

CAA Consultation Assessment

Title of airspace change proposal (ACP)	Enabling Remotely Piloted Aircraft Operations at RAF Fairford - HALE
Change sponsor	Ministry of Defence (MoD)
Project reference	ACP-2021-078
Account Manager	██████████
Case study commencement date	02 January 2024
Case study report as at	25 January 2024

Instructions

In providing a response for each question, please ensure that the 'status' column is completed using the following options:

YES • NO • PARTIALLY • N/A

To aid the SARG Lead it may be useful that each question is also highlighted accordingly to illustrate what is:

resolved YES not resolved PARTIALLY not compliant NO

Executive Summary

The Ministry of Defence, as sponsor of this airspace change proposal (ACP), consulted on establishing segregated airspace in the form of a Danger Area (DA) to facilitate Beyond Visual Line of Sight (BVLOS) take-offs and landings of High-Altitude Long Endurance (HALE) Remotely Piloted Air Systems (RPAS) at Royal Air Force (RAF) Fairford, Gloucestershire in support of North Atlantic Treaty Organisation's (NATO) Agile Combat Employment Concept. The airspace change requirement is to accommodate transition of the Remotely Piloted Aircraft (RPA) between RAF Fairford and high-altitude transit, not for training or operations. Segregated airspace is required as United States (US) HALE RPA do not currently have a detect and avoid capability (DAA) that would enable it to operate BVLOS in non-segregated airspace. This ACP was categorised as a Level M2 change (in accordance with CAP 1616, Version 4 (V.4), Table 2).

The sponsor originally sought to accommodate both Medium Altitude Long Endurance (MALE) RPA and HALE RPA within this ACP, but after stage 2 on taking into consideration feedback from NATS regarding impacts on civil traffic and on completion of internal United States Air Force (USAF) analysis, the sponsor split out the MALE RPA proposal into a separate ACP and developed a single HALE design option

which was presented to stakeholders at their stage 3 consultation for this ACP. The design option presented comprised 4 segments, segment A Surface (SFC) to Flight Level (FL)75, segment B FL50 to FL240, Segment C FL160 to FL500 and segment D FL 200 to FL500. The HALE RPA referenced at consultation was the RQ-4 Global Hawk.

The sponsor conducted a consultation over a period of 6 weeks. On receipt of consultation feedback, the sponsor determined that the airspace design, as presented at consultation, did not require any amendments.

The sponsor proposed, at consultation, activation of the airspace 2 – 3 times per week for up to 3 hours duration on each occasion. Hours of activation to be limited to between 1 hour after sunset to 1 hour before sunrise. For normal operations activation would be restricted to night-time hours, no earlier than 1 hour after sunset and no later than 1 hour prior to sunrise but normally not earlier than 2000 or after 0530 Universal Co-ordinated Time (UTC) with activation outside of the proposed times expected to be rare and coordinated in advance. No changes were made to these proposed activation arrangements after consultation.

Airspace will be activated by NOTAM at least 24 hours prior to operations. Procedures will be adopted to ensure that the airspace is activated only when required and dynamically deactivated when not in use. A Danger Area Crossing Service (DACS) is being provided. The sponsor is seeking dispensation from the SARG Special Use Airspace (SUA) Safety Buffer Policy. Air traffic control draft procedures and Letters of Agreement have been discussed with stakeholders and drafts submitted as part of the sponsor's airspace change submission.

PART A – Summary of Airspace Change Process to date

A.1	Airspace change proposal public view (caa.co.uk)	
A.2	Stage 1 DEFINE Gateway	
A.2.1	20220311-ACP-2021-078 RPAS Ops RAF Fairford Stage 1 Gateway Recommendation (1).docx The required documentation was presented on time, and we were satisfied that the sponsor had met the requirements of the process up to that point. Progress to the next step of the process was therefore approved.	
A.3	Stage 2 DEVELOP & ASSESS Gateway	
A.3.1	20220608-ACP-2021-078 RPAS Ops at RAF Fairford Stage 2 Gateway Recommendation.docx The required documentation was presented on time, and we were satisfied that the sponsor had met the requirements of the process up to that point. Progress to the next step of the process was therefore approved.	
A.4	Stage 3 CONSULT Gateway	
A.4.1	20230915-ACP-2021-078 RPAS Ops from RAF Fairford HALE Stage 3 Gateway Recommendation.docx The sponsor was required to complete several actions pertaining to technical, consultation and economic process requirements.	

	<p>These were completed, and we were satisfied that the sponsor had met the requirements of the process up to that point. Progress to the next step of the process was therefore approved.</p> <p>Following consultation, the sponsor's categorisation of responses was reviewed by the CAA. Further to a request for clarification by the sponsor, the latter submitted an updated version of their categorisation. We were satisfied that the sponsor had met the requirements of the process up to that point.</p>
A.5	<p>Stage 4 UPDATE & SUBMIT</p>
A.5.1	<p>The sponsor formally submitted their proposal. We requested an item of consultation evidence during the Stage 4 document check. This item was provided promptly.</p>

PART B – Consultation Assessment	
B.1	AUDIENCE
B.1.1	<p>Did the consultation target the right audience?</p>
	<p>The sponsor selected aviation stakeholders from an area within a radius of c.30 miles from RAF Fairford as well as consulting with members of the National Air Traffic Management Advisory Committee (NATMAC). The 94 stakeholders that were directly targeted were grouped as follows:</p> <ul style="list-style-type: none"> • 33 x NATMAC members including MoD Defence Airspace and Air Traffic Management (DAATM) • 28 x local aviation stakeholders. This group included airports, aerodromes, and airfields such as Bristol Airport, London Oxford Airport and RAF Brize Norton. It also included General Aviation organisations such as Bath, Wiltshire, and North Dorset Gliding Club, Bidford Gliding and Flying Club and Wiltshire Microlight Centre.

	<ul style="list-style-type: none"> • 12 x airlines including Jet2, Ryanair, and TUI Airlines. • 11 x local authority stakeholders including Gloucestershire, Wiltshire, Oxfordshire, Worcestershire, and Warwickshire County Councils. • 6 x local and national organisations including Campaign to Protect Rural England (CPRE), Cotswold Area of Outstanding Natural Beauty (AONB) and Natural England. • 4 x individuals. <p>It is noted that the sponsor has explained that they did not find contact details to enable direct engagement with the 12 airlines referred to above but has stated that they attempted to consult with these airlines via the airline trade groups on the NATMAC list. No responses were received from the airlines. It has not been possible to establish the effort to which attempts were made to obtain relevant contact details.</p> <p>Intermediaries are described in CAP 1616 (V4 Table C1) as including local authorities and/or local and national organisations. The sponsor consulted with local authorities, local and national organisations of an environmental nature as well as national aviation bodies on the NATMAC list which fall within the CAP 1616 definition of intermediaries.</p> <p>The sponsor assessed the ACP as primarily impacting aviation stakeholders and have provided acceptable rationale, namely that no impacts below 7,000 ft were anticipated and so the sponsor determined that it was not necessary to contact individual properties.</p> <p>The sponsor provided their stakeholder list at Annex A to their Stage 4A Consultation Review document.</p>
<p>B.1.2</p>	<p>Please provide a summary of responses below</p>
	<p>The sponsor received a total of 17 responses during the consultation. Of these, 8 responses were submitted via a feedback form hosted on the online citizen space platform. Where the sponsor obtained quantitative data from consultation responses, it is set out below.</p> <p>The sponsor asked consultees 9 questions. The first four questions dealt with stakeholder identification and contact details. Questions 5, 6, 7 and 8 asked for feedback on the consultation proposal. Question 9 dealt with publication of the consultee's response.</p> <p>Stakeholders were asked at Question 4 to select the best description for their association with this proposal:</p>

Question 4 Type of stakeholder description	Number of responses received (and %)	Question 5, 6 and 7 were open-ended questions designed to gather qualitative feedback on the proposal with consultees asked to describe how they might be impacted by the proposal and to
Local community stakeholder	1 (12.5%)	
Aviation stakeholders	5 (62.5%)	
NATMAC organisation	1 (12.5%)	
ATC Provider	1 (12.5%)	
Total	8	

suggest design amendments or mitigations to minimise impact. Stakeholders were also asked for any other general considerations that they wished the sponsor to consider.

Question 5 stated “The sponsor endeavours to minimise the impact of its operations to other users of the airspace while still ensuring that required military activity can safely and efficiently be conducted. Are there any design amendments or potential mitigations that you think the sponsor should consider to achieve this?”

Question 6 asked “Do you expect to be impacted by this airspace change? If so, please describe the expected impact(s).”

Question 7 asked “Are there other general considerations that you would like the sponsor to consider in order to mitigate impacts?”

The sponsor received qualitative data from the responses to questions 5, 6 and 7, and the data is discussed later in this assessment (at B.5.4) together with the sponsor’s response.

Question 8 asked respondents “Do you support this airspace change?”

Question 8 responses to whether there was support for the airspace change.	
Yes	3 (37.5%)
No	4 (50%)
Not answered	1 (12.5%)

	<table border="1"> <tr> <td data-bbox="421 201 840 268">Total</td> <td data-bbox="840 201 1256 268">8</td> </tr> </table>	Total	8	<p>When reviewing the qualitative data in relation to Question 8 above, NATS stated their position on the ACP to be neutral but that they had selected “yes” to this question as there was no “neutral” option available.</p> <p>In addition to the responses received via citizen space, the sponsor received 9 emails regarding the proposal from: 4 NATMAC organisations, 2 aviation stakeholders, 1 local authority, 1 national organisation and 1 community member. The sponsor encouraged these respondents to complete the online feedback form. None elected to do so.</p> <p>All responses, irrespective of how they were submitted to the sponsor, have been reviewed.</p>
Total	8			
B.2	APPROACH			
B.2.1	Did the change sponsor consult stakeholders in a suitable way?	Yes		
	The sponsor conducted their consultation via the online citizen space platform, as required by the CAP 1616 process. As a result, stakeholders were consulted in a suitable way.			
B.2.2	What steps did the change sponsor take to encourage stakeholders to engage in the consultation?			
	<p>The following steps were taken:</p> <ul style="list-style-type: none"> • The sponsor contacted 94 consultees directly by email to inform them of the launch of the consultation and signpost them to an online feedback form and planned consultation events. There was an expectation that intermediaries such as national organisations and local authorities would disseminate as necessary. The evidence shows that for example the British Helicopter Association (BHA) disseminated the information presented to their members and sought their views. • A reminder email was issued on 6 November 2023, two weeks prior to the consultation closing date. • Two virtual meetings were arranged to be held via Microsoft TEAMS on 24 October and 2 November 2023. No-one attended the first meeting, and 1 stakeholder, a representative of the General Aviation Alliance (GAA) attended the 2 November meeting. The event was hosted by representatives from HQ United States Air Forces Europe/Air Forces Africa (USAFE-AFAFRICA) sponsor subject matter experts. A presentation was used at the event. • The sponsor met with NATS, 78 Squadron (Swanwick Military) and RAF Brize Norton on 2 November 2023 during the consultation period. There were 17 attendees at this meeting. • The sponsor was clear that the primary method of responding should be by use of the online feedback form via the citizen space platform, however stakeholders were also given the option of responding by email and 			

	<p>by post. The postal address was provided in the consultation strategy and the consultation document.</p> <ul style="list-style-type: none"> The sponsor made clear in their consultation strategy that they would strive to comply with any requests made for the consultation materials in alternative formats. In the event it would appear no such requests were made. <p>The evidence shows that the sponsor continued to engage with consultees after the consultation had closed in order to work to resolve issues.</p> <p>The sponsor detailed within their consultation strategy that publicising the planned consultation events via methods other than the targeted email and citizen space would not be necessary to reach potentially interested parties, given that the airspace change proposal is a Level M2 change and expected primarily to impact aviation stakeholders. This approach was accepted by the CAA at the Stage 3 gateway assessment meeting.</p> <p>The evidence shows that the consultation launch email did not reach the correct General Aviation Alliance (GAA) representative until 1 November 2023, which was half-way through the consultation period. The sponsor apologised to the representative and explained that the launch email had been sent to the GAA contact that they had contact details for. The sponsor went on to meet with the GAA representative virtually on 2 November 2023 and addressed a question raised by them regarding sterilization of segment A.</p> <p>Evidence provided by the sponsor in support of the activities described above has been reviewed and is contained within the following annexes:</p> <ul style="list-style-type: none"> Annex A – Register of Stakeholders Annex C – Stakeholder consultation presentation Annex D – Stakeholder evidence (outgoing and incoming emails) 	
B.2.3	Was the change sponsor required to respond to any unexpected events and/or challenges?	N/A
	There were no unexpected events and/or challenges.	
B.3	MATERIALS	
B.3.1	What materials were used by the change sponsor during the consultation?	
	<p>Consultation document (V.2) – this included an overview of current operations at RAF Fairford and local airspace and an outline of the design principles for this ACP. The sponsor explained why the do-nothing and HALE options 1 and 2 were discounted at stage 2 and how the consultation option (option 3) had been developed. They addressed airspace utilisation, plans to seek dispensation from the CAA Safety Buffer Policy, a commitment to review requirement of the segregated airspace every 2 years and anticipated effects of the proposed option together with planned mitigating measures.</p> <p>Full Options Appraisal (V.2) – This document included: an explanation for the decision made post-stage 2 to split out the</p>	

	<p>Medium Altitude Long Endurance (MALE) RPA options from this ACP and proceed solely with a High Altitude Long Endurance (HALE) Remotely Piloted Aircraft (RPA) option, a summary of how the sole HALE consultation design option was developed, inclusion of an updated safety assessment accounting for changes made since stage 2, evaluation of the consultation option against the do-nothing baseline and an environmental impact assessment summary.</p> <p>Consultation Strategy (V.2) – This document included: a summary of engagement activity conducted by the sponsor during stages 1 and 2 of their ACP with hyperlinks to supporting engagement documentation, an explanation of the stakeholder audience identified for consultation, consultation approach and contingency planning, consultation timeline, materials, and next steps post-consultation.</p> <p>A set of Frequently Asked Questions (FAQs) – A 2-page document aimed at supplementing the consultation document that explained key terms used within the consultation including what is meant by Agile Combat Employment and provided an explanation of actions to be taken in the event of a lost link with the Remotely Piloted Air Systems (RPAS) pilots. It has not been possible to verify whether the FAQs were treated as a living document and updated during the consultation.</p> <p>Stakeholder consultation presentation for virtual event – this outlined the statement of need, provided a description of the HALE RQ-4 Global Hawk RPA and concept of operations, listed the design principles (DPs), explained why HALE options 1 and 2 were discounted post-stage 2 and how HALE consultation option 3 had been developed as a result of USAF and NATS engagement, set out expected impacts of the option and requested feedback.</p> <p>This presentation was full of acronyms that were not explained within the document, although they may have been when the presentation was delivered. In the event only one stakeholder attended the presentation and as an aviation stakeholder it is very likely they would have been cognisant of their meaning.</p>	
B.3.2	Did the materials provide stakeholders with enough information to ensure that they understood the issue(s) and potential impact(s) on them?	Yes
	<p>The scope and anticipated effects of the proposal were clearly explained. Although technical aviation terms were used in the consultation materials, a glossary was included, and explanatory text provided to assist stakeholders in understanding technical aviation detail.</p> <p>There were 2 requests for clearer information which the sponsor responded to. Cotswold Airport (Kemble) requested a higher resolution map to provide clarity regarding the area involving Kemble (EGBP). The sponsor responded directly to the stakeholder providing a map zoomed in on segment A with an indication of the location of Cotswold Airport.</p> <p>The sponsor also received a request from the Association of Remotely Piloted Aircraft Systems (ARPAS) for a .kmz file with the proposed area of Segment A's location marked out to a resolution of a few metres in order to assist with better understanding of the exact location of Segment A which they were of the view was extremely difficult to see from the materials provided. The sponsor provided the information in the format requested. No further concerns were raised.</p>	
B.4	LENGTH	

B.4.1	Please confirm the start/end dates and the duration of the consultation below	
	Consultation started: 11 October 2023 Consultation ended: 21 November 2023 Duration: 6 weeks	
B.4.2	If duration was less than 12 weeks, what was the justification?	Yes
	The justification for running a 6-week consultation was provided within the sponsor's consultation document and was due to nil impacts below 7,000 feet and the extensive engagement already undertaken with airspace users and ATS providers. The sponsor should include this rationale within their Stage 4 A Consultation Review Document.	
B.4.3	Was the period of consultation proportionate?	Yes
	The length of this consultation was half the accepted standard of 12 weeks set out within CAP 1616. The sponsor has provided rationale for the period of consultation chosen. The consultation was not conducted during any major holiday seasons. The rationale provided is adequate taking into account the targeted nature of the sponsor's stakeholder audience, the level of this ACP and the anticipated impact of the airspace change.	
B.5	GENERAL	
B.5.1	Was the conduct of the consultation aligned with the consultation strategy?	Yes
	Yes, the conduct of the consultation was aligned.	
B.5.2	Has the change sponsor categorised the responses in accordance with CAP 1616?	Yes
	Further to a request for clarification by the sponsor, the latter submitted an updated version of their categorisation. On reviewing V2, we were satisfied that the sponsor had met the requirements of the process up to that point.	
B.5.3	Has the change sponsor correctly identified all of the issues raised during the consultation and accurately captured them in the consultation response document?	Partially
	The consultation response data has been reviewed. The sponsor has identified the majority of issues raised during the	

	<p>consultation and captured them within their consultation response document, Step 3D categorisation of responses document and Step 4B documentation. They do not appear to have responded to:</p> <ol style="list-style-type: none"> 1. The request for information on who would be coordinating safety promotion of the airspace to inform Brize airspace users and allay any concerns that they may have. 2. Comments made regarding prioritisation of Global Hawk flights in relation to other military operational requirements. 3. Concerns raised regarding where station-based aircraft could hold when the airspace is active and access to the Daventry and Lichfield Radar corridors for departing/arriving traffic. <p>Regarding point 1 above, although the sponsor has not specifically addressed this point, they have confirmed within their submission that changes to the airspace will be notified through the AIRAC publication, via aeronautical charts and detailed within the AIP. Notification of activation will be provided via NOTAM. It may be that regional user group forums could be used to promulgate messaging on the airspace change and a recommendation is set out at B.6.1 below to that effect.</p> <p>Regarding point 2, prioritisation tasking is addressed via recommended draft condition no.3 within the CAA Operational Assessment (Technical).</p> <p>Regarding point 3, it is recommended that procedures to address these scenarios be included within the Letter of Agreement(s).</p>	
B.5.4	Does the consultation response document detail the change sponsor's response to the identified issues? Is the change sponsor's response to the issues raised appropriate/adequate?	Partially
	<p>The issues raised by stakeholders and the sponsor's responses are outlined below.</p> <p><u>Impacts on Class G airspace.</u></p> <p>An aviation stakeholder stated there would be disruption to class G airspace and associated airspace when the aim should to be integrate Unmanned Aerial Vehicles (UAV).</p> <p>Sponsor's response: Potential impacts to Class G airspace are acknowledged but expected to be minimal. This is informed by the sponsor's observation of ADS-B data, the impact analysis simulation presented in stage 3 and stakeholder feedback which the sponsor assessed as indicating that impacts to Class G airspace and General Aviation should be minimal with the provision of a Danger Area Crossing Service (DACs). The issue of integration of Unmanned Aerial Systems (UAS)/RPAS within UK airspace is outside the scope of this ACP.</p> <p><u>Concerns regarding re-routing around the DAs when activated.</u></p>	

An observation was made that introducing another DA would impact those having to route around the airspace when the DA was active, result in increased fuel burn and increased risk of airspace infringements. The sponsor was asked to consider re-using existing established DAs.

Sponsor's response: Existing DAs are not sufficient to contain HALE RPA operations from RAF Fairford. The impact of this proposal has been considered at every stage of the ACP and the sponsor has worked to minimise impact to the maximum extent possible while still providing the required military capability. Operations are expected to comprise 2 – 3 arrivals or departures per week. Some impacts to capacity are anticipated due to the requirement to flight plan around the DA while it is active. The availability of a DACS through the proposed airspace could potentially alleviate some of this impact. Should pilots be unable to accept DACS, the routing of traffic around the proposed airspace may create bottlenecks and increased traffic density in areas near the border of the proposed airspace. Due to the timing and duration of airspace activations and the identified lack of traffic operating in Class G airspace, this is unlikely to have a significant impact.

Safety considerations

An aviation stakeholder was of the view that there was no safety case and that RPAS can operate in existing airspace.

Sponsor's response: Segregated airspace is required in accordance with CAP 722 Unmanned Aircraft System Operations in UK Airspace – Guidance which states that UAS must be able to detect and be detected by means of available and recognised Electronic Conspicuity technology if operating BVLOS in non-segregated airspace. US HALE RPA do not currently have a detect and avoid capability. The airspace was designed to accommodate normal arrival and departure as well as emergency scenarios to ensure that, in all foreseeable scenarios, the RPA will remain with the DAs. A safety assessment was provided at stages 2 and 3 CAP 1616 process.

Concern around potential for increased mission requirements

Cotswold Airport (Kemble) stated that the proposed activation hours would not affect them too much but that they would need to consider their LoA with RAF Brize Norton and make reference to this ACP airspace. They expressed concern regarding future impact and whether the mission requirement would grow to extend into their normal operational hours.

Sponsor's response: There are no plans to expand beyond the proposed activation hours stated.

Establishing a contingency DA at an alternative airfield

The BGA stated that they did not object to the proposal on the basis that operations would be limited to after sunset and before sunrise but noted that no alternative landing airfield had been identified in this ACP and referenced the ACP for a DA for RPAS operations and RAF Waddington with subsequent ACP for a contingency DA of the same dimension for concurrent activation at RAF Marham.

Sponsor's response: There is no plan to establish a contingency DA at another airfield associated with this ACP's operations.

Numbers of activations per week

NATS referred to the proposed activation of 2 – 3 times per week for up to 3 hours per activation and requested that as part of the CAA approval process, that the CAA specify “no more than 3 activations per week” as they were of the view that the sponsor's statement was too general. NATS stated any change to the activation periods required must require a formal change to the approved airspace and that the implementation of integrated airspace would significantly reduce the impact to the overall network.

Sponsor's response: The intention remains to activate for up to 3 hours at a time, 2 – 3 times per week. impact analysis was conducted assuming 3 activations per week and 156 activations per year.

Activation times

NATS asked for better definition of terms used by USAFE for what they described as their “intent” regarding activation times with an option to “rarely” activate outside the proposed times and asked for the cumulative effect of multiple Special Use Airspace (SUA) activations to be considered when defining protocols and agreeing LoAs.

Sponsor's response: While not currently anticipated, allowing for activations outside of the 2000 – 0530 UTC window, but still between 1 hour after sunset and 1 hour before sunrise, must be accounted for to provide the flexibility to meet MoD needs. USAFE is happy to work with NATS and the MoD to further refine how often this may occur, what would drive such an activation and how this would be coordinated.

Activity windows

NATS provided feedback on the activity window, particularly during the Autumn and Winter with darker, longer nights and sought agreement on robust airspace management protocols and options that allow further flexibility on the activation times

through negotiation and notification of planned activity for times when increased civil demand is known on the shoulders of the proposed timeframe. They considered this particularly important for planning of first rotation traffic and flows across the North Atlantic Track system.

Sponsor's response: USAFE will endeavour to provide 14 calendar days' notice for activations with the exception of short-notice operational requirements and will work with NATS and the MoD to further refine how they may occur and how this would be coordinated.

Danger Area Crossing Service (DACS)

One individual stated that they expected to see provision of a DACS for Helicopter Emergency Medical Services (HEMS) and police aircraft. The GAA stated that they expected minimal impact to GA traffic with a DACS being provided. Clarification was sought on how long, on average, Segment A would be unavailable for a DACS as a result of HALE operations. NATS asked for assurance that the airspace would only be active when necessary for the operation of the RPAS.

NATS referenced CAA conditions set for a separate MoD ACP supporting BVLOS RPAS operations stating that DACS cannot be provided when the RPAS is operating in the airspace – particularly applicable to civil aircraft. They sought clarity on their assumption as a result that no coordinated transit or DACS can be provided to civil aircraft.

Sponsor's response: The provision of a DACS has been planned since Stage 2. A DACS will be provided by Brize Radar and Swanwick Military when the airspace is active. Detailed procedures will be included in finalised Letters of Agreement. Our mission planners have indicated that Segment A would need to be sterilized for up to 30 minutes for both departures and arrivals (one time per activation). As soon as safe to do so, each segment would be released to ATC to allow for a DACS. In response to NATS, the sponsor has stated that USAFE will ensure airspace not required for HALE RPA operations are made available for a DACS as soon as possible. When the airspace is no longer required it will be deactivated and the NOTAM cancelled.

The sponsor advised NATS of their understanding that the segmented design would permit DACS transits in any segments that the BVLOS RPAS has vacated but that they would seek clarity from the CAA. Segments would be proactively returned to RAF Brize Norton Radar and Swanwick Military for a DACS when the HALE RPA has vacated the segment and is at an altitude or position to ensure that the segment is not needed for emergency/contingency situation.

Impacts for RAF Brize Norton

Brize Norton Air Traffic Control (ATC), while recognising that the amount of traffic affected was likely to be minimal, raised concerns that if they were providing a DACS in segment A, then it might be a resource burden for them to control traffic

through the airspace when active. They stated they would prefer to be the controlling authority for segment A and for Global Hawk when in the airspace so that they could minimise the impact on Op TANSOR, National Standby aircraft, any aircraft in emergency using Brize Norton as the Military Emergency Diversion Airfield (MEDA), as well as routine station-based flying where aircrew are conducting essential training and currency flights. If not the controlling authority an LoA would be required to enable access for Brize traffic sometimes is required to hold to the north prior to arrival.

The sponsor was asked whether flight plans for Brize Norton airways joiners and leavers would be rejected when the airspace is active.

Brize Norton also questioned whether the 3-hour time window would account for Global Hawk returning with an emergency and whether the airspace could be activated outside of the 3-hour window.

The sponsor was also asked who would be coordinating safety promotion of the airspace to inform Brize airspace users and allay any concerns that they may have.

Brize Norton aircrew raised concerns over where station-based aircraft could hold when the airspace is active and access to the Daventry and Lichfield Radar corridors for departing/arriving traffic. An additional concern was regarding what priority would be afforded to Global Hawk flights, relative to Op TANSOR, National Standby commitments and routine flying.

Sponsor's response: A higher workload is expected for RAF Brize Norton and Swanwick Military ATC due to controlling the RPA, providing, and managing the DACS requests and accomplishing tactical re-routing of network traffic. The latter would also increase workload for civil controllers. The sponsor agreed with Brize Norton ATC controlling segment A and stated that with the provision of a DACS, overall impacts should be minimal, and the majority of impacts should be mitigated through pre-coordinated procedures. Details will be included in the LoA with Brize Norton.

It is expected that Brize Norton airway joiners and leavers will not be rejected while the airspace is active.

The 3-hour activation is intended to not only accommodate arrivals and departures but to also ensure that the airspace is active for a sufficient time to account for emergency or contingency scenarios.

The sponsor does not appear to have responded to feedback regarding coordinating safety promotion, where station-based aircraft could hold and access to the Daventry and Lichfield Radar corridors or the concern raised regarding prioritisation. These items are discussed at B5.3 above and where applicable addressed by way of draft recommendation/condition at B6.1 and B6.2 below.

Onward transit of the RPA

NATS sought to understand further the assurance arguments for onwards transit of the RPA and supporting operational agreements in order to develop appropriate procedures where required, asking how the onward transit would be carried out in non-segregated airspace.

Sponsor's response: USAFE expects the HALE RPA Operational Arrangement to require segregated airspace during onward transit in the form of an airspace reservation. The language is being drafted by the CAA and a draft will be shared when completed.

Recovery process for the HALE platform

NATS sought clarity regarding the recovery process for the HALE RPA in relation to the separate segments.

Sponsor's response: Descent will begin in segments D and C and those areas will be required for the majority of the descent profile.

Safety Buffer Policy

NATS referenced the plan for a 2NM internal buffer and sought confirmation that it would be as it supports the safety assurance arguments expected regarding proximity of General Air Traffic (GAT) aircraft operating within Controlled Airspace (CAS) and aircraft operating within the proposed Special Use Airspace (SUA). NATS stated that this included areas where segment B abuts the Flexible Use Airspace (FUA) COTSWOLDS CTAs 15/16/17 and 18.

Sponsor's response: We intend to request dispensation to the current buffer policy. A 2 NM internal buffer is planned in segments B, C and D. Should the CAA's buffer policy be changed, the sponsor would engage with NATS to determine if additional safety assurance work would be required before implementation of a reduced buffer.

Implementation dates

NATS suggested the ACP timeline did not align with either previous engagement discussions or the required timelines for critical Air Traffic Management (ATM) system updates required to safely deliver the airspace change and asked to discuss this further with the sponsor in the event of ACP approval.

Sponsor's response: USAFE is happy to discuss with NATS further to ensure that the required ATM system updates can be accomplished.

Reviewing the need for the segregated airspace

NATS referenced the sponsor's intention to review the need for the segregated airspace every 2 years and suggested that a review should occur sooner, for example in the event of an update to CAA policy.

Sponsor's response: We will commit to a review every 2 years or sooner should CAA policy be updated.

Impact on CCTV network

Fairford Town Council asked for the frequency bands for the flight controls and whether they would be likely to affect the Council's CCTV network.

Sponsor's response: Prior to operations, the US Air Forces in Europe (USAFE) Spectrum Management Office will work with the UK National Frequency Management Office to avoid potential frequency interference associated with RPAS operations to/from RAF Fairford.

Themes considered to be out of scope.

In response to concern raised regarding noise impact on the ground, the sponsor advised that the CAP 1616 requirement is for the MoD to assess anticipated environmental impacts of the consequential changes on civil aviation patterns. As no noise impacts to civil traffic patterns are expected below 7,000 ft, no noise study was required or conducted.

There was a request for the sponsor to include the groundwater environment in the Environmental Impact Analysis. The sponsor explained that this is not a requirement of CAP 1616. Any requirements will be covered under RAF Fairford's existing emergency response plans.

Letters of Agreement (LoA)

DAATM stated that an LoA between USAFE and Brize Norton would be required to ensure procedures are in place that minimise the impact to Brize Norton flying and cater for crewed aircraft emergencies, as well as any potential Global Hawk emergencies. They sought an LoA that defines relative priorities for all Brize Norton traffic and Global Hawk, along with agreed separation standards between crewed and uncrewed military traffic and details including when visual and radar pattern traffic is permitted to operate.

NATS stated that Swanwick Procedures would need to agree a LoA and associated MATS part 2 instructions and that following approval, this would form the basis of Hazard Analysis work early in 2024.

Sponsor's response: Draft LoA between the Swanwick Military Airspace Management Cell (MAMC) and Headquarters USAFE submitted to the CAA. Also, draft LoA between NATS, London Control (Swanwick) and Scottish Control (Prestwick) submitted. Annex E HALE Operations outline draft procedures between Brize Bank and Fairford Tower for HALE operations out of RAF Fairford.

Is the change sponsor's response to the issues raised appropriate/adequate?

The airspace design consulted upon was not amended on account of feedback. However, the sponsor has demonstrated their willingness to respond to stakeholder feedback during the CAP 1616 process as the design presented to stakeholders at consultation had been modified at stage 2 on account of stakeholder feedback, in particular from NATS. In doing so the sponsor stated that they were able to present a safer and more efficient airspace design option with fewer impacts to other airspace users. The sponsor proposed mitigations at consultation, for example regarding airspace activation arrangements, which likewise have not been amended post-consultation. There is no fundamental difference between the proposal consulted on and the final airspace change being sought. However, the sponsor has responded to issues raised by stakeholders in the formulation and agreement of draft Letters of Agreement and draft procedures.

As discussed above and at B5.3, the sponsor does not appear to have responded to 3 items of feedback. Draft recommendation/conditions are proposed to address this.

Update to assessment completed 05.02.24 – sponsor's proposed technical amendment.

On reviewing the sponsor's final submission, the CAA requested that the sponsor consider the possibility of proposing a technical amendment to the proposed airspace design to raise the upper limit of segments C and D. The sponsor has submitted a proposed technical amendment to raise the upper limit of segments C and D from FL500 to FL660 to comply with CAP 722 Unmanned Aircraft System Operations in UK Airspace Guidance and to future-proof the DA complex. No revisions have been made to proposed activation times, frequency, or duration of activation. In the alternative, the sponsor has asked that if the CAA determine that increasing the upper levels of segments C and D to FL660 to future-proof the airspace is not possible, that the upper limits be increased to at least FL600 instead to account for current HALE RPA capabilities.

78 Squadron response to proposed technical amendment.

The sponsor engaged with 78 Squadron on the proposed amendment. Although no raw data engagement evidence has been provided, the sponsor has confirmed by email to the CAA that 78 Squadron identified no impact to non-participating aircraft. The only impact identified was that the HALE RPA may be on frequency longer therefore requiring more MoD controller resources than if transiting at FL500.

Sponsor's response: The proposed flight profiles are not changing. HALE RPA transit was always planned above FL500 but

based on previous discussions with the CAA, the sponsor assumed that transit/climb above FL500 would not require a segregated airspace structure.

NATS response to proposed technical amendment.

The sponsor engaged with NATS requesting feedback on any potential impacts expected due to this amendment. The sponsor specifically asked NATS if any additional impacts were expected above and beyond those identified by NATS in their consultation response. The sponsor also requested clarity on assumptions on the environmental impact assessment provided at stage 3 consultation. Raw data engagement evidence has been provided and reviewed.

NATS stated that the NATS Analytic model was built using the dimensions of the previously submitted airspace design with an additional 2,000 ft buffer above and below to account for the CAA Special Use Airspace (SUA) buffer policy. Within the small traffic sample available to complete the analytics in the MoD's timeframe, there were no aircraft above FL500. This stakeholder went on to say that with no change to the proposed durations of the activation, pre-tactically this should make no difference and any risk can be mitigated by stipulating that ASM protocols will state no more than 3-hour activations if needed.

NATS sought clarity on how much longer it would take the RPAS to climb to its transit level from FL500 and then reach the point where it would no longer require the SUA to be activated in case of a lost link or emergency return to RAF Fairford is essential to enable a complete response.

NATS commented that although it is more frequently the case that commercial air traffic (CAT) is operating at FL470-FL510, it is easy to think that, based on current airspace usage, there isn't any impact by raising the Upper Level of the DAs to FL660. They stated that the proposal does not appear to consider future High-Level Operations of "new entrant" traffic which will operate at these extremely high altitudes, potentially for longer period of times in some cases. Therefore, NATS were of the view that the sponsor's description of the proposal as "future proofing" was not aligned with the intent of the Airspace Modernisation Strategy (AMS) effectively implementing a barrier to High Altitude Operations that industry says are nearer to reality that might be the current perception. If the revision was proposed "just in case" then it did not fit with the principle of Flexible Use Airspace (FUA) and so NATS would need to consider objecting to the proposal.

Noting that this ACP does not consider the onward routing of the RPAS although it is intrinsically linked to the implementation of the SUA, NATS sought more information and engagement on the CAA's development of the "agreement" with MoD and USAFE stakeholders for this and overflight of the FIR by BVLOS, stating that their assurance processes require this to manage their operation.

NATS operational assurance processes have been conducted on the single platform proposed. Any use by any other platforms would need to be re-assessed following relevant regulatory requirements.

Sponsor's response: No difference is expected in the duration of activation prior to releasing the airspace as the flight profile is not anticipated to change. The aircraft was always expected to climb to a transit altitude above FL500, but we worked under the assumption that segregated airspace would not be required above FL500. As a result, the estimated duration of when the airspace would be able to be returned is not expected to change.

	<p>Details of the airspace reservation procedures for onward transit will be shared once received from the CAA. The idea of future-proofing the ACP is considered by the sponsor to be in line with the principle of FUA and the AMS.</p> <p>One of the AMS objectives is “futureproofing” new airspace designs today to enable emerging requirements for Free Route Airspace (FRA) and trajectory-based operations, thus minimising the potential need later on for lengthy changes in airspace design. The sponsor feels this is equally relevant to emerging requirements for HALE RPA flight at higher levels and that incorporating that capability now will prevent the need for future lengthy ACPs.</p> <p>This amendment will not only protect the HALE RPA operating above FL500 but will also protect future civilian traffic that will eventually operate from FL500 to FL660 by ensuring there is adequate segregated airspace to provide a safe environment for all. Only the required altitudes will be booked based on the operational requirement for each flight to ensure that as much airspace as possible will remain available to other users of the airspace.</p>	
B.5.5	Is the formal airspace change proposal aligned with the conclusions of the consultation response document?	Yes
	Yes, it is aligned.	
B.5.6	Was a Public Evidence Session required for this proposal? If yes, was any new evidence presented which could alter the conclusions of the consultation response document and/or formal airspace change proposal submission?	N/A
	N/A	
B.6	RECOMMENDATIONS/CONDITIONS/PIR DATA REQUIREMENTS	
B.6.1	Are there any Recommendations which the change sponsor should try to address either before or after implementation (if approved)? If yes, please list them below.	Yes
	Recommendation for after implementation (if approved) - It is recommended that regional user group forums are used to promulgate information on the airspace change, to inform RAF Brize Norton airspace users and allay any concerns that they may have.	
B.6.2	Are there any Condition(s) which the change sponsor must fulfil either before or after implementation (if approved)? If yes, please list them below.	Yes
	Recommended draft condition 1 It is recommended that a condition is placed on the approval of this ACP that procedures to address where RAF Brize Norton	

	<p>station-based aircraft could hold when the airspace is active and access to the Daventry and Lichfield Radar corridors for departing/arriving traffic are included within finalised Letters of Agreement/Air Traffic Management Procedures.</p> <p><u>Recommended draft condition 2</u></p> <p>It is recommended that a condition is placed on the approval of this ACP that the sponsor must finalise all Letters of Agreement. A copy of the final versions must be provided to the CAA along with evidence of the agreement of all parties (either through signatures on the document or alternative information that confirms acceptance by all parties).</p> <p><u>Recommended draft condition 3</u></p> <p>It is recommended that a condition is placed on the approval of this ACP that all Air Traffic Management Procedures must be finalised. A copy of the final versions must be provided to the CAA along with evidence of the agreement of all parties (either through signatures on the document or alternative information that confirms acceptance by all parties).</p>	
B.6.3	<p>Are there any specific requirements in terms of the data to be collected by the change sponsor for the Post Implementation Review (if approved)? If yes, please list them below.</p>	Yes
	<p><u>STAKEHOLDER OBSERVATIONS</u></p> <p>The change sponsor is required to collate related stakeholder observations (enquiry/complaint data) and present it to the CAA. Any location/area from where more than 10 individuals have made enquiries/complaints must be plotted on separate maps displaying a representative sample of:</p> <ul style="list-style-type: none"> • aircraft track data plots; and • traffic density plots <p>The plots should include a typical days-worth of movements from the last month of each standard calendar quarter (March, June, September, December) from each of the years directly preceding and following implementation of the airspace change proposal.</p>	

PART C – Consultation Assessment Conclusion(s)		
C.1	<p>Does the consultation meet the CAA’s regulatory requirements, the Government’s guidance principles for consultation and the Secretary of State’s Air Navigation Guidance?</p>	Yes

The fundamental principles of effective consultation are targeting the right audience, communicating in a way that suits them, and giving them the tools to make informative, valuable contributions to the proposal's development. I am satisfied that these principles have been applied by the change sponsor before, during and after the consultation. I am satisfied that the change sponsor has conducted this consultation in accordance with the requirements of CAP 1616, that they have demonstrated the Government's consultation principles and that the consultation has:

Taken place when the proposal was at a formative stage – evidenced by the sponsor's statement within their consultation document that stakeholder feedback would help to shape the final proposal. This principle is also evidenced by the content of the consultation feedback form which invited stakeholders to suggest design amendments or mitigations to minimize the impact of the proposed airspace change on airspace users. Although the sponsor consulted on a single airspace design option, they provided an explanation of other options considered at stage 2 and their rationale for proceeding to consultation with a single design option that had been modified considering stakeholder feedback.

Presented the consultation material clearly and outlined the potential impacts that needed to be considered – evidenced by a consultation document in which the scope and anticipated effects of the proposal were clearly explained. Although aviation terms were used in the consultation materials, a glossary was included, and explanatory text provided to assist stakeholders in understanding technical aviation detail. The language used would not have precluded those stakeholders without technical aviation knowledge or expertise from understanding the information presented and providing informed responses.

Provided a sufficient timeframe to allow considered responses – Although the sponsor reduced by half the accepted standard for consultation length articulated in CAP 1616, this principle is evidenced by adequate rationale for doing so based on no impacts below 7,000 feet and the extensive engagement already undertaken with airspace users and ATS providers. No requests were made by stakeholders for an extension of the consultation period. The consultation period did not fall within any major holiday seasons.

Taken into account the product of the consultation – Although the sponsor did not revise the final airspace design on account of feedback, this principle is evidenced by the work they have carried out with stakeholders on letters of agreement and draft procedures to address issues and concerns.

Level 2 ACP

PART D – Consultation Assessment sign-off			
	Name	Signature	Date
Consultation assessment completed by Airspace Regulator (Engagement and Consultation)	[REDACTED]	[REDACTED]	25 January 2024
Consultation assessment conclusions approved by Manager Airspace Regulation	[REDACTED]	[REDACTED]	16 February 2024