

CAA Decision Log

Airspace Change Proposal Title	Enabling RPAS out of a nominated diversion airfield
Airspace Change Proposal Reference	ACP-2023-022
Change Sponsor	Ministry of Defence
AIS Submission Target Date	17 January 2025
CAA Decision Target Date	13 January 2025
<i>Instructions</i> In providing a response to each question and/or status, the following colour coding should be used: - COMPLIANT/NOT APPLICABLE - NOT COMPLIANT/ACTION REQUIRED - ISSUE/CONCERN TO HIGHLIGHT	
Executive Summary This is the third in a series of ACPs sponsored by the MOD to support the transition into service of its new RPAS, Protector RG Mk1 (Protector). MAA regulations require that Protector is segregated from other airspace users when not operating in controlled airspace and that a diversion airfield is nominated to enable recovery of Protector should the main operating base, RAF Waddington, become unavailable. The MOD selected RAF Marham as the permanent nominated diversion airfield for Protector. As RAF Marham sits entirely within class G airspace, it was identified that suitable airspace would be required to facilitate the transit of Protector between the ATZ and the class C CAS above RAF Marham at FL195. A trial ACP, ACP-2023-047, was approved in Feb 24 and introduced TDAs at RAF Marham from SFC to FL195. Planned use of the trial airspace, which was originally in place from May-Nov 24, was delayed and this airspace has been extended in-place until 12 Jun 25. This ACP seeks to introduce permanent airspace to enable RAF Marham to be used as the diversion airfield for Protector. The proposed design replicates that introduced and in-place under the trial ACP (ACP-2023-047) and consists of 2 cylindrical DAs of 5nm radius centred on the ARP and placed one on top of the other. The first extends from SFC to FL105, the second from FL105 to FL195. The intention is for both DAs to be activated by NOTAM for the duration of all Protector sorties from RAF Waddington.	

A SUACS will be available at all times the DAs are activated, although approval to enter a DA will not be possible for civilian aircraft when Protector is already established within it. Analysis presented by the Sponsor has shown that the airspace affected by the proposal has relatively low traffic volumes and the impact to other airspace users is expected to be minimal.

It is recommended that conditional approval for this ACP is given for implementation-only of the proposed DAs at this stage and approval for activation initially withheld. Two conditions have been recommended: the first is required to ensure that amendment of the existing LoAs for the operation of the trial airspace, which must be altered to apply to the operation of the proposed permanent DAs, is completed; the second condition is required to ensure that the requirements of SARG Policy 133 related to safety buffers have been met and agreed with NATS, and provided to CAA AR for consideration and approval. Both conditions must be met prior to granting approval for the activation of the structures by NOTAM.

The ACP was approved for submission to AIS for notification only on the 14th March 2025 whilst the assessment and the decision of the ACP continues. The CR reference is CR-09819 and the AIRAC will come into effect on 15th May 2024 (05/2025)

PART A – Airspace Change Process – GATEWAYS		
A.1	Airspace Change Portal	
A.1.1	Airspace change proposal public view	
A.2	CAA SharePoint site	
A.2.1	Enabling RPAS Operations Out of RAF Leuchars - Project - All Documents	
A.3	Stage 1 DEFINE Gateway	29/02/2024
A.3.1	20240208 (ACP-2023-022) Enabling RPAS Operations out of a nominated diversion airfield Stage 1 Gateway Recommendation.docx	
A.4	Stage 2 DEVELOP AND ASSESS Gateway	26/04/2024
A.4.1	20240412 Enabling RPAS Operations out of RAF Marham (ACP-2023-022) Stage 2 Gateway Recommendation -	

	<u>Develop & Assess.docx</u>	
A.5	Stage 3 CONSULT Gateway	31/05/2024
A.5.1	<u>20240420 (ACP-2023-022) Enabling RPAS operations out of a nominated diversion airfield Stage 3 Gateway Recommendation.docx</u>	
A.6	Chronology	
A.6.1	<i>The Ministry of Defence submitted an initial Statement of Need on the 28th March 2023. An Assessment Meeting was held on the 18th October 2023 which resulted in an updated Statement of Need being submitted on the 1st November 2023. The MoD submitted for a Define Gateway on 29th February 2024, a Develop and Assess Gateway on 26th April 2024 and a Consult Gateway on 31st May 2024. Having passed the respective gateways, the MoD submitted their formal airspace change proposal on 23rd September in accordance with the agreed timeline. The ACP was approved for AIS notification only on 14th March 2025, whilst the formal ACP assessment and decision continued.</i>	
A.7	Are there any additional process requirements of the Civil Aviation Authority (Air Navigation) Directions 2023 (the “Air Navigation Directions”) and/or the Air Navigation Guidance 2017 which apply to this airspace change, and have they been complied with?	N/A
A.7.1	N/A	

PART B – Airspace Change Process – STAGE 5			
B.1	Was a Public Evidence Session required for this proposal?		N
B.1.1	Not required for this proposal		
B.2	Were any requests made for this decision to be called-in by the Secretary of State?		N
B.2.1	Not applicable to this ACP		
B.3	Does the Secretary of State call-in criteria apply to this proposal?		N
B.3.1	Not applicable to this ACP		
B.4	Has the Secretary of State decided to call-in this proposal?		N/A
B.4.1	Not applicable to this ACP		
B.5	Subject Matter Expert (SME) Regulatory Assessments NOTE: this captures RAG status only – full details contained within each of assessment (hyperlinks inserted below)		
ATM Safety		NOT APPLICABLE	Environmental COMPLETE
Economic Assessment & Statement		COMPLETE	Instrument Flight Procedure NOT APPLICABLE
Engagement / Consultation		COMPLETE	Operational COMPLETE
B.5.1	Is there any other information outside of the regulatory assessments above which should be brought to the attention of the decision maker (e.g. outstanding Letters of Agreement)? The Sponsor has provided, as draft LoAs for this ACP, copies of the LoAs that support the use of the current trial airspace that was approved and implemented at RAF Marham under ACP-2023-047. These LoAs, while representative of the LoAs required to support the proposed permanent airspace and very likely to be agreed, cannot be approved in their current form. Updated and finalised LoAs will be required for review prior to the CAA authorising the use of the proposed permanent airspace.		

B.6	Other Relevant Documents (title and hyperlinks to be inserted)		
B.7	Has the relevant legal and policy framework to the airspace change process been taken into account, including: • the Air Navigation Directions; • the Airspace Modernisation Strategy; • section 70 of the Transport Act 2000; • the Air Navigation Guidance 2017; and • CAP 1616 and associated publications?		Y
B.8	CAA consideration of whether the proposal is in accordance with the Airspace Modernisation Strategy (Air Navigation Directions, direction 5(1)). <u>NOTE:</u> the left column captures RAG status only and the right column captures the rationale – full details will be contained within the SME Regulatory Assessments. Reference should be made to the AMS characteristics (CAP 1616f, 6.61). For more information on the AMS strategic objectives, see <i>Airspace Modernisation Strategy 2023-2040 Part 1: Strategic Objectives and Enablers</i> (CAP 1711).		
Safety		The purpose of this airspace change is to implement an airspace solution that enables the BVLOS operation of the RAF's new large RPAS, Protector RG Mk1, while maintaining the high level of aviation safety that exists throughout the UK. However, the Sponsor clearly states within the formal submission that the proposal does not form part of the AMS, does not aim to solve the strategic issue of RPAS integration within UK airspace and does not seek to introduce a novel solution to address BVLOS integration. The ACP proposes the use of danger areas (DAs), currently the most recognised method of achieving segregated airspace, to enable BVLOS operation of Protector in class G airspace while maintaining the high level of aviation safety.	
Integration of diverse airspace		Current regulation does not allow for integration of BVLOS RPAS operations in uncontrolled airspace, to	

users	which this ACP applies. The proposed DAs will enable Protector to transit between controlled airspace (class C airspace above FL195) and RAF Marham through the surrounding class G airspace by segregating the activity. However, recognising the limited use of the proposed airspace by Protector, expected to average 2 – 3 occasions per month, the Sponsor has committed to ensuring the availability of a special use airspace crossing service (SUACS) at all times when the DAs are active. This will ensure that the impact to other airspace users is minimised.
Simplification of airspace system	The addition of the proposed DA airspace does not simplify the existing airspace system. However, the construct of the proposed DAs has been simplified as far as possible to ensure it can be easily understood by all airspace users.
Environmental sustainability	The AMS environmental sustainability strategic objective states that: “environmental sustainability will be an overarching principle applied through all airspace modernisation activities. Airspace modernisation should deliver the Government’s key environmental objectives with respect to air navigation as set out in the Air Navigation Guidance.” The statement of need of this ACP does not include any environmental factors. However, the development of the design option for this ACP considered the impact on other airspace users and as a result consequential environmental impacts on civil traffic. On the basis of the rationale and evidence submitted by the change sponsor, the anticipated environmental impacts as a result of the airspace change are expected to be negligible. Consequently, the Government’s key environmental objectives can be met.
B.9	CAA consideration of factors material to our decision whether to approve the change (section 70, Transport Act 2000). <u>NOTE:</u> the left column captures RAG status only and the right column captures a summary of the rationale – full details will be contained within the SME Regulatory Assessments. Reference should be made to the Section 70 characteristics (CAP 1616f, 6.80).
Maintain a high standard of safety in the provision of air traffic services section 70(1)(a)	The purpose of the proposal is to introduce appropriate airspace structures to enable the use of RAF Marham as the nominated diversion airfield for the Protector RPAS. Safe BVLOS operation of the Protector RPAS to RAF Marham can only be achieved in the current regulatory environment through segregation of these activities using DAs, as proposed in this airspace change. Segregation of these activities is appropriate, proportionate and in accordance with CAA and MAA policy. The Sponsor provides assurance that the proposed DAs will only be activated when RAF Marham ATC is available and able to operate a SUACS; if RAF Marham ATC is unable to provide this service, the related activities will be ceased, and the airspace deactivated.

	As stated, BVLOS operation of Protector in uncontrolled airspace must be segregated from other aviation activity and this must be recognised in the provision of a SUACS. Therefore, at this stage, requests to cross active DAs that are occupied by Protector are not to be approved and operating procedures must reflect this position.
Secure the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic section 70(2)(a)	The Sponsor confirms that the proposed airspace structures will have no impact on CAT in adjacent airspace. The impact to GA and other airspace users will also be minimised through the amendment of applicable LoAs, and through the commitment of the Sponsor to provide SUACS and SUAAIS at all times when the DAs are notified as activated. Analysis of GA traffic in the local area has shown the traffic levels to be low and, therefore, the consequential impact is considered to be negligible.
Satisfy requirements of operators and owners of all classes of aircraft section 70(2)(b)	The Sponsor took into account the stakeholder feedback received and experience gained from introducing similar airspace at RAF Waddington, the main operating base for Protector, and from the introduction of the trial airspace at RAF Marham. This informed the design of the DAs proposed in this ACP, which takes into account the needs of local airspace users and operators and has led to the development of appropriate LoAs to mitigate the impact of the DAs.
Take account of the interests of any other person (other than an operator or owner of an aircraft) in relation to the use of any particular airspace or the use of airspace generally section 70(2)(c)	The Sponsor has stated that the introduction of the proposed DAs will have negligible, or no, impact on any other person, other than an operator or owner of an aircraft.
Take into account the Secretary of State's guidance relating to spaceflight activities section 70(2)(ca)	This airspace change does not interact with spaceflight activities and this guidance does not apply.
Take into account the Secretary of State's guidance on environmental objectives section 70(2)(d)	The CAA is required to take into account the Air Navigation Guidance 2017. In the Air Navigation Guidance 2017, the Government has set environmental objectives with respect to air navigation. These environmental objectives are 'designed to minimise the environmental impact of aviation within the context of supporting a strong and sustainable aviation sector. The objectives are, to:

	• limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise; • ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions; and • minimise local air quality emissions and in particular ensure that the UK complies with its international obligations on air quality. The ACP is scaled as a Level 1 as it has potential to alter civil aviation traffic patterns below 7,000 ft. over an inhabited area. As it is being sponsored by the MoD environmental impacts that are a direct result of military aircraft or military operations (including civil aircraft carrying out military function under contract) are not required to be considered or assessed. However, consequential environmental impacts from other airspace users (i.e., civil aviation) that are a result of the proposed change must be assessed in accordance with Level 1 requirements. The change sponsor submitted a rationale and supporting evidence regarding the consequential impacts on civil traffic and thereby the resulting environmental impacts and concluded that these are negligible. The mitigating measures that will be undertaken, such as the provision of a SUACS at all times when the DAs are active ensure that the majority of airspace users can continue to transit on the most direct and efficient routeing, thereby minimising the likely environmental impact of the airspace change. Based upon the evidence provided by the sponsor, the environmental impacts resulting from this ACP are not considered significant, and therefore, this proposal is not in conflict with the environmental objectives as set out in the Air Navigation Guidance 2017.
Facilitate the integrated operation of air traffic services provided by or on behalf of the armed forces of the Crown and other air traffic services section 70(2)(e)	The Sponsor has provided copies of existing LoAs, which will be amended to reference the permanent airspace proposed by this airspace change, that define the cooperative ATM procedures that will be used to enable the integrated operation of Protector in CAS and to manage the transition of Protector between CAS and SUA. This includes a LoA between NATS and 78 Sqn that will define the notification, coordination and communication procedures, including “lost-link” communication failure.
Take account of the interests of national security section 70(2)(f)	This airspace change proposal has been developed to introduce airspace structures that will establish RAF Marham as the nominated diversion airfield for Protector, which is required to enable the BVLOS operation of Protector in UK airspace. In turn, this will facilitate the training of Protector crews to be conducted in the UK, leading to the establishment and development of the operating capability of the air system in the RAF. Therefore, the Sponsor considers the approval of this ACP to be in the interests

	of National Security.	
Take account of any international obligations notified to the CAA by the Secretary of State section 70(2)(g)	No such international obligations have been notified to the CAA under section 70(2)(g) of Transport Act 2000.	
B.10	Are there any other associated publications relevant to the proposal and, if so, have the requirements of those publications been met? <u>NOTE:</u> associated publications include Airspace Policy Statements listed here .	Y
B.10.1	SARG Policy 133: Policy for the Establishment and Operation of Special Use Airspace, Annex H Safety Buffer Policy, requires states that a safety buffer should be applied to SUA established to enable BVLOS operations. The sponsor has made reference to procedures agreed between the MOD and NATS with respect to safety buffer requirements for the approved trial TDAs and states that similar will be agreed for the proposed permanent DAs. Therefore, at this time, the requirements of SARG Policy 133 have not been evidenced to be met. Approval of this proposal must be conditional upon the provision of evidence that SARG Policy 133 safety buffer requirements have been satisfied.	
B.11	Conclusions in respect of requirement to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users is reflected on an equitable basis. <u>NOTE:</u> this section only applies if the CAA is classifying or amending the classification of UK airspace.	
B.11.1	Not applicable – the airspace classification remains unchanged by the proposal.	

PART C – Stage 5 Recommendation		
C.1	Taking the above information into account, what is your recommendation to the decision-maker for this proposal?	
C.1.1	<i>Insert narrative which clearly sets out the decision which is collectively recommended by the team of regulatory SMEs.</i> Tech Reg Recommendation: It is recommended that this ACP is approved for implementation only at this stage, with approval for activation initially withheld pending the Sponsor satisfying the 2 Conditions detailed in section C.2.1. Environmental Recommendation: The change sponsor satisfied all relevant policy requirements. Taking into account the change sponsor's rationale and supporting evidence the final proposed option is not anticipated to have significant environmental impact as a result of the displacement and consequential re-routing of civil aviation. It is considered that the anticipated environmental impact from the proposed airspace change has been adequately assessed considering scalability and proportionality.	
C.2	Are there any Recommendations and/or Conditions for the change sponsor to address prior to implementation (if approved)?	Y
C.2.1	<i>This section will initially be populated with those recommended by the SMEs but will be updated to reflect only those which have been deemed necessary by the decision makers.</i> <i>Recommendations are not mandatory, whereas conditions are requirements that must be met before the airspace change is activated. Conditions may include, for example, the need for all other necessary consents and approvals to be in place, notification and management processes, etc.</i> Tech Reg Recs & Conditions Condition 1: The proposed airspace structures are approved for implementation-only. Approval for activation will only be granted by the CAA on receipt and approval of finalised and signed copies of the required LoAs. Condition 2: The proposed airspace structures are approved for implementation-only. The Sponsor is required to provide	

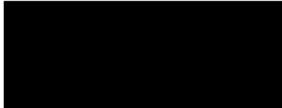
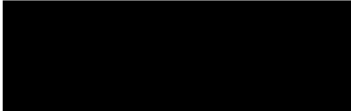
	confirmation of compliance with SARG Policy 133: Policy for the Establishment and Operation of Special Use Airspace dated 12th February 2024, along with evidence of agreement between MOD and NATS that no additional safety buffers are required and that appropriate procedures will be in place to manage the vertical interaction between the proposed SUA and the class C airspace that adjoins above. Approval for activation of the proposed SUA will only be granted by the CAA on receipt and approval of this evidence. Recommendation 1: A consequential impact of activation of the proposed DAs and their proximity to EGD208 could increase the funnelling effect currently experienced between the RAF Marham MATZ and EGD208. While this effect is expected to be minimal, it is recommended that LARS is made available at all times when the DAs are active in order to provide additional mitigation.	
C.3	Are there any specific requirements in terms of the data to be collected by the change sponsor for the Post Implementation Review (if approved)?	Y
C.3.1	Tech Reg PIR requirements: If the ACP is approved for implementation and activation, it is recommended that the sponsor is provided with a copy of the Stage 7 PIR Data Request Form to use as a guide to the data that will be required to inform the PIR. It should also be emphasised that the following will be of particular interest and should be included within the Sponsor's PIR submission: - Record of activation data for the DAs, including publication details of NOTAM, time of activation, duration and intended activity. - Record of occurrences of any airspace activation period that is subsequently unused, including duration of activation prior to cancellation and reasons for cancellation, ie weather, air system unserviceability, etc. NB: This detail will only be required on occasions the airspace is planned to be used, ie to support PD training, and the planned usage does not take place; no such record is required when activated purely as a nominated diversion to support Protector operations. - Record of use of the DAs by Protector, including reason for use and whether a planned or unplanned use. - Requests for the use of the SUACS, supported and unsupported, with reasoning if unsupported. NB: GA are currently only required to request entry into the ATZ and can cross the MATZ without seeking approval if they remain clear of the ATZ. As such, it is expected that the DAs should only restrict similar access when occupied by Protector. Therefore, sufficient explanation of unsupported DACS requests, not attributable to the presence of Protector, will be required to justify the SUACS refusal. - Detailed record of any and all inadvertent excursions from the DAs by Protector. - Detailed records of any and all unauthorised incursions of the DAs.	

	- Should approval for dispensation from SARG Policy 133 be identified as a requirement and approved, a report will be required to indicate compliance with the dispensation criteria, to include detailed records of any and all deviations from that dispensation. Environmental PIR requirements: The sponsor should collect the following data for the Post Implementation Review (if approved): - Number, timings and duration of the activations. - Number, type, and altitude of aircraft re-routing around and overhead and number of airspace users requesting a SUACS, number of aircraft refused one. - Location where re-routed aircraft operate.
C.4	Are any other consents and approvals needed in order to permit the intended operation (title and hyperlinks to be inserted)?
C.5	Are there any other comments/observations for the decision maker?
	N
C.5.1	
C.6	Account Managers Signature
Account Manager	
	10/04/2025

PART D – Draft Regulatory Decision – Comment (for Level 1 Airspace Change Proposal's only)		
D.1	Was a Draft Regulatory Decision published for this proposal?	<i>N</i>
<i>N/A</i>		
D.2	Was any feedback received in relation to the Draft Regulatory Decision?	<i>N/A</i>
<i>N/A</i>		
D.3	Has the Draft Regulatory Decision been amended in light of feedback received?	<i>N/A</i>
<i>N/A</i>		

PART E – Final Regulatory Decision – Comment/Approval**[Delete signatory rows below dependent on Decision Maker]****Manager Airspace Regulation comments and recommendation:**

This is a proposal to support limited planned diversions for the MoD Protector aircraft and thus is in support of National Security requirements. The dimension of the proposed structure is also limited laterally to 5nm aligning with the existing Military Air Traffic Zone, where a crossing service will be provided by the MoD whilst the new Danger Areas (DA) are active. The combined effects of, limited intended use, dimensions of the proposed structure and the crossing service provision ensures the impact to other users has been minimised to the greatest extent possible. Furthermore, this proposal aligns with the Airspace Modernisation Strategy Requirements of ensuring the MoD has sufficient access to appropriate airspace. I would note the requirement that as part of the routine audit process the MoD is required to keep under review the requirement for this structure and seek to remove it when practicable. Subject to the recommendations made above I recommend approving this ACP.

Manager Airspace Regulation			11 May 2025
Head AAA comments and recommendation/regulatory decision:			
<i>Approved.</i>			
Head AAA			20/05/2025