

CAA Operational Assessment

Title of airspace change proposal	Enabling T&E activity of Protector in UK airspace Spring/Summer 2024
Change sponsor	Ministry of Defence (MOD)
Project reference	ACP-2023-047
Account Manager	[REDACTED]
Case study commencement date	17 Jan 24
Case study report as at	5 February 2024
<p><i>Instructions</i></p> <p>In providing a response for each question, please ensure that the 'status' column is completed using the following options:</p> <ul style="list-style-type: none"> • YES • NO • PARTIALLY • N/A <p>To aid the SARG Lead it may be useful that each question is also highlighted accordingly to illustrate what is:</p> <p>resolved YES not resolved PARTIALLY not compliant NO</p>	

Executive Summary
<p>This ACP is for an airspace trial that seeks to confirm whether RAF Marham is a suitable diversion airfield for the large Remotely Piloted Air System (RPAS), Protector RG Mk1. Protector will be based at RAF Waddington where permanent segregated airspace has been established to enable its transit through Class G airspace into adjoining CAS for onward transit to operating and training areas. Protector test and evaluation operations are scheduled to start in late Spring 2024 prior to the platform formally entering service.</p> <p>The main objective of the trial is to establish whether RAF Marham is a suitable diversion airfield for Protector. Its use will also inform the development of ACP-2023-022, currently at Stage 1 of the CAP1616 process, which will seek to establish RAF Marham as the permanent diversion airfield for Protector. The Change Sponsor has defined four 'sub-objectives' and metrics to evaluate the operational suitability of the proposed TDA, the impact on other airspace users and associated operational procedures.</p> <p>The proposed TDA comprises a 5nm cylinder centred on RAF Marham which is divided into two vertical segments, the lower volume extending from SFC to FL105 and the upper volume from FL105 to FL195. The vertical division was introduced in response to feedback from aviation stakeholders and</p>

is intended to reduce the duration of impacts on other airspace users when Protector is within the airspace, see figures 1 and 2 below:

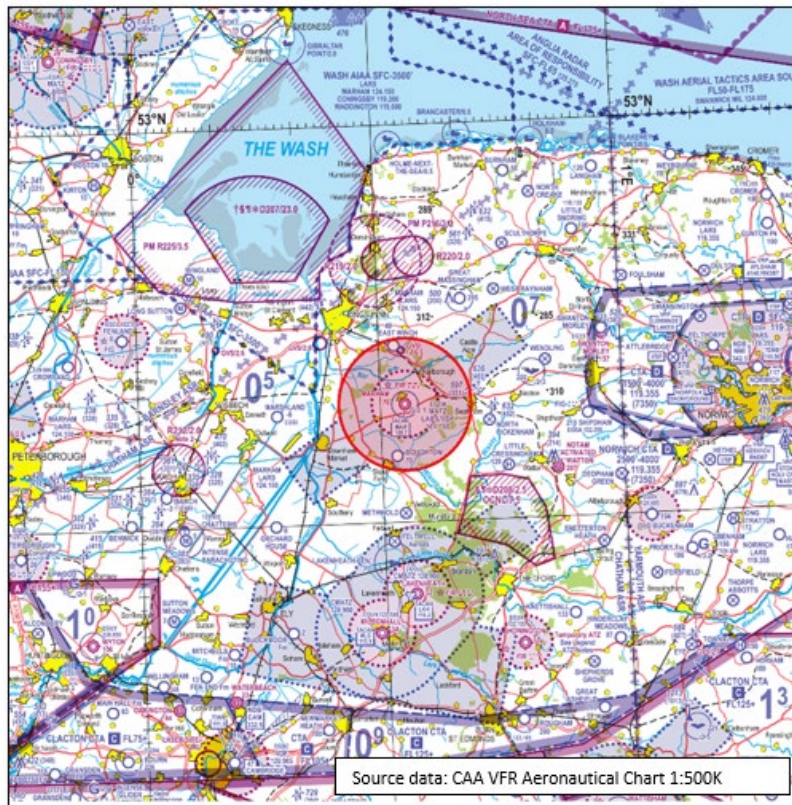


Figure 1 - RAF Marham TDA Design

The airspace trial is scheduled to run for 6 months, from 1 June to 30 November 2024. Up to 2 planned diversions will be conducted to RAF Marham, with each diversion to include an arrival and departure. The TDA at RAF Marham will be activated for the full duration of all Protector sorties from RAF Waddington, including when there are no planned diversions (i.e. TDA will be active but not necessarily utilised). This is to enable Protector to access RAF Marham as a diversion airfield should RAF Waddington become unavailable due to unforeseen circumstances.

The change sponsor anticipates that during the first 6 months, Protector will be flown during core flying hours, Monday to Friday, up to 3 times per week and may include some night flying. A DACS will be provided by RAF Marham ATC during TDA hours of activation.

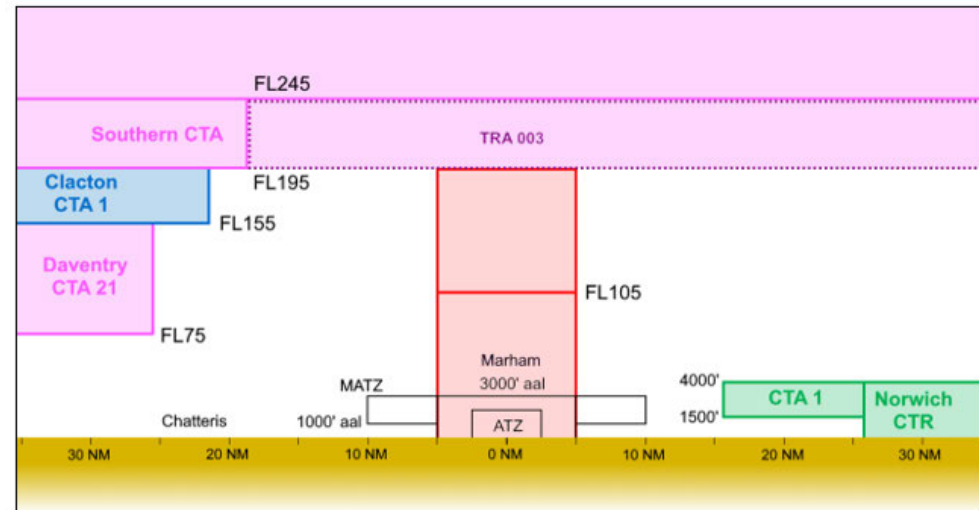


Figure 2 - RAF Marham SWNE² TDA Cross-section

1.	Justification for change and options analysis (operational/technical)	Status
1.1	Is the explanation of the proposed change clear and understood?	Yes
	<p>This proposal is for the trial of an airspace change at RAF Marham to facilitate the operation of the Protector RG Mk 1 RPAS (Protector) out of RAF Waddington. The proposed change is a simple design of 2 cylindrical TDAs, both of 5nm radius, stacked on top of each other. The first extends from SFC to FL105, the second from FL105 to FL195. Both TDAs will be activated by NOTAM for the duration of all Protector flights out of RAF Waddington. Activating the TDAs will provide RAF Marham as a diversion airfield for Protector should the runway at RAF Waddington become unavailable.</p> <p>The proposed change has been described in a clear and understandable way and suitable charts and diagrams have also been included to illustrate the airspace design.</p>	
1.2	Are the reasons for the change stated and acceptable?	Yes
	<p>It is clearly stated that the purpose of the proposal is to establish and trial appropriate airspace to confirm that RAF Marham provides a suitable diversion airfield for Protector. It is explained that RAF Marham is situated in class G airspace and that current MAA regulations require BVLOS operations in class G airspace to be segregated.</p> <p>The stated reasons for the proposed change are considered acceptable.</p>	
1.3	Have all appropriate alternative options been considered, including the 'do nothing' option?	N/A
	<p>N/A.</p> <p>The proposal is for an airspace trial, the results of which will be used to inform the permanent proposal, ACP-2023-022, and will consider alternative design options.</p>	
1.4	Is the justification for the selection of the proposed option sound and acceptable?	N/A
	<p>N/A.</p> <p>The proposal is for an airspace trial, the results of which will be used to inform the permanent proposal, ACP-2023-022.</p>	
2.	Airspace description and operational arrangements	Status

2.1	Is the type of proposed airspace design clearly stated and understood?	Yes
	The sponsor has clearly described the intent to trial the use of DAs to facilitate the use of RAF Marham as a diversion airfield for Protector. The type of airspace design that is proposed is considered easily understood.	
2.2	Are the hours of operation of the airspace and any seasonal variations stated and acceptable?	Yes
	The proposal states that the TDAs will not be permanently active and will be activated by NOTAM only for the duration of Protector flights from RAF Waddington. While no specific timings are provided, the sponsor states that the flying tempo will be limited to core flying hours, Monday to Friday, up to 3 times per week and that some night flying is also expected.	
	Although detail is limited, the proposal is considered acceptable based upon the anticipated negligible impact of the proposed TDAs.	
2.3	Is any interaction with adjacent domestic and international airspace structures stated and acceptable including an explanation of how connectivity is to be achieved? Has the agreement of adjacent States been secured in respect of High Seas airspace changes?	N/A
	N/A	
2.4	Is the supporting statistical evidence relevant and acceptable?	Yes
	The sponsor has provided statistical evidence of relevant traffic volumes and of RAF Waddington closure rates, which would result in a requirement for Protector to divert to RAF Marham if it occurred during a Protector flight. The traffic analysis suggests that, on the busiest days, there are less than 30 civilian aircraft movements through the airspace that would be affected by the proposed DAs.	
	The trial plan for Protector anticipates 2 planned practice diversions to RAF Marham. Once those sorties have been completed the only use of RAF Marham by Protector will be in response to an unplanned closure of RAF Waddington preventing Protector's return if airborne at the time. The evidence provided shows an average annual unplanned closure rate of RAF Waddington runways of ~4 per year, which suggests it is reasonable to expect ~2 unplanned diversions by Protector to RAF Marham during the 6-month airspace trial period.	
	This evidence is considered relevant and acceptable.	
2.5	Is the analysis of the impact of the traffic mix on complexity and workload of operations complete and satisfactory?	Yes

	<p>The TDAs are used to segregate the RPAS BVLOS activity from other airspace users and therefore does not impact the traffic mix. The analysis also shows that the anticipated usage of the airspace by Protector during the trial period is extremely limited (2x planned diversions and a statistical possibility of up to 2x unplanned diversions as a result of runway closure at RAF Waddington) and, therefore, of negligible impact.</p> <p>This assessment is considered satisfactory.</p>	
2.6	Are any draft Letters of Agreement and/or Memoranda of Understanding included and, if so, do they contain the commitments to resolve ATS procedures (ATSD) and airspace management requirements?	YES
	<p>A total of 4 draft LoAs, in very mature form, are presented by the sponsor with the main submission for this proposal. The LoAs provide sufficient detail to resolve the ATS procedures and airspace management requirements for the safe operation of the TDAs.</p> <p>Proposed Condition: Finalised copies of the 4x LoAs should be provided to CAA Airspace Regulation prior to activation of the proposed TDAs.</p>	
2.7	Should there be any other aviation activity (low flying, gliding, parachuting, microlight site etc) in the vicinity of the new airspace structure and no suitable operating agreements or ATC Procedures can be devised, what action has the change sponsor carried out to resolve any conflicting interests?	NO
	There is no evidence or intelligence to suggest that the sponsor has not been able to agree operating procedures with other local aviation stakeholders.	
2.8	Is the evidence that the airspace design is compliant with ICAO SARPs, airspace design & FUA regulations, and Eurocontrol guidance satisfactory?	Yes
	The initial design of the proposed airspace was for the introduction of a single TDA from SFC to FL195. In response to stakeholder feedback, and in the interests of FUA, the proposed structure has been divided in 2 at an altitude of FL105. This enables traffic to transit one of the TDAs while Protector is operating within the other, potentially halving the duration of impact to other airspace users.	
2.9	Is the proposed airspace classification stated and justification for that classification acceptable?	N/A
	N/A. Introduction of TDAs for the purposes of an airspace trial.	

2.10	Within the constraints of safety and efficiency, does the airspace classification permit access to as many classes of user as practicable?	YES
	<p>Introduction of TDAs for the purposes of an airspace trial.</p> <p>The sponsor has stated a DACS will be available for the duration of all activation periods, thereby ensuring continued access to the airspace for all users unless the TDA volume is occupied by Protector. When occupied by Protector, regulation requires segregation, so all civilian airspace users will be required to remain outside of the TDA until Protector has cleared the relevant segment. In order to reduce the duration of this impact, the TDA has been divided into 2 segments, one from SFC to FL105, the other from FL105 to FL195.</p>	
2.11	Is there assurance, as far as practicable, against unauthorised incursions? (This is usually done through the classification and promulgation.)	Yes
	The TDAs will be activated by NOTAM with a minimum of 24-hrs notice. The airspace will also be monitored and managed by RAF Marham ATC.	
2.12	Is there a commitment to allow access to all airspace users seeking a transit through controlled airspace as per the classification, or in the event of such a request being denied, a service around the affected area?	Yes
	<p>The sponsor has stated that a DACS will be offered for the duration of all activation periods, thereby ensuring continued access to the airspace for all users unless the TDA volume is occupied by Protector. When occupied by Protector, regulation requires segregation, so all civilian airspace users will be required to remain outside of the TDA. ATS will continue to be provided by RAF Marham ATC.</p> <p>In addition, assurance has been given that the airspace may not be used as a mechanism to exclude airspace users, other than when it is occupied by Protector requiring segregation, or for reasons of air traffic safety and coordination.</p>	
2.13	Are appropriate arrangements for transiting aircraft in place in accordance with stated commitments?	Yes
	RAF Marham ATC currently offers ATS to transiting aircraft in the local area related to the RAF Marham ATZ and MATZ. It is therefore reasonable to expect that similar provision will be made for the proposed TDAs.	
2.14	Are any airspace user group's requirements not met?	NO
	There is no evidence of intelligence to suggest that there are any airspace users' requirements that have not been met.	

2.15	Is any delegation of ATS justified and acceptable? (If yes, refer to Delegated ATS Procedure).	N/A
	N/A	
2.16	Is the airspace design of sufficient dimensions with regard to expected aircraft navigation performance and manoeuvrability to contain horizontal and vertical flight activity (including holding patterns) and associated protected areas in both radar and non-radar environments?	Yes
	The dimensions of the proposed airspace are based upon Protector's ATLC (Automatic Takeoff and Landing Control) circuit pattern, which has been shown to be wholly contained by the proposed design.	
2.17	Have all safety buffer requirements (or mitigation of these) been identified and described satisfactorily (to be in accordance with the agreed parameters or show acceptable mitigation)? (Refer to buffer policy letter.)	Yes
	<p>The sponsor has provided an application for dispensation from the CAA Safety Buffer Policy. The application considers both the existing policy (Policy Statement - Special Use Airspace - safety buffer policy for airspace design purposes dated 22 August 2014) and the draft policy (DRAFT Policy Statement - Policy for the establishment and operation of Special Use Airspace (Annex I) dated 25 November 2023) which is expected to be published imminently.</p> <p>An assessment of the existing policy states that:</p> <ul style="list-style-type: none"> • Lateral dispensation is not required because there is no CAS within 5nm of the proposed TDAs. • Vertical dispensation is requested as the proposed TDAs adjoin the class C airspace above. The TDAs must adjoin CAS to facilitate Protector's transition to / from the adjoining CAS. In mitigation, the sponsor offers that positive ATC management will be provided and ATM procedures have been developed for the operation. These have been developed in collaboration with NATS and were agreed for the recently approved and implemented DAs at RAF Waddington for the operation of Protector. <p>Assessment of the draft policy shows there are no specified lateral or vertical buffer dimension requirements. Instead, the draft policy states that safety buffers should ensure adequate separation from flight planned aircraft in adjacent CAS. It is reasonable to expect that, as agreement has been reached with NATS based upon the current, defined, safety buffer requirements, agreement can be reached with NATS to satisfy the proposed policy requirements.</p> <p>Proposed Recommendation: It is recommended that the application for dispensation from the CAA Safety Buffer Policy is approved; clarification of which policy is extant at the time of decision should be provided and confirmation of the agreement with NATS that will be required to satisfy that policy.</p>	

2.18	Do ATC procedures ensure the maintenance of prescribed separation between traffic inside a new airspace structure and traffic within existing adjacent or other new airspace structures?	N/A
	N/A.	
2.19	Is the airspace structure designed to ensure that adequate and appropriate terrain clearance can be readily applied within and adjacent to the proposed airspace?	N/A
	N/A.	
2.20	If the new structure lies close to another airspace structure or overlaps an associated airspace structure, have appropriate operating arrangements been agreed?	Yes
	<p>The proposed TDAs adjoin the class C airspace (temporary reserved area) above at FL195. The draft LoA (LoA between Lincs TATCC, RAF Waddington, RAF Coningsby, RAF Cranwell, RAF Marham, 78 Sqn Swanwick and 56 Sqn for Protector Operations – document 2 at Appendix B of the main submission document) details the operating arrangements that have been agreed for the management of the interface between the proposed airspace and the CAS above.</p> <p>Laterally, the proposed TDA creates a gap of approximately 2.4nm with the nearby danger area EGD208 which, as published in the UK AIP, is H24 and extends from SFC to 2500ft, with occasional activation to 7500ft by NOTAM. This gap currently exists between EGD208 and the RAF Marham MATZ and it is interesting to note that, although at present there is no restriction to GA that limits access to the MATZ airspace, it appears that some choose to avoid the MATZ and route through this gap.</p> <p>Those GA that currently call for a MATZ crossing are considered likely to request a crossing of the active TDA; similarly, those that routinely avoid the MATZ are expected to also avoid the active TDA. Therefore, the group likely to be impacted by the introduction of the TDAs are those who currently legitimately transit the MATZ, remaining clear of the ATZ, without requesting to do so and who subsequently decide to avoid, rather than request to cross, the active TDA. Analysis conducted using June 2023 data to quantify this group indicated approximately 20 transits of the RAF Marham MATZ (weekdays-only), remaining clear of the ATZ, in addition to the 83 MATZ crossing requests received during the same period, which is an average of one per weekday. In the worst-case scenario, all of this group would decide to avoid the active TDA rather than call to transit through it, and they would all subsequently route through the gap. This would increase the number of transits of the gap between the active TDA and EGD208 by an average of 1 compared to the present-day. Traffic analysis indicates that the number of transits through the gap are very low: during June 23 there were often zero transits of this gap and, on days when there were transits, it</p>	

	<p>was usually 1 or 2 tracks, with a high of 6 transits identified on a single date.</p> <p>Therefore, while the proximity of the proposed TDA to EGD208 has the potential to create some funnelling of air traffic, the analysis suggests the traffic volumes to be negligible and the likely increase to be of the order of 1 additional track per day of TDA activation.</p> <p>Recommendation: A consequential impact of activation of the proposed TDA and its 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 TDA is active in order to provide additional mitigation.</p>	
2.21	Where terminal and en-route structures adjoin, is the effective integration of departure and arrival routes achieved?	N/A
	N/A.	

3.	Supporting resources and communications, navigation and surveillance(CNS) infrastructure	Status
3.1	Is the evidence of supporting CNS infrastructure together with availability and contingency procedures complete and acceptable? The following are to be satisfied:	Yes
	<ul style="list-style-type: none"> • Communication: Is the evidence of communications infrastructure including RT coverage together with availability and contingency procedures complete and acceptable? Has this frequency been agreed with AAA Infrastructure? <p>No specific infrastructure details have been provided as part of the trial plan submission; however, it is reasonable to expect that the existing infrastructure at RAF Marham is suitable to support the planned diversion operations. Therefore, this element of the existing infrastructure is considered acceptable.</p>	

	<ul style="list-style-type: none"> • Navigation: Is there sufficient accurate navigational guidance based on in-line VOR or NDB or by approved RNAV-derived sources, to contain the aircraft within the route to the published RNP value in accordance with ICAO/ Eurocontrol standards? For example, for nav aids, has coverage assessment been made, such as a DEMETER report, and if so, is it satisfactory? 	
	No specific infrastructure details have been provided as part of the trial plan submission; however, it is reasonable to expect that the existing infrastructure at RAF Marham is suitable to support the planned diversion operations. Therefore, this element of the existing infrastructure is considered acceptable.	
	<ul style="list-style-type: none"> • Surveillance: Radar provision – have radar diagrams been provided, and do they show that the ATS route/airspace structure can be supported? 	
	No specific infrastructure details have been provided as part of the trial plan submission; however, it is reasonable to expect that the existing infrastructure at RAF Marham is suitable to support the planned diversion operations. Therefore, this element of the existing infrastructure is considered acceptable.	
3.2	Where appropriate, are there any indications of the resources to be applied, or a commitment to provide them, in line with current forecast traffic growth acceptable?	N/A
	N/A.	

4.	Maps/charts/diagrams	Status
4.1	<p>Is a diagram of the proposed airspace included in the proposal, clearly showing the dimensions and WGS84 co-ordinates?</p> <p>(We would expect sponsors to include clear maps and diagrams of the proposed airspace structure(s) – they do not have to accord with aeronautical cartographical standards (see airspace change guidance), rather they should be clear and unambiguous and reflect precisely the narrative descriptions of the proposals.)</p>	Yes
	The sponsor has provided a 1:500k VFR Aeronautical chart extract overlaid with a graphic to depict the location of the proposed TDAs. There is also a graphic illustrating an airspace cross-section from a SW/NE perspective which shows the CAS in the surrounding area and adjoining above. In addition, a table clearly states the dimensions and WGS84 coordinates of the structures.	

4.2	Do the charts clearly indicate the proposed airspace change?	Yes
	The sponsor has provided a 1:500k VFR Aeronautical chart extract overlaid with a clear indication of the location of the proposed TDAs.	
4.3	Has the change sponsor identified AIP pages affected by the change proposal and provided a draft amendment?	N/A
	N/A. This proposal is for an airspace trial and the introduction of TDAs.	
4.4	Has the change sponsor completed the WGS84 spreadsheet and submitted to the CAA for approval?	NO
	This is not a requirement for temporary airspace and, as such, the WGS84 ADQ spreadsheet has not yet been completed by the sponsor. However, its completion is considered best practice and the sponsor is expected to complete this step prior to AIS submission of the AIC.	

5.	Operational impact	Status
5.1	Is the change sponsor's analysis of the impact of the change on all airspace users, airfields and traffic levels, and evidence of mitigation of the effects of the change on any of these, complete and satisfactory? Consideration should be given to:	Yes
	a) Impact on IFR General Aviation traffic, on Operational air traffic or on VFR General Aviation traffic flow in or through the area.	
	<p>The sponsor has provided analysis to suggest that the impact of the proposed structures on traffic in the vicinity will be negligible.</p> <p>The data provided indicates 83 MATZ crossing requests were received during the busiest month of 2023 (June). The sponsor has assumed this traffic is not evenly distributed across the month and that there are one or two busier days each week. This has been extrapolated to indicate approximately 6 to 10 MATZ crossing requests were received on the busiest days. In addition to this, it is indicated that up to 10 GA aircraft transit the RAF Marham overhead above the MATZ and below 7000ft, resulting in an estimated total of around 20 GA aircraft requiring transit of airspace that would be affected by the proposed TDAs on a busy day.</p> <p>It is recognised that some GA legitimately transit the MATZ, remaining clear of the ATZ, without contacting RAF Marham ATC. These GA will no longer be able to do this when the TDAs are active and will either need to utilise the DACS or route around the structures. There is also</p>	

	<p>GA that routinely avoid the MATZ, electing instead to route around the area, and these can be expected to continue to do so.</p> <p>While the TDAs will be activated by NOTAM for the entire duration of all Protector sorties out of RAF Waddington, the TDAs themselves should not increase denial of ATZ entry or crossing at RAF Marham unless the TDA is occupied by Protector. Up to 2 practice diversions are planned by Protector during the trial period and, statistically, ~2 further diversions may result from unplanned events preventing Protector's return to RAF Waddington. A diversion will consist of an arrival and subsequent departure of Protector, therefore each TDA is expected to be occupied, for around 10 minutes, on approximately 8 occasions during the trial period.</p> <p>The sponsor suggests that the combination of the small numbers of GA aircraft interacting with the affected airspace throughout the day, and the very short periods of occupancy by Protector in the event of diversion, will result in negligible impact.</p> <p>This analysis and assessment is accepted.</p>	
	b) Impact on VFR Routes.	
	There are no VFR routes that will be impacted by the proposed airspace.	
	c) Consequential effects on procedures and capacity, i.e. on SIDs, STARs, holds. Details of existing or planned routes and holds.	
	There is no consequential impact on procedures or capacity identified by the sponsor. This analysis is accepted.	
	d) Impact on airfields and other specific activities within or adjacent to the proposed airspace.	
	The impact to local minor aerodromes has been mitigated through amendment to existing LoAs with those aerodromes.	
	e) Any flight planning restrictions and/ or route requirements.	
	There are not expected to be any restrictions to flight planning or route requirements as a result of the implementation of the TDAs.	
5.2	Does the change sponsor consultation material reflect the likely operational impact of the change?	Yes
	As this submission considers the introduction of TDAs to enable an airspace trial, no consultation material is required. However, the trial plan does consider the operational impact of the TDAs which is assessed to be negligible, largely due to the extremely limited use of the areas by Protector. This assessment is accepted and is expected to be confirmed by data gathered during the trial.	

Case study conclusions – to be completed by Airspace Regulator (Technical)	Yes/No
Has the change sponsor met the SARG airspace change proposal requirements and airspace regulatory requirements above?	Yes
<p>The sponsor has met with the ACP requirements for an airspace trial and with the regulatory requirements detailed above.</p> <p>The trial plan contains sufficient detail for approval from a technical perspective, including a clear objective and defined sub-objectives that signpost the key data to be collected during the trial. The sponsor also states the direct link to use the gathered data to inform the permanent airspace change application, ACP-2023-022, that is also underway in Stage 1 of the process.</p> <p>The sponsor has worked hard to provide acceptable evidence that the impact of the structures on other airspace users will be negligible, despite a requirement for the TDAs to be activated by NOTAM for the duration of all Protector sorties from RAF Waddington. The MOD has committed to the provision of a DACS at all times when the airspace is active and it is well understood that restrictions to movements into, or within, the TDAs will only be necessary on the very rare occasions that Protector is physically operating within one or other of the TDAs. This will further mitigate the expected negligible impact of the TDAs.</p> <p>The sponsor has also submitted a request for dispensation from the safety buffer policy, providing an assessment against both the existing, and draft, SUA safety buffer policy documents. Similar dispensation was applied for, and granted, in relation to the recently approved and implemented EGD324A & EGD324B at RAF Waddington. However, in the case of the RAF Marham TDAs, there is no lateral interaction with CAS and dispensation is only required for the vertical aspect as the structures necessarily adjoin the class C / TRA 003 airspace above at FL195. This is to enable Protector direct access between the CAS and TDAs allowing it to descend into / climb out of RAF Marham when used as a diversion airfield. The sponsor offers the same mitigation to the safety buffer policy as applied at RAF Waddington: positive air traffic control and a LoA with NATS / 78 Sqn detailing operational arrangements. Specifically, the operating procedures ensure that, on departure, Protector remains below FL175 unless a positive clearance has been received to climb above FL195. NATS has provided a statement that the safety case developed for the operation out of RAF Waddington is expected to be transferred across to support this trial ACP and, subsequently, the permanent application.</p>	

RECOMMENDATIONS/CONDITIONS/PIR DATA REQUIREMENTS	Yes/No
Are there any Recommendations which the change sponsor <u>should try</u> to address either before or after implementation (if approved)? If yes, please list them below.	Yes

*****GUIDANCE NOTE:***** Recommendations are something that the change sponsor **should try** to address either before or after implementation, if indeed the airspace change proposal is approved. They may relate to an area in which the change sponsor is reliant upon a third party to actually come to an agreement and consequently they do not carry the same 'weight' as a Condition.

The proposed TDA structure lies in close proximity to EGD208 and creates a gap of approximately 2.4nm between the 2 structures. At present, this gap exists between the RAF Marham MATZ (which has the same lateral dimensions as the proposed TDA) and EGD208, and analysis shows that minor funnelling occurs through this gap as a result of some GA deciding to avoid the MATZ airspace. If approved for implementation, when the TDA is notified as active, this funnelling effect may be increased. However, analysis suggests the number of aircraft affected to be negligible, with a possible increase of 1 track per day likely.

Recommendation: As a consequence of activation of the proposed TDA and its proximity to EGD208, the minor funnelling effect currently experienced between the RAF Marham MATZ and EGD208 could be increased. While this effect is expected to be minimal, it is recommended that LARS is made available at all times when the TDA is active in order to provide additional mitigation.

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

*****GUIDANCE NOTE:***** Conditions are something that the change sponsor **must fulfil** either before or after implementation, if indeed the airspace change proposal is approved. If their proposal is approved, change sponsors **must observe** any condition(s) contained within the regulatory decision; failure to do so **will usually** result in the approval being revoked. Conditions should specify the consequence of failing to meet that condition, whether that be revoking the ACP or some alternative.

Letters of Agreement. The sponsor has provided copies of 4 existing LoAs annotated with the amendments that would be needed in the event the proposed airspace is approved. These LoAs detail the operational arrangements, at a local level with nearby minor aerodromes and nationally with NATS, needed to resolve the ATS procedures and airspace management requirements for the safe operation of the proposed TDAs.

Proposed Condition 1: Finalised copies of the 4x LoAs should be provided to CAA Airspace Regulation prior to activation of the proposed TDAs.

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.

YES

As an airspace trial, this ACP will not be the subject of a formal PIR.

However, the following describes the data that the CAA requires the sponsor to collate during the approved period of the trial. This data should be provided to CAA AR on a fortnightly basis throughout the duration of the trial:

1. All stakeholder feedback received pertaining to the trial airspace.
2. Record of activation data for the TDAs, including publication details of NOTAM, time of activation, duration and intended activity.
3. 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.
4. Record of DACS requests, 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. In the context of the airspace trial, the TDAs should only limit 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 DACS refusal.
5. Record of use of TDAs by Protector, including reason for use and whether a planned or unplanned use of the TDAs.
6. Record of any and all inadvertent excursions from the TDAs by Protector.
7. Record of any and all unauthorised incursions of the TDAs.
8. Noting the approval for dispensation from the SARG SUA Safety Buffer Policy, a report will be required to indicate compliance with the dispensation criteria, to include detailed records of any and all deviations from the dispensation to the Safety Buffer Policy.

General summary

From a technical perspective, it is recommended that this trial ACP is approved for implementation, with approval for activation initially withheld. A single condition has been proposed to ensure that the 4 existing LoAs requiring amendment to support the operation of the TDAs are complete prior to the first activation of the structures by NOTAM.

Proposed Recommendation 1: It is recommended that a condition is set stating that the proposed TDAs are approved for notification-only at this stage, pending submission of the 4 agreed and completed LoAs described in the Trial Plan Submission document to CAA AR. On receipt and acceptance of the completed LoAs, CAA AR will provide the sponsor with written confirmation that the structures have been approved for activation by NOTAM.


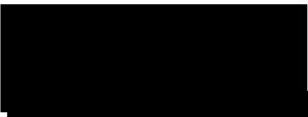
The application for dispensation from the CAA SUA safety buffer policy is also supported and recommended for approval as requested. Noting that the policy is about to be replaced with an updated version, it is recommended that the decision maker ensure it is made clear to the sponsor under which policy the dispensation approval has been made and, as a result, exactly what agreement with NATS will be required to satisfy the applicable policy.

Proposed Recommendation 2: It is recommended that the application for dispensation from the CAA Safety Buffer Policy is approved; clarification of which policy is extant at the time of decision should be provided, along with confirmation of the agreement with NATS that will be required to satisfy that policy.

Comments and observations

NFTA.

Trial ACP

Operational assessment sign-off	Name	Signature	Date
Operational assessment completed by Airspace Regulator (Technical)			5 February 2024
Principal Airspace Regulator comment /	Name	Signature	Date

Decision			
Operational assessment conclusions approved by Manager Airspace Regulation	[REDACTED]	[REDACTED]	16/2/2024
Manager Airspace Regulation Comments and Decision: Comments contained in Decision Log			