

OFFICIAL



Defence Airspace and Air Traffic Management

Telephone: [REDACTED]

Ref – 20221128-Waddington_Stage_3

Date 28 Nov 22

WADDINGTON ACP STAGE 3 – MOD RESPONSE SUMMARY

1. This is the MOD airspace users combined response for Stage 3 of ACP-2019-018. It is a summary of responses broken down into the individual Groups or Units, with the individual emails provided separately for completeness. Questions to the sponsor are written in italics for ease of viewing.
2. **78 Sqn.** Had no objection to the proposed airspace and would provide an Air Traffic Service according to the airspace parameters. In order to ensure that the correct communications links are in place, 78 Sqn raise the question: *Who will be the controlling authority i.e. Waddington Radar (based at Coningsby) or Waddington Tower?*
3. **19 Sqn.** ASACS see minimal impact to normal daily flying that they have a responsibility for. However, they noted that an SOP will be required to ensure that if QRA at Coningsby were to be launched, on a heading that conflicts with the proposed DA, then measures would be in place to cross the DA before handing over to ASACS.
4. **1 Gp.** RAFAT and the ISTAR FHQ have been involved in the design process since the start and support the application. Specific feedback from 1 Gp ATC units can be found within the Lincolnshire TATCC feedback section.
 - a. **Coningsby.** Station aircrew highlighted some areas of concern, which were predominantly regarding their use of the proposed airspace when active and how the airspace might impact the airspace from a regional perspective. It was highlighted that procedures will need to be in place to allow QRA aircraft to transit through an active DA under a DACS, which will require deconfliction from RAFAT/Protector if within the airspace. This will require discussion to ensure QRA departures, which require a large height block, are not unduly impacted.
 - b. DACS provision was further highlighted regarding unplanned diversions to other units when potentially low on fuel. If DACS cannot be provided, then this will need to be understood so an additional fuel penalty can be added. This also applies to departures for routine sorties, but the impact would be lessened as fuel would not be an issue, a DACS could potentially be planned for when the DAs are active but RAFAT/Protector not operating.
 - c. The availability of Waddington as a diversion was raised, especially during Large Force Exercises. This could potentially be mitigated through recovery windows being deconflicted from planned RAFAT practise windows and Protector departure/recovery, or through holding procedures for Protector.
 - d. It was also identified that activation of the DAs would potentially displace traffic to other areas and increase traffic density in East Anglia and the Vale of York. This could have an impact to effectiveness of ATC provision through compression of traffic under a service but could be mitigated by DACS provision when RAFAT and Protector activities permit. Other impacts would be on Close Air Support training in the Coningsby area and recoveries when Coningsby are using Runway 07.
 - e. Coningsby raised one question: *The proposal states that the Danger areas will be active for the duration of Protector sorties, what will be the likely duration?*

OFFICIAL

OFFICIAL

5. **22 Gp.** Feedback is split across each of the 22 Gp units that operate or are based in vicinity of the proposed airspace. Feedback from RAF Cranwell ATC is covered within the TATCC feedback section.
- a. **Cranwell OC Ops Wing.** Noted that the low section of the proposed airspace would only have a small impact to Cranwell traffic and procedures. A very similar airspace restriction was trialled for Sky Guardian operations at Waddington in Sep 21 with little disruption to adjacent airfields. The Sky Guardian trial highlighted the importance of close liaison and discipline regarding activation times, to minimise the impact to other airspace users and ATS providers.
 - b. From a procedures perspective, RAFAT pre-positioning must take place inside the Danger Area to avoid infringement of the Cranwell ATZ and to minimise overlap with the Cranwell MATZ. This will permit deconfliction against aircraft departing/arriving Cranwell, or in the visual circuit, which is particularly important when Cranwell is operating on Runway 19/01. RAFAT break-off procedures i.e. actions in the event of an intruder in the airspace, must also be designed to minimise impact on Cranwell airspace. An SLA/LOA will be required to determine relative priorities and procedures for the issues above.
 - c. The upper section of the proposed airspace would have a small impact on Cranwell as it will require a Climb Out Restriction to be applied to Cranwell MID 1C. This impact is believed to be manageable, especially if a DACS is available. The overall perceived effect of this proposal is limited provided that there is discipline regarding promulgation of activation times and RAFAT procedures are designed to minimise impact on the Cranwell ATZ and MATZ. avoid any further infringement of the CRN MATZ
 - d. The key concern for stakeholders was RAFAT activities pre-positioning runs or break-offs spilling outside the DA and into Cranwell airspace, the mitigation for which is clearly defined RAFAT break-off procedures designed to avoid the Cranwell airspace encompassed in an SLA/LOA, along with provision of a DACS.
 - e. **57 Sqn (Prefect).** welcomed the altitude adjustment of the upper airspace to deconflict from the Prefect ceiling of FL100. This negotiation was done during Stage 2 discussions and the adjustment was appreciated. 57 Sqn were broadly content with the proposal, notwithstanding concerns about the reduction in available airspace in vicinity of Cranwell when the lower part is active.
 - f. 57 Sqn believe the airspace design to be simple and easily understood, with a perceived low impact on Prefect operations, which are all conducted at or below FL100. The main concern for stakeholders was that activation of the lower piece of airspace will reduce the available airspace in the area thereby potentially increasing the likelihood of a Loss of Safe Separation. Potential mitigations highlighted against this were activating the airspace for the minimum time necessary and DACS provision. The other aspect highlighted was the requirement for a robust process to ensure all airspace users are informed of activation in good time.
 - g. **45 Sqn (Phenom).** Raised concerns and their response highlighted that the proposed airspace would have a negative impact on their current activities. The concerns were mainly about the higher portion of airspace, which, when active, would mean Phenom will lose a significant part of their normal operating area above FL100, potentially compressing aircraft into congested airspace.
 - h. They highlighted that the higher portion of airspace would limit climb outs and descent into Cranwell, with MID1C to FL150 unavailable unless a DACS can be obtained. Crews climbing out to or descending from the Gamston and Lichfield corridors would also require a longer transit if a DACS cannot be obtained, as well as departures for airways join at TRENT.
 - i. 45 Sqn also identified that activation of the airspace may also limit diversion options when the airspace is active and RAFAT/Protector operating in the airspace. They did highlight the positive aspect that clearly defined airspace will aid SA and safe deconfliction of each other's activities, and that if a DACS is available it would allow flexibility for units to operate within the airspace when RAFAT/Protector are not using it.
 - j. 45 Sqn asked the following questions in their response:
 - a. *Will R313 be removed as a result of this ACP?*

OFFICIAL

OFFICIAL

- b. *Is there any scope for sectioning the upper airspace, so the impact of the whole DA being active is lessened when only certain sections are required?*
- c. *For RAFAT only will the Lower DA be controlled similarly to R313, i.e. only active for display practice +/- 15 mins?*
- d. *How long is an approximate Protector sortie? Will there be significantly long activation times for it?*
- e. *Do both elements of the DA need to be active for the whole period? If the DA is only required to allow Protector to climb to operate in Class A and/or C, does it have to be activated for the whole airborne duration and could an emergency recovery be tactically managed through ATC?*
- f. *Is Protector fitted with a TCAS/TAS system, thereby allowing normal deconfliction to TCAS fitted aircraft (accepting that Protector may not generate a RA for itself)?*
- g. *How will the DAs be referred to on the RT? E.g. LOW/HIGH?*

k. **2 FTS.** Considered the proposed airspace design to be reasonable and saw no issues or impacts to their ops.

l. **4 FTS.** Identified no issues as they rarely operate around Waddington, however the airspace design seemed fair and reasonable to them.

m. **6 FTS.** identified some minor factual inaccuracies in the consultation documentation but made no comments on the designs:

- a. Para 1.1 - should read Apr 2022 rather than Apr 2023.
- b. Para 8.6 - No 3 FTS operates the Phenom and Prefect ac; No 6 FTS (18 sqns/ 12 locations) has EMUAS based at RAFC Cranwell operating the Grob Tutor (as shown in 8-14). RAFC Cranwell also has a civilian Flying Club.
- c. Some links have "Error! Reference not found...".

n. **Wittering ATC.** Tutor Operations are conducted below 10000ft, minimising any potential for interaction or inadvertent penetration of the higher portion of segregated Airspace. To mitigate any potential interaction with the base of the upper section, local DATIS information could include altitude conversions to ensure highest RPS altitude for operations in vicinity of segregated Airspace.

o. Tutor Operations are rarely conducted North of Barkston Heath and remain clear of Unit MATZs when in receipt of LARS, so are unlikely to be affected by the proposed airspace. Civil GA routes will be largely unaffected within the Wittering AoR and traffic routing North of Barkston Heath would be transferred to Waddington.

p. If Protector was to use a task Squawk within active/segregated airspace it would aid the situational awareness of controllers and give them an early indication of the likelihood of a DACS being approved.

q. The impact on Fast Jet activity from Marham/Coningsby/Lakenheath that is conducting general handling in Class G airspace will have a reduced lateral area available to conduct this task within the Wittering AoR Class G Airspace, which increases the likelihood of interaction with Tutor flying.

6. **Lincolnshire TATCC.** The Lincolnshire TATCC are in the process of developing new procedures and processes in response to this change. The following impacts were observed by the different units:

a. **Waddington Radar.** A review of Air Ops (Control) personnel numbers will be required due to the uplift of flying and potential complexity of taskings and new procedures. There were no major concerns identified for flying operations as Waddington Radar will be the DACS owner and can manage flying tactically and at the Supervisor's discretion.

OFFICIAL

b. **Cranwell Radar.** All recoveries to Runway 08 at Cranwell from the northeast will need to route around the airspace to recover, if a DACS is not approved. The Lower Portion (5nm up to FL105) does overlap with some of the IFR holds that are part of the published Cranwell IAPs, particularly TAC 08 and TAC-PAR 08. However, tactical coordination and close liaison between Cranwell and Waddington will ensure flexibility and coordinate both sets of activities to take place, which will require coordination but is more practicable than IAP amendments.

c. Coningsby noted that the 'cylinder' overhead RAF Waddington could have an impact if no DACS is available as Waddington is the primary diversion airfield for Coningsby-based Typhoons. This can be mitigated through early notification of activity, only activating for the minimum amount of time necessary and through implementation of a fuel penalty during activation times.

d. For Runway 25 outbounds, departures may be capped at FL100 beneath the 'box' until laterally clear. Typhoon STANEVAL are content with this proposal, which would be tactically managed by ATC, in the same way a departure would be restricted if AARA8 is active.

e. It is crucial that RAFAT remain within their airspace because if they spill out to the southeast of the cylinder during a display, they would potentially conflict with departures especially those requesting Deconfliction Service. On a standard IFR departure, Typhoons will be climbing away from CGY 'belly-up' to the 'cylinder' which further increases risk if RAFAT spill from the airspace to the southeast. The mitigation for this would be to ensure RAFAT break-off procedures do not leave to the southeast, which will require a MOD internal SLA/LOA. To further mitigate the effect, it's recommended the Coningsby Supervisor can call 'knock it off' for the RAFAT display in the interest of safety or for high priority recoveries.

f. For Runway 07 inbounds, if a DACS was not available the airspace available to facilitate recoveries will be reduced. The standard instrument recovery profile would not be achievable but visual recoveries would still be achievable. All instrument approaches would require to be fed in through the Cranwell overhead, thereby impacting Cranwell activities such as PFLs. This situation could occur if a recovery wave occurs simultaneously with RAFAT display timings or Protector arriving/departing, so deconfliction of timings will be investigated locally.

g. Whilst this situation is unlikely to occur due to all of the factors needing to align, it is still possible which is why close liaison will be required between Coningsby, Waddington, RAFAT and Protector to minimise potential conflicts as a result of the airspace being active. This further highlights the importance of a DACS being available whenever the airspace is active.

7. **Summary.** MOD airspace users and ATC Units were consulted on the proposed Waddington airspace and asked to identify what the impact would be on their activities and any appropriate mitigations. The key themes were that a DACS would be crucial in mitigating the impact of the airspace and without it there could be an impact to a wide range of MOD activities. It was also apparent that efficient notification protocols would allow other airspace users to plan around the times when RAFAT and Protector activities would mean crossing approval is less likely to be granted. The other theme was that RAFAT break-off procedures need to be designed such that their impact on local ATC patterns is minimised, with an SLA/LOA being required between the relevant parties.

8. Responses to the questions in this document can be sent via DAATM to the originators. If there are any questions regarding the content of this response, please contact the undersigned.

