

MOD Airspace Trial Phase 1 – TDA 598 – Operating Principles and Practices

1 Introduction

The UK Ministry of Defence (MoD), through the Air and Space Warfare Centre (ASWC) at RAF Waddington, have a duty to provide a realistic live training environment to UK and NATO Forces, including large-scale collective training air exercises using the full range of combat aircraft tactics and simulated weapon systems.

To achieve the above, the MoD through the ASWC has undertaken an Airspace Change Proposal (ACP) to establish a Temporary Danger Area (TDA) on a trial basis, superseding previous arrangements between the ASWC and NATS Prestwick Centre (PC), associated to Cobra Advanced Combat Airspace (CACA). The airspace trial shall be undertaken in 2 phases, the first between the 18 Oct 20 and 06 Nov 20. The second trial period is scheduled for Mar 21.

Due to time constraints associated to the introduction of the Phase 1 trial, methodologies employed for Flight Plan (FPL) acceptance associated to the CACA, as well as additional tactical re-routings shall be employed to support the safe and effective handling of both Operational and General Air Traffic (OAT)(GAT). As a consequence, the TDA shall not be considered as a UK Airspace Management Cell (AMC) managed area.

2 Aim

The aim of this document is to set out the operating principles and practices associated to the activation, operation and de-activation of the TDA volume as agreed between NATS and the MOD (ASWC).

The content of this document builds upon but ultimately supersedes arrangements made in support of the CACA volume.

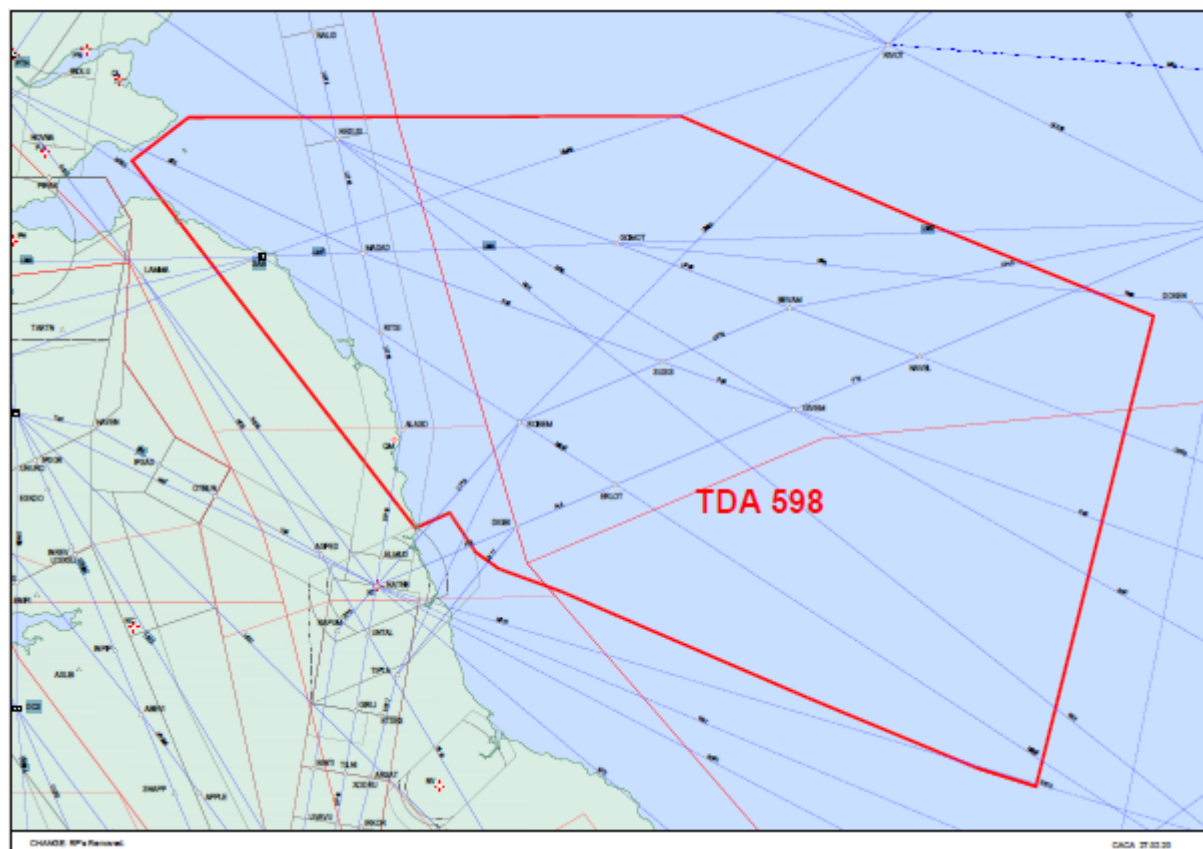
This document does not cover trial metrics or associated internal operating requirements; but does act as an agreed methodology associated to the activation and use of the TDA and supporting airspace structures throughout the Phase 1 trial period.

3 Airspace Construct

3.1 TDA Volume (TDA 598)

To support the ASWC requirement to undertake advanced combat training:

Coordinates	Vertical
560938N 0024841W 561625 N 0023238W 561449N 0001312W 555631N 0005309E 553914N 0015615E 542636N 0011534E 543003N 0005954E 544237N 0001428E 550035N 0005050W 550434N 0010814W 550716N 0011424W 551332N 0012117W 551115N 0013048W to origin	FL85 to FL660



3.2 RIVOT - PTH Tactical Route

Between Reporting Points RIVOT (562429N 0004637E) and PTH (562633N 0032207W) a tactical route is established to allow GAT to circumnavigate the TDA volume.

During periods of TDA activation GAT operating on this tactical route shall be considered to be operating En-Route for the purposes of co-ordination between Military and Civil ATS providers¹.

3.3 North Sea Reduced Co-ordination Area (NSRCA)

As detailed within the UK AIP (ENR 2.2) the NSRCA is permanently established and defines co-ordination procedures between Military and Civilian ATS providers¹. For the purposes of the trial, the activation of the TDA shall supersede the NSRCA for that portion of airspace encompassed within the TDA volume. Out with the activated TDA volume, extant procedures shall apply and will be used for the purpose of tactically re-routing GAT.

3.4 Additional Areas

In addition to the TDA, additional exercise areas will be used for activities such as Air-Air Refuelling (AAR) or Intelligence, Surveillance, Targeting, & Reconnaissance (ISTAR) aircraft. Where these activities take place below FL245, the airspace classification will be Class C Temporary Reserved Areas (TRAs) between FL245 and FL195, and in Class G if below FL195. For activities above FL245, normal co-ordination processes, including the granting of tactical Non-Deviating Status, will be conducted between military agencies and NATS PC.

Additionally, planned excursions from the TDA are expected in order to undertake holding or resetting activities. Such activity can be expected in the vicinity of Leuchars (Fife Coast) and within Northumbria (to the West of the TDA). See Para 4.2 for obligations

4 Operational Principles

4.1 NATS

NATS PC will manage the safe and efficient flow of GAT around ~~and~~ the TDA by applying appropriate Air Traffic Flow and Capacity Management (ATFCM) processes as well as tactical re-routings as required.

In addition, NATS PC will ensure that relevant airline operators and agencies are informed of the planned times of operation for the TDA via an Airspace Information Management (AIM) notice and Notice to Airman (NOTAM) promulgation.

4.2 ASWC

As the exercise sponsor the ASWC, in addition to providing military participants with training and sortie objectives, shall ensure that:

¹ See NATS / MOD LOA – Standing Co-ordination Procedures.

- a) A robust Ingress and Egress plan for Military Participants is devised and that Military ATS providers are appropriately manned to facilitate the safe arrival and departure of air assets into and out of the TDA.
- b) That Military participants are fully briefed on the airspace volume to be used as well as the presence of permanent CAS structures and Upper Routes that surround the TDA.
- c) That Military participants have sufficient mapping / overlays relevant to their platform depicting the airspace construct.
- d) That airborne activity which would impede compliance with the Rules of the Air is wholly contained within the TDA volume.
- e) That any departure from the TDA into CAS is appropriately co-ordinated between ATS providers to ensure the safety of both OAT and GAT².

4.3 SWN(Mil)

To ensure continued ATS provision for aircraft operating to / from EGNT and NV via the Copenhagen FIR, SWN(Mil) will provide services to such aircraft as set out in detail within agreed ATC procedures³.

5 Activation and De-Activation

5.1 Suppression of Adjacent Danger Areas

To assist in the safe and efficient flow of traffic, the ASWC will facilitate the suppression of specified Danger Areas, as set out in Para 5.1.1, during the trial period to enable GAT to FPL and operate along Conditional Routes (CDRs) which avoid the TDA. Suppression of these areas shall ensure that they are unavailable for booking by any military agency during TDA activation periods.

5.1.1 Specified Danger Areas – See UK AIP ENR 5.1

EG D323 – (Southern MDA) A, B, C, D E, F, G, H, J, K, L, M, N, P, Q, R
 EG D613 – (Central MDA) A, B, C, D
 EG D513 - (Druridge Bay) A, B, C
 EG D412 – (Staxton)

5.2 Airspace Activation and Deactivation Sequence

Temporal buffers shall be applied between MDA and TDA activity periods to allow GAT to reconfigure to alternating airspace configurations and thus ensure FPL acceptance and safe segregation of airspace structures for military use.

The following temporal buffers shall be applied:

² See NATS / MOD LOA – Standing Co-ordination Procedures.

³ Procedures are set out in ATC Temporary Operating Instruction (TOI)

Note: Should SWN(Mil) be unable to work affected traffic following pre-notification prior to the activation of the TDA, GS Scot Upper shall inform the PC OS, who will in turn initiate TDA cancelation and inform the ASWC of the reason.

MDA to TDA Activity: Minus and Plus 1hr

Timeline example based on TDA activity between 09:00 and 12:00 UTC

Prior to 08:00	•D323 / D613 / D513 active
At 08:00	•D323 / D613 / D513 / D412 Suppressed and unavailable for reservation
Between 09:00 and 12:00	•TDA Active
At 12:00	•TDA Inactive
At 13:00	•D323 / D613 / D513 / D412 Becomes available for reservation

5.3 Notification of Activity

Notification of activity status shall be undertaken by NOTAM at D-1. Where activation is required on a Monday notification will be undertaken on the proceeding Friday.

NOTAM information shall reference the CAAs Aeronautical Information Circular (AIC) (Y 075/2020) as authority to activate the TDA volume.

5.4 Provisional Activation Times and Dates

Within the 3-week Phase 1 airspace trial period, 19 Oct 20 and 04 Nov 20, it is expected that TDA will be activated on the following dates at the following times⁴:

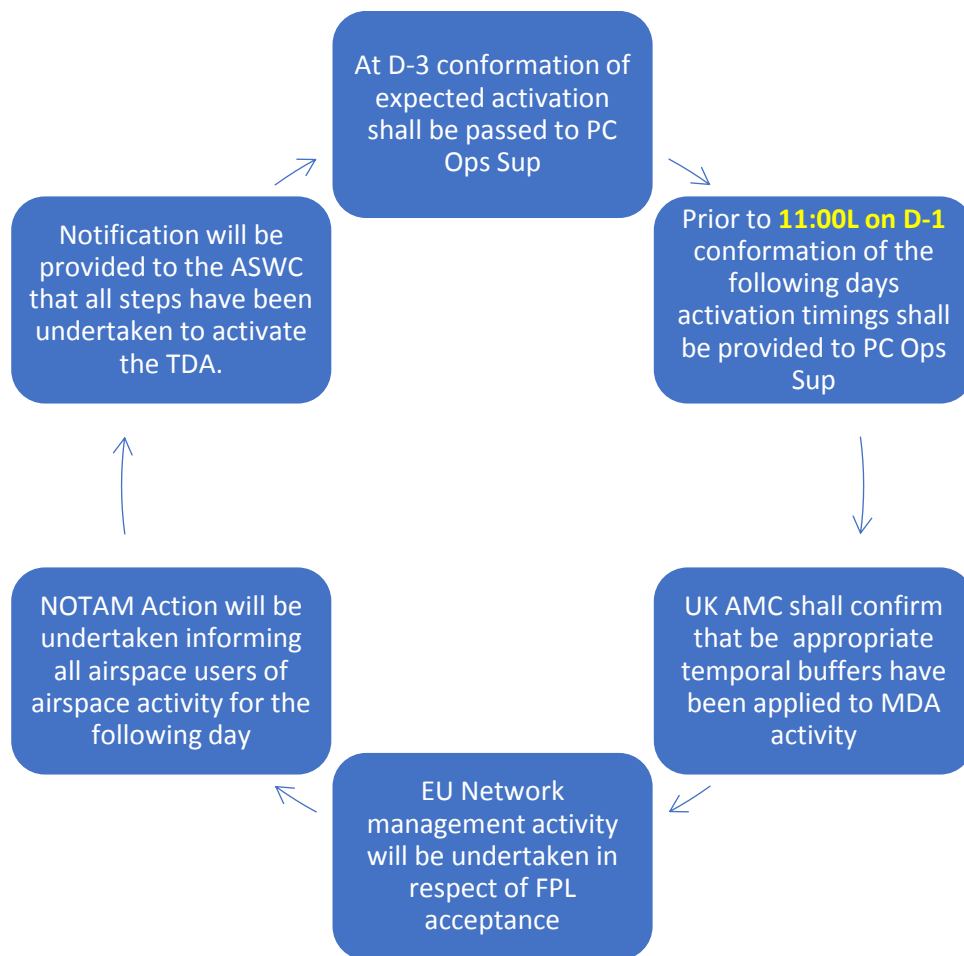
19 Oct 20	•09:00 to 12:00 UTC
21 Oct 20	•09:00 to 12:00 UTC
26 Oct 20	•10:00 to 13:00 UTC
28 Oct 20	•10:00 to 13:00 UTC
02 Nov 20	•10:00 to 13:00 UTC
04 Nov 20	•10:00 to 13:00 UTC

It is however recognised that circumstances may require the alteration of both dates and activation timings.

5.5 Pre-Activation Protocol

To accommodate for potential amendments, the following pre-activation protocol shall be followed.

⁴ Note: British Summer Time ends on Sun 25th Oct 20



For Monday activations, the proceeding Friday shall be considered D-1

5.6 Airspace Hand back

Following NOTAM distribution of activity timings at D-1, no amendments to activation timings will be undertaken.

At D-0, should activity be cancelled or completed early, the ASWC shall inform the NATS PC OS that the TDA is no longer required. The PC OS shall then initiate notification action informing all airspace users as required. It is stressed that once notification of hand back has commenced it cannot be reversed or amended.

6 Cat A Flight Handling

Should any CAT A flight under the control of PC require to penetrate the TDA when active, 1 ACC shall be contacted by GS Scot Upper to advise them of the flight status and co-ordinate transit of the active area.

7 Emergency Penetration of TDA 598

Irrespective of the TDA activity status, PC and SWN(Mil) reserve the right to enter the airspace with any aircraft in emergency. GAT under the control of PC shall be instructed to squawk 7500, 7600, or 7700 as appropriate. Sectors shall advise the GS Scotland Upper,

GS Scotland Lower, or the OS, who will inform the SWN(Mil) Sup and ASACS of the intention to enter the TDA, along with the pilot intentions.

8 Suspension of Trial

Should significant safety related issues be observed during the trial period, the PC OS shall discuss such observations with the ASWC in order to affect a resolution.

Both the ASWC and NATS PC reserve the right to suspend the airspace trial and revert the airspace construct to its baseline configuration in the event that safety related issues cannot be resolved.

9 Contact Details

Scottish AC (Prestwick):		Air and Space Warfare Centre (ASWC)			
Operations Supervisor			Trial Sponsor OC 92 Sqn		
Upper Group Supervisor			92 Sqn Ex CRIMSON WARRIOR ProjO		
Lower Group Supervisor			92 Sqn Inzpire Ex CRIMSON WARRIOR ProjO		
E-Mail			92 Sqn Inzpire Ex CRIMSON WARRIOR MSO		
		Waddington Ops during Mission Planning on D-1			