



Ministry
of Defence

ACP-2021-007 Feedback

ACP-2020-026 and 2021-048
Consultation



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Introduction

The Ministry of Defence (MoD) is the change sponsor for the 3 ACPs being discussed today. The proposals seek to secure Combat Airspace for the use by UK and multi-national partners during occasional large scale, highly complex, multi-domain collective training exercises that are used to prepare aircrews for operational service. The proposals comply fully with the strategic aim as laid down in Annex C of CAP 740.

“The strategic aim for Defence ASM is to enable all arms of Defence to ‘train as they would fight’ by safeguarding long term access to appropriately sized and sited airspace, which can be reserved for hazardous activities, while minimising the impact on other airspace users.”¹

ACP-2021-007 – TDA 597 was activated between 0900-1200 on 6, 8, 10, 13, 15 and 17 September and between 1800-2130 on 21 and 23 September to enable Exercise COBRA WARRIOR. TDA 597 will also be activated in Mar 22.

ACP-2021-048 – Is a proposal to activate the TDA again for 2 periods with specific dates in Aug and Sep 22.

ACP-2020-026 – Is the proposal for a permanent airspace structure to be activated for specific exercises. This is currently at Stage 2 in the CAP 1616 process.

As the key aviation stakeholder in the region, MoD is keen to work with Newcastle International Airport to agree procedures and protocols to allow the equitable sharing of airspace.

M Parker

Squadron Leader Michael Parker
HQ Air Command

19 November 2021

¹ CAP 740, Page 41, para C1

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Contents

Introduction	3
Statement of Need	6
Design Principles	7
ACP-2021-007	8
ACP-2021-048	9
ACP-2020-026	10

Statement of Need

Why is the change needed?

With the introduction of 5th generation aircraft into the RAF inventory in the form of the Lightning F35, larger, rectangular portions of airspace are needed so that crews can participate in realistic training, employing tactics which would be used in a hostile environment. The current Manged Danger Areas (MDAs), although suitable for routine flying training, are of incorrect orientation, location and dimensions for a full simulated Combat Air Operation involving participants from the UK along with our NATO allies.

What is the statement of need for these proposal?

Air Command, on behalf of the Ministry of Defence, has an obligation to provide relevant tactical collective training to its combat and combat support forces to ensure UK Forces are correctly prepared to defend UK interests in line with the UK Defence Strategy. An appropriate airspace is required to meet this need; it must safely facilitate exercising large forces of modern and future air platforms in an efficient and representative combat environment.

Core military requirements:

Minimising the risk of Mid-Air Collisions (MAC) to the maximum extent whilst enabling;

- Full tactical employment of aircraft and weapons capability
- Supersonic flight and rapid height changes
- Overflight and loiter of rural overland (target) areas
- Use high and low altitude activity concurrently
- Representative employment ranges of simulated air-air and air-surface weapons
- Representative operational numbers
- Ability to oppose from ground and air simultaneously
- Contested in electromagnetic environment.



Design Principles

The design principles (DPs) were set following engagement with representative stakeholder groups and are common through all 3 ACPs. Safety is the highest priority and DP(a) is automatically assigned Priority 1.

The MoD feels that the ability to complete its training and operational objectives is next in priority after safety and, since no stakeholder contested this, DP(b) is assigned Priority 2 along with the corresponding DP(e) about minimising impact to other airspace users.

Priority	Design Principle
1	DP(a) The airspace design must be safe, with any hazards identified and risks mitigated such that they are as low as reasonably practicable and tolerable.
2	DP(b) The training area will be within efficient reach of RAF / United States Air Force (Europe) (USAFE) Main Operating Bases. DP(c) Optimise the airspace design to accommodate periodic large-scale multi-domain collective training activities. DP(e) Minimise impact on other airspace users and the network.
3	DP(h) Minimise the impact to Commercial Air Traffic flow, sector complexity and sector capacity. DP(g) Minimise environmental impacts including CO2 emissions. DP(f) Minimise environmental impacts including noise (where relevant).
4	DP(d) Optimise Airspace Management (ASM) applying Flexible Use of Airspace (FUA) principles and ASM Policy
5	DP(j) Minimise complexity in flight planning. DP(i) Optimise protocols for deconfliction of simultaneous activations of multiple volumes of Special Use Airspace. DP(k) Maximise the incorporation of results of the MOD's supporting Airspace trial – ACP-2020-042.

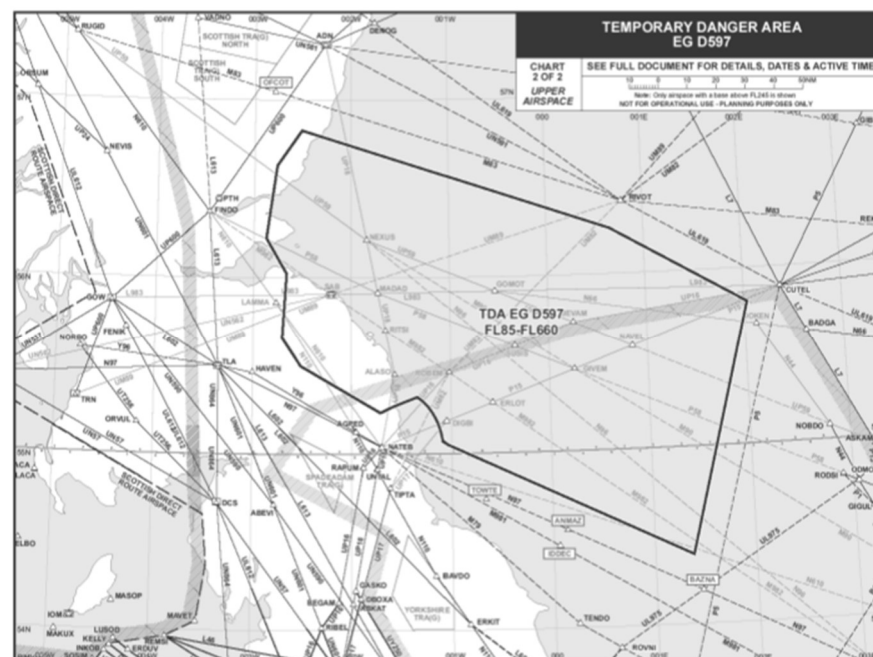
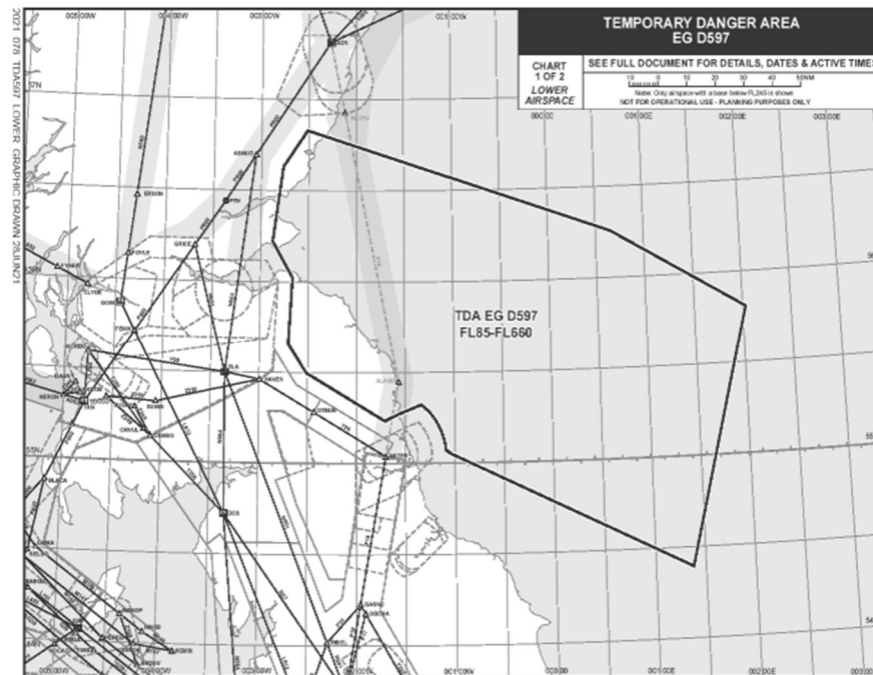
Table 1. Design Principles



ACP-2021-007

D597

TDA 597 was activated between 0900-1200 on 6th, 8th, 10th, 13th, 15th and 17th September and between 1800-2130 on 21st and 23rd September to enable Exercise COBRA WARRIOR.



IMPACT TO NEWCASTLE

Discussion points:

Safety – did the airspace itself cause any safety issues or raise any safety concerns?

Operational Impacts - What effect did the activation of the airspace have on your operation?

Airspace Management – how well did the notification, activation and management of the airspace work?

Air Traffic Management – Did the handling of military Ex traffic and/or civil traffic in and around TDA 597 cause any issues?

Environment and Noise – Did the activation of TDA 597 cause any environmental or noise concerns?

Any other observations about TDA 597 or ACP-2021-007 in general?

ACP-2021-048

This ACP proposes further activations of the airspace for 2 exercises in 2022.

STORM WARRIOR

Aug 9th and 11th - 2000-2315 UTC

Aug 16th, 18th, 23rd and 25th – 0800-1115 UTC

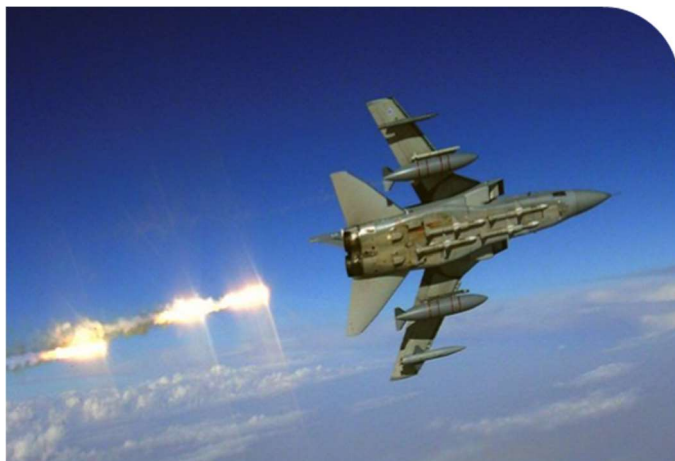
COBRA WARRIOR

5th-9th

12th-16th

19th-23rd (all September)

Probably a 0900-1200 UTC daily activation, not required on weekends.



IMPACT TO NEWCASTLE

Discussion points:

Safety – does the airspace itself cause any safety issues or raise any safety concerns?

Operational Impacts - What effect will the activation of the airspace have on your operation?

Airspace Management – do you have concerns about how the airspace will be managed?

Air Traffic Management – Do you have any concerns about how civil or military traffic will be routed in or around D597?

Environment and Noise – Do you anticipate any noise or environmental impact caused by civil aircraft as a direct result of this activation?

Any other observations about TDA 597 or ACP-2021-048 in general?

ACP-2020-026

This is currently at stage 2.

CAP 1616 page 39,

Step 2A Options development

The change sponsor develops one or more options that address the Statement of Need and align with the defined design principles.

The latest version of the options development submission narrows the options down to 1. A portion of segregated airspace, minimum dimensions 90 x 160 nm predominantly based over the sea but with overland portions on the shortest edge. Situated off the east coast of the UK.

The timeline for this is to deliver in Spring 2023.

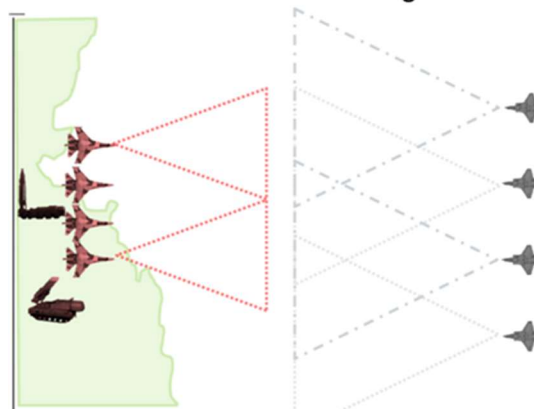
Although this is the preferred permanent solution, it will not be permanently active, current forecast is for:

COBRA WARRIOR (~12-15 missions per exercise lasting up to 3 hrs per mission).

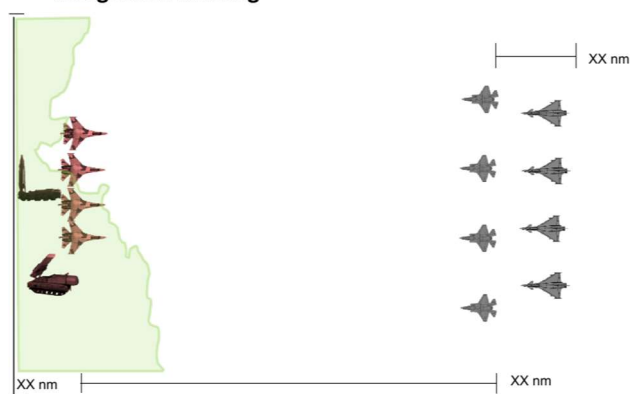
STORM WARRIOR (~6 missions lasting 3 hours each).

RIISING PANTHER is held 6 times per year, twice a month in Feb, June and Nov with 3 missions per exercise lasting 3 hours each.

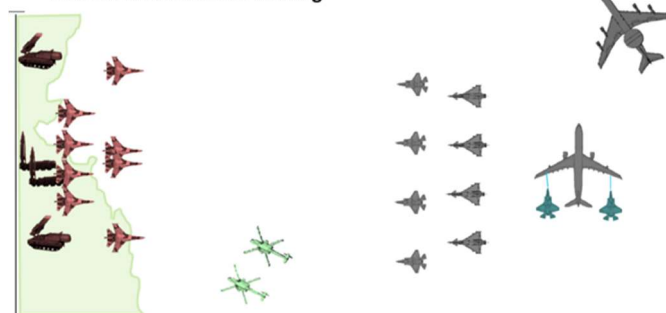
Missionised Formation Training



Integration Training



Collective Missionised Training



Summary

Airspace is a state asset. The aim of the MoD proposals is to share equitably and make full use of Flexible Use of Airspace principles. At forecast usage, even at maximum, it amounts to the SUA being active for 1.8% of the time.

MoD recognises Newcastle as the key affected stakeholder in this proposal and is keen to establish strong 2-way communications.

MoD is committed to learning lessons from the trial and temporary activations.