up to the CAA to decide if our proposal is reasonable.

In any case, we'd equally highlight this particular ACP, and its associate engagement, relates purely to the TDA with its limited validity of 90 days.

Once again, thanks so much for getting in touch and engaging with us; we look forward to hearing from you in the near future.

Best Regards

██████████

██████████

Accountable Manager

Web: www.nexusnine.co.uk

E-mail: ██████████



Nexus Nine Ltd

Company Number: 10731020

Building 330, Westcott Venture Park, Westcott, HP18 0XB

From: chairman@longmynd.org <chairman@longmynd.org>

Sent: 07 October 2022 16:59

To: ██████████ <██████████>

Cc: ██████████ <██████████@BHPA.co.uk>

Subject: RE: Radnor UAS BVLOS TDA (ACP-2021-030)

Importance: High

Caution: External Message

Hi

Thank you for the BCC of this email.

It is useful for cross country freeflight that the timing of the TDA activity is in the earlier part of the year and encouraging that you are closing the TDA activity over Easter.

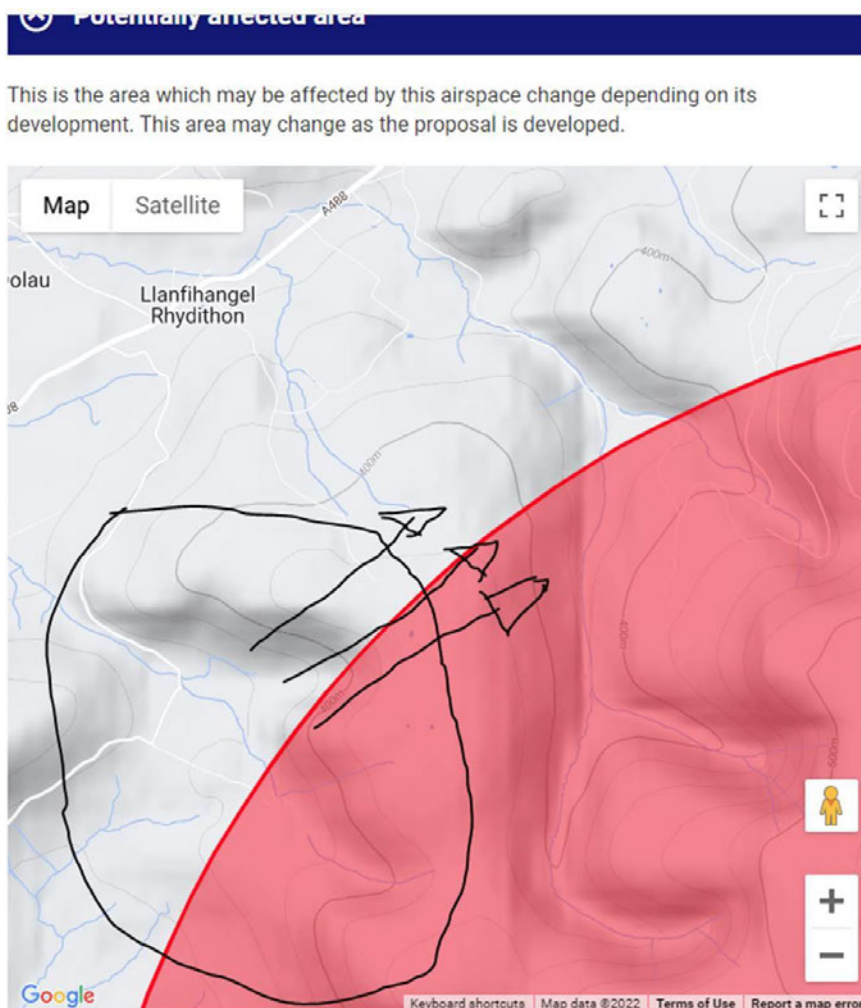
It is very concerning to see that Radnor Range/Nexus Nine are saying they are applying for a permanent DA. Located alongside Shobdon ATZ, and worse that it is very adjacent, this creates a large chunk of non-accessible airspace to freeflight pilots and could easily see longer free flight flights through Wales curtailed at this point. Wales is one of the few places with remaining largely open Class G airspace for freeflight pilots and this TDA or a new permanent DA would significantly change this. Our flights emanate from many hills and depending on wind direction may fly into this area. Surely there are locations that would be less of an impact to GA & freeflight?

More concerning is the location/extent of the proposed TDA as this directly affects one of our clubs long used flying sites for both soaring and cross country, Shepherds Tump.

Our site guide for the affected hill :
http://www.longmynd.org/?page_id=282

We have used this site for many years. See the illustration below, please excuse my hastily added markings (I am trying to respond to this during work) – the black circle our potential soaring area and the arrows our usual escape to fly cross country downwind (the site takes roughly a SW wind). The main route to leave the hill on XC is directly affected by the outer edge of the TDA.

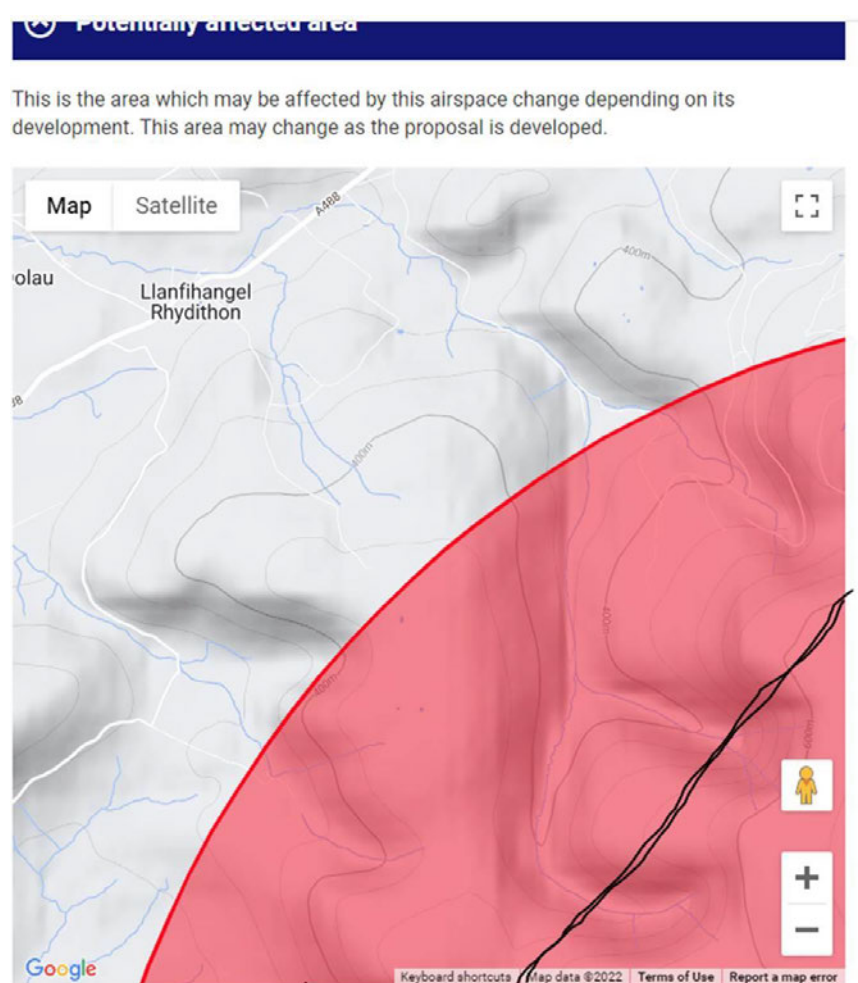
I understand just south of Shepherds Tump is another hill used by another club but an agreed cut of the corner of the TDA circle could likely allow for the uninterrupted use of both sites!



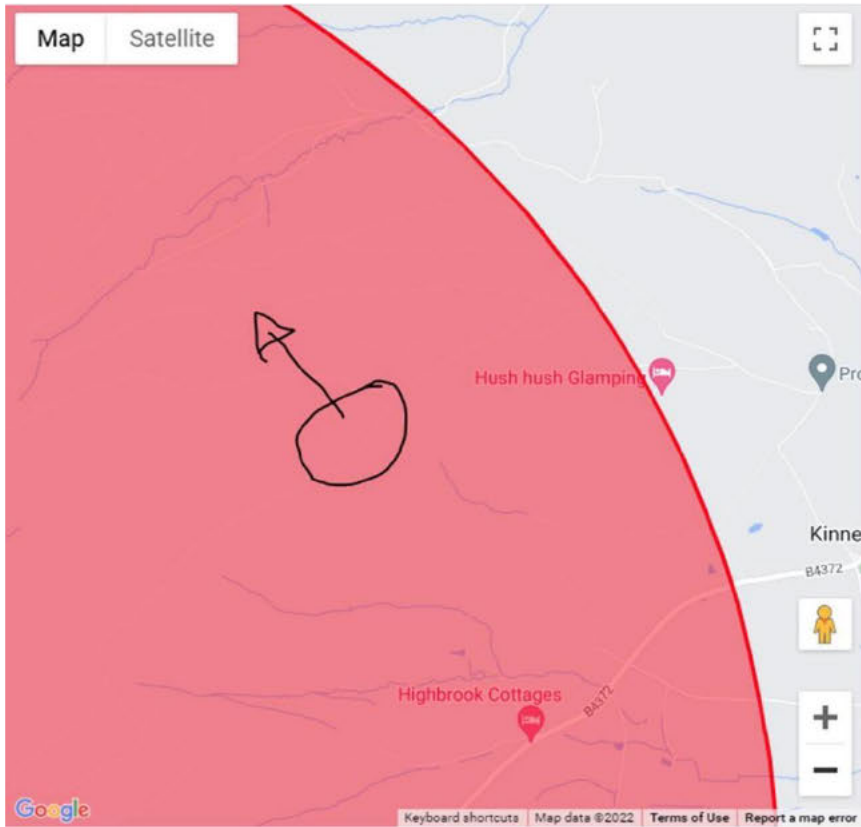
If the corner of the TDA could be cut as illustrated below, this would largely leave this flying site unaffected, allowing both the usual soaring and cross country escape downwind to continue unaffected.

There is always a concern with our sport that the wind can push us back against our will and in such case the possibility exists to be blown into the TDA, if the corner of the TDA was removed I would assume this would largely have no impact on your operations but it would make a huge difference to our operations and remove the danger of our unpowered aircraft being blown back into the TDA. It seems nonsensical to create a TDA that invites conflict and potential danger when it can be slightly adjusted to avoid both.

What I am a little confused about, is the TDA for 1.5nm or 3nm or either depending on NOTAM? Would an application for a permanent DA be for 1.5 or 3nm? 3nm seems an excessive grab of valuable GA airspace.



One further concern, there has been a well used flying site called Bache Hill towards the east of the proposed TDA, allowing for soaring in a SE wind with cross country downwind as indicated by the arrow. Whilst this is no longer a club flying site, it is still flown by paraglider pilots and there was hope to bring this again into the Club.



There are 2 sides to this of course, the TDA and the proposed permanent DA.

Of course, due to the nature of our sport we are generally against permanent GA airspace grabs that we are often unable to fly over and in attempting to fly around will often see us fall short of what could have been much longer flights on our unpowered aircraft. But in this case we are particularly concerned that actual flying sites could be lost.

In line with the points raised above, I would be very keen and grateful to have a meeting with you to discuss how we could perhaps work together for minimal disruption/conflict to both our activities, this could apply to the TDA and the DA especially in respect to Shepherds Tump hill which on the face of it looks like a very small compromise being on the western extremity and could allow the hill to remain fully clear of your TDA and possible DA.

Thank you,

Kind regards

[REDACTED] | [REDACTED]
Long Mynd Soaring Club (LMSC) | Chairman
chairman@longmynd.org / www.longmynd.org

[REDACTED] British Microlight Aircraft Association

From: [REDACTED]
Sent: 16 September 2022 11:52
To: [REDACTED]
Cc: [REDACTED] <[REDACTED]>
Subject: RE: Radnor UAS BVLOS TDA (ACP-2021-030)

[REDACTED]

Thanks so much for getting back to me; its great to hear from your organisation. You've raised a number of really interesting points, probably easiest if I copy them below (in green) to ensure I've covered all of your questions thoroughly; my answers are shown in blue and I'll ensure this whole email trail is included in the updated submission to the CAA.

Forgive me if I've missed it but I cannot trace having had any answer from you to the questions posed there.

We received your email pertaining to ACP-2021-030 on Friday 8th Oct, it is included in our submission to the CAA along with the points that you made. Unfortunately, due to the timescale (arrival at 1600 on a Friday before the Engagement Period closed on the Sunday) we were unable to provide you with a reply within business hours. Please be assured, during the 56-day Stakeholder Engagement Period, between our 2 ACPs we fielded approximately 100 activities of engagement back and forth. Whilst we regret that we didn't provide your organisation with a direct reply, we believe that the feeling and impact from a significant number of Stakeholders has been documented with detailed engagement. Our Updated Stakeholder Engagement Period does though, give us this renewed opportunity to engage including replying to your original observations.

Namely:

As such the BMAA would like to ask if all these airfields have been engaged with sufficient time to view the information on the ACP, understand any potential impact and to respond?

Our Engagement Strategy was discussed at length with our CAA Case Officer and the CAA Engagement Team, prior to commencement. Our strategy saw us contact local airfields who represent the majority of GA movements within the locality. Conscious this would not encompass all Stakeholders (such as the sites you mention), our strategy utilised the reach of 3 national GA representative bodies, alongside others, who have direct links to many of the specific GA activities within the Radnor and Moreton-In-Marsh areas, such as the BMAA. It is our belief that, as part of the national teams, the views and concerns of local clubs and sites could be effectively captured to provide us with qualitative feedback, not just quantitative views. It also enables us to centrally capture the potential disruption that any TDA might cause to your members such that we can do our best to deconflict. We would also highlight that the BMAA forms only part of our wider engagement including Emergency Services, military, local councils and wider GA Stakeholders. We believe that, our engagement is proportionate to a Temporary Danger Area that can have a validity of not more than 90 days and planned activity of approximately 18 days.

Why does the sponsor need two TDAs for exactly the same use? Why cannot the use be merged, especially as the sponsor says the use of either TDA will be for 18 out of 90 days?

Our 2 ACPs were submitted in response to 2 separate business needs, each at a specific location. Since our Engagement Period in 2021 the business need for Moreton-In-Marsh has changed, as such we have withdrawn ACP-2021-029. Our requirement for Radnor remains unchanged.

I also complained about your engagement and can trace no responses to those point along with others made in the attached letter. Please find above clarification above regarding the timeline of engagement as to why we were unable to provide you with a reply within the previous Engagement Period. I also now attach replies to this previous queries as part of this Update Engagement Period. Your initial queries are documented on pages 67-68 of our January 2022 submission to the CAA.

So, we remain concerned about the standard of your engagement on this ACP. We should not need to trawl through the CAA ACP portal in order to find answers to our questions and points requiring responses. Keep in mind that yours is only one of numerous ACPs that organisations, such as ours, has to monitor and engage with and many of our organisations rely on voluntary work for such things, as does the BMAA. Please accept our apologies that we could not facilitate a reply within our previous Engagement Period. We would wish to highlight that we contacted national bodies documented as representing the BMAA on the first day of our 56-day Engagement Period, which we hoped would

have enabled your views discussed earlier to be brought to the fore within the Engagement Period. I do though, attach replies to your previous engagement to this email; if there are any recent changes or concerns, do please get back in touch.

It would be inappropriate for us to pre-judge the view of the Regulator on our Engagement Process. Notwithstanding this, we believe our Engagement was appropriate to the nature of this ACP and in line with the requirements stipulated in CAP1616. We welcome the additional opportunity to engage with you for the remainder of the Update Engagement Period.

Having been prompted by this to read through your final submission on the ACP portal I disagree with some of that information, which was not distributed to us as a NATMAC member. In fact, I note that the BMAA is not even on your initial list of aviation stakeholders shown there. However, I do note that you have addresses some of the general concerns we voiced but, again, this should have been sent as a reply to our submission and not left for us to be expected to check every ACP for updates. That is why it should be engagement by the sponsor directly with stakeholders.

Our initial ACP submission involved a meeting with the Regulator to ensure our ACP met the Gateway Requirements and to make clear to us our responsibilities as a Sponsor – Stakeholder Engagement formed an important part of this. Our proposed Engagement Strategy was reviewed by the CAA prior to beginning the Engagement Period and we believe it is proportionate to the ACP.

Whilst you raise a number of concerns regarding our chosen Engagement Strategy, and clearly we might have a differing view, we feel these perspectives should be independently assessed by the Regulator when they review our final submission. We would be keen to utilise this Update Stakeholder Engagement Period to identify, discuss and, where possible, mitigate the operational concerns of your organisation such that, if this ACP is approved, we cause least disruption to your members – amending our proposal if required.

Best Regards

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■■■■■■■■■■

Accountable Manager

Web: www.nexusnine.co.uk

E-mail: ■■■■■■■■■■



Nexus Nine Ltd

Company Number: 10731020

Building 330, Westcott Venture Park, Westcott, HP18 0XB

Attached Engagement Response

ACP-2021-030 RADNOR ENGAGEMENT RESPONSE

Name of Contact: ■■■■■■■■■■

Organisation: British Microlight Aircraft Association (BMAA)

Postal Address: The Bullring
Deddington
Banbury
Oxfordshire
OX15 0TT

Email Address: [REDACTED]
[REDACTED]@bmaa.org

Feedback Points:

5. The BMAA acknowledge that this proposed TDA is in a reasonably remote area but would note that it is Class G airspace, which is increasingly being reduced by such segregated use and is also close to General Aviation airfields of:

Shobdon	5.7nm
Lane Farm	5.2nm
Woonton	7nm
Hardwicke	8nm
Elan Valley	11nm
Long Mynd gliding	16nm

(Distances from edge of proposed TDA)

As such the BMAA would like to ask if all these airfields have been engaged with sufficient time to view the information on the ACP, understand any potential impact and to respond?
[Please see our comments regarding this in main email of 16 Sep 22.](#)

6. This ACP appears to be a duplication of ACP-2021-029, other than proposed date of activation. In fact in this ACP the Sponsor Requirement and Opportunities refers to Moreton-in-Marsh:

“As a result of this, we need to understand the capability of our platforms to operate Beyond Visual Line of Sight (BVLOS) within the Moreton-In-March area”

It is confusing as to which location the sponsor wishes to carry out BVLOS operations.
[Your observation is well made, this was a typographical error on my part and was corrected during the 2021 Engagement Period. We apologise for any confusion caused.](#)

Why does the sponsor need two TDAs for exactly the same use? Why cannot the use be merged, especially as the sponsor says the use of either TDA will be for 18 out of 90 days?
[Our 2 separate ACPs relate to separate business requirements which are site-specific. Since our initial Engagement Period our ACP for Moreton-In-Marsh \(ACP-2021-029\) has been withdrawn as our requirement changed. The 18-day activity period has been kept to a minimum in order to cause least disruption to other Stakeholders.](#)

It seems that the sponsor is hedging its bets by applying for two TDAs at different locations in case one gets rejected.
[Each ACP places significant demand on our organisation, in terms of personnel, time and cost. We would be unable to support an application if it were not to fulfil a viable opportunity.](#)

The BMAA would maintain that ACP-2021-029 Moreton-in-Marsh is a bad location for a TDA for the reasons stated in our response to that ACP.
[ACP-2021-029 has been withdrawn by the Sponsor. At present we have no requirement for a TDA at Moreton-In-Marsh.](#)

7. There is insufficient justification as to why BVLOS operations cannot be carried out elsewhere within existing segregated airspace, e.g. Llanbedr's purpose designed UAV DAs, other than for the sponsor's convenience – which would negatively impact many other airspace users. Our ACP for a TDA is based on a requirement of the landowner at Radnor. At our initial CAA ACP meeting, the Regulator deemed that our proposal met the Gateway requirements to proceed through the CAP1616 process.
8. The BMAA also wish to complain about the sponsor's inadequacies in the Engagement process, some of which should be enforced by the CAA:
- a. Engagement start date was stated as 16 August but the Stakeholder Letter was not uploaded to the ACP portal until 31 August. Thus the engagement period is effectively over 2 weeks shorter than claimed.

This does not comply with CAP1616.

Due to a technical error on my part the Stakeholder Engagement Letter did not upload to the ACP Portal at the beginning of the Engagement Period; this error was corrected at the earliest opportunity. This was discussed with the CAA at the time and deemed by the Regulator that CAP1616 had not been breached. We would also note that this letter remained on the ACP Portal for at least 6 weeks during the Engagement Period – this is the minimum period required by CAP1616. In the interests of transparency, this uploading error was highlighted by the Sponsor within the Final Submission made in January 2022.

- b. The sponsor admits it has not contacted all NATMAC stakeholders, as directed by the CAA in the Assessment Meeting: "Consultation and engagement: This process must encompass:
- Aviation stakeholders
 - Other airspace users
 - NATMAC
 - Aerodromes
 - Anyone directly, indirectly or potentially impacted, including elected representatives and/or environmental interest groups representing communities likely to be affected by potential impacts"

The BMAA only received the information on 31 August.

This also does not comply with CAP1616.

It was made clear to us by the CAA that there is no requirement to contact all members on the NATMAC list, nor do we believe this would be appropriate for an ACP of this nature. Alongside others, we contacted a number of national GA bodies who represent the vast majority of UK activity, including the BMAA.

- c. Assessment Meeting Presentation, dated 05 July, was not uploaded to the ACP portal until 26 September and then only because a BMAA member pointed out the omission. Thus this information was not available for most of the supposed engagement period. The Assessment Meeting Presentation provided a 'running order' for the initial Assessment Meeting with the CAA; this meeting was fully minuted, outlining all of the points discussed. These minutes were approved by the CAA as a true record of the ACP meeting. It is common for Assessment Meeting presentations not to be uploaded to the ACP Portal. Nonetheless, the upload of this document was requested by a Stakeholder and the Sponsor obliged without delay.

From: [REDACTED] <[REDACTED]>
Sent: 14 September 2022 17:16

To: [REDACTED] <[REDACTED]>
Subject: RE: Radnor UAS BVLOS TDA (ACP-2021-030)

Caution: External Message

Dear [REDACTED]

Thank you for your message. You are correct that I did respond to this ACP, on behalf of the BMAA. Attached is a copy of my submission.

Forgive me if I've missed it but I cannot trace having had any answer from you to the questions posed there. Namely:

As such the BMAA would like to ask if all these airfields have been engaged with sufficient time to view the information on the ACP, understand any potential impact and to respond?

Why does the sponsor need two TDAs for exactly the same use? Why cannot the use be merged, especially as the sponsor says the use of either TDA will be for 18 out of 90 days?

I also complained about your engagement and can trace no responses to those point along with others made in the attached letter.

So, we remain concerned about the standard of your engagement on this ACP. We should not need to trawl through the CAA ACP portal in order to find answers to our questions and points requiring responses. Keep in mind that yours is only one of numerous ACPs that organisations, such as ours, has to monitor and engage with and many of our organisations rely on voluntary work for such things, as does the BMAA.

Having been prompted by this to read through your final submission on the ACP portal I disagree with some of that information, which was not distributed to us as a NATMAC member. In fact, I note that the BMAA is not even on your initial list of aviation stakeholders shown there. However, I do note that you have addresses some of the general concerns we voiced but, again, this should have been sent as a reply to our submission and not left for us to be expected to check every ACP for updates. That is why it should be engagement by the sponsor directly with stakeholders.

Regards

[REDACTED]
British Microlight Aircraft Association Airspace Team lead

From: [REDACTED] <[REDACTED]>
Sent: 08 September 2022 10:28
To: [REDACTED]
Subject: Radnor UAS BVLOS TDA (ACP-2021-030)

[REDACTED]

I hope this finds you well.

Back in October last year you were good enough to provide some useful feedback to our proposed TDA at Radnor. This was collated, alongside other feedback, and included in our initial submission to the CAA in January of this year. Due to unforeseen circumstances, we have had to reschedule our proposed TDA from 2022 into the early part of 2023. Whilst other aspects of our proposal are unlikely to change, it does make sense that we re-engage with other local airspace users to understand any other potential impacts our revised timeline of 26 Jan to 26 April 2023; thus retaining our ability to

adjust our proposal accordingly. I attach a letter which hopefully explains this; it has also been uploaded to the CAA Airspace Change Portal for your wider membership to view. Whilst the 90-day period does run into April, we'd look to 'front-load' our TDA activity towards the early part of the year when GA activity is somewhat quieter; this formed an important part of our mitigation for organisations such as yours due to the temporary airspace. Of particular note here is our TDA 90-day period covers Easter 2023, which I'd imagine attracts a lot of activity for your clubs – we'd look to minimise TDA activation during this period to avoid disruption.

I'd be grateful if you might be able to internally distribute this proposed change to your membership – particularly those clubs you mentioned in your October email. This will allow us to best understand the impact for them and ideally deconflict with any events they might already have in their diaries.

As mentioned in the letter, our opportunity for Stakeholder feedback is open until 7th October and we'd welcome your thoughts.

Best Regards

██████████

██████████

Accountable Manager

Web: www.nexusnine.co.uk

E-mail: ██████████



Nexus Nine Ltd

Company Number: 10731020

Building 330, Westcott Venture Park, Westcott, HP18 0XB

██████████ **Shobdon Airfield**

From: ██████████

Sent: 08 September 2022 11:05

To: Airfield Manager <airfieldops@shobdonairfield.co.uk>

Subject: Radnor UAS BVLOS TDA (ACP-2021-030)

██████████

I hope this finds you well.

Back in October last year you were good enough pass on details of our proposal to your users for feedback. This was collated, alongside other feedback, and included in our initial submission to the CAA in January of this year. Due to unforeseen circumstances, we have had to reschedule our proposed TDA from 2022 into the early part of 2023. Whilst other aspects of our proposal are unlikely to change, it does make sense that we re-engage with other local airspace users to understand any other potential impacts our revised timeline of 26 Jan to 26 April 2023 might have; thus retaining our

ability to adjust our proposal accordingly. I attach a letter which hopefully explains this; it has also been uploaded to the CAA Airspace Change Portal for wider viewing. Whilst the 90-day period does run into April, we'd look to 'front-load' our TDA activity towards the early part of the year when GA activity is somewhat quieter; this formed an important part of our TDA mitigation for airfields such as yours. Of particular note here is our TDA 90-day period covers Easter 2023, which I'd imagine attracts a lot of activity – we'd look to minimise TDA activation during this period to avoid disruption.

Alongside any of your thoughts, I'd be grateful if you might be able to internally distribute to the airfield users (I've already sent direct to [REDACTED]). This will allow us to best understand the impact for them and ideally deconflict with any specific events they might already have in their diaries.

As mentioned in the letter, our opportunity for Stakeholder feedback is open until 7th October and we'd welcome your thoughts.

Best Regards

[REDACTED]

[REDACTED]

Accountable Manager

Web: www.nexusnine.co.uk

E-mail: [REDACTED]



Nexus Nine Ltd

Company Number: 10731020

Building 330, Westcott Venture Park, Westcott, HP18 0XB

Appendix F – Environmental Noise

North-East Sector Dwellings



South-East Sector Dwellings



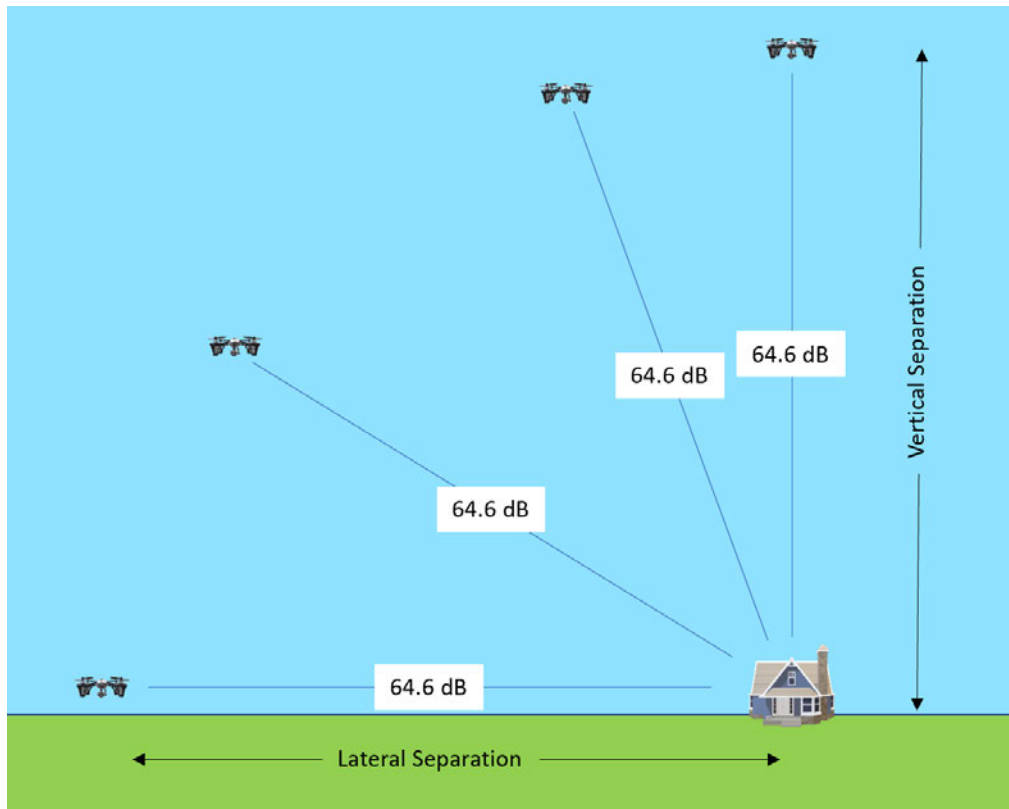
South-West Sector Dwellings



North-West Sector Dwellings



Vertical Vs Lateral Separation Diagram



Decibel Noise Comparison Table

Environmental Noise	<i>dBA</i>
Jet engine at 100'	140
Pain Begins	<i>125</i>
Pneumatic chipper at ear	120
Chain saw at 3'	110
Power mower	107
Subway train at 200'	95
Walkman on 5/10	94
<i>Level at which sustained exposure may result in hearing loss</i>	<i>80-90</i>
City Traffic	85
Telephone dial tone	80
Chamber music, in a small auditorium	75-85
Vacuum cleaner	75
Normal conversation	60-70
Business Office	60-65
Household refrigerator	55
Suburban area at night	40
Whisper	25
Quiet natural area with no wind	20
Threshold of hearing	0

Source: Yale University, <https://ehs.yale.edu/noise-hearing-conservation>