AVIATION STATE ENGAGEMENT FORUM	
New South Wales	**Submission date: 11 August 2022**

TITLE	**Proposed Major Changes to Williamtown Airspace Effective 15 June 2023 AIRAC**
SUBMITTED BY	Defence Joint Airspace Control Cell (JACC) – adf.airspace@defence.gov.au
CONSULTATION SUMMARY	To seek feedback from the aviation industry on the proposed major changes to Williamtown airspace, including: • Replacement of R578ABCDEFG with Military Class C control area (CTA), including change to the lateral and vertical dimensions of the airspace. • Change to the lateral dimensions of the Williamtown Military Control Zone (CTR), and the addition of a second CTR that will be activated when required. • Internal subdivision and minor change to the lateral dimensions of R574. • Removal of R580. • Internal subdivision and minor change to lateral dimensions of R583B, plus change to the lateral and vertical dimensions of R583A (R583AB becomes R584ABCD). • Replacement of R587AB with Class C control area and R588ABC, including change to the lateral and vertical dimensions. • Replacement of the Williamtown Class E A045 step with a larger Class E A065 step to provide improved continuous descent operations for aircraft arriving Williamtown and a base of Class E airspace overnight that is consistent with other similar locations. • D589A is no longer required. • Minor amendments to the air route network in the area.

KEY ISSUES	• In 2015, CASA and RAAF released their *Joint Aeronautical Study of Williamtown Airspace* which provided 33 recommendations for improvements to the airspace.
	• RAAF and Airservices Australia (Airservices) have been working together to develop a new airspace and route design for the Williamtown area in order to acquit a number of the joint study recommendations regarding continued safe operations of both civil and military aircraft at RAAF Base Williamtown (also known as Newcastle Airport).
	• The changes to adjacent Military Flying Restricted Areas are required to:
	  ○ Facilitate the new terminal airspace design,
	  ○ Align with the national standardisation of ATC separation standards regarding Restricted Areas,
	  ○ Optimise military use of Restricted Areas.
	• The changes are proposed for implementation in June 2023.

FEEDBACK TO	FOR ATTENTION: Flight Commander, 453 Squadron Williamtown 453sqnwlmflt.fltcdr@defence.gov.au WGCDR Andrea Armstrong, JACC adf.airspace@defence.gov.au
CLOSE DATE	**29 Aug 2022**
ATTACHMENTS	1. Proposed Williamtown Military Class C CTR/CTA 2. Proposed Williamtown Class E CTA 3. Proposed R574ABCD WILLIAMTOWN

	4. Proposed R584ABCD WILLIAMTOWN 5. Proposed R588ABC WILLIAMTOWN 6. Proposed Air Route Changes

BACKGROUND

Royal Australian Air Force (RAAF) Base Williamtown is also known as Newcastle Airport. Within Williamtown airfield hours, RAAF provide Air Traffic Services (ATS) to all aircraft within Williamtown airspace. Airservices provide an ATS around and above Williamtown airspace, as well as outside Williamtown airfield hours. Williamtown is Australia's main fighter jet training base, and home to the HAWK Lead-in Fighter and F-35 Joint Strike Fighter.

In 2015, the Civil Aviation Safety Authority (CASA) and RAAF finalised a joint aeronautical study of Williamtown airspace, which provided 33 findings and recommendations for a review of the airspace. Following this and in close consultation with Defence, Airservices has conducted this review, including the design of strategically-separated Standard Instrument Departures (SID) and Standard Instrument Arrivals (STAR) for Williamtown, as well as the adoption of a standardised separation standard with adjacent Military Restricted Areas (RA).

Williamtown airspace is strategically vital for a dynamic range of customers and as such, Defence and Airservices are committed to finding the right balance for equitable access for all airspace users, including civilian Regular Public Transport (RPT), General Aviation (GA), Flying Doctor and other health services flights whilst maintaining vital military operations. With the acquisition of the F-35A and the recommendations of the Williamtown study Defence undertook a review of operations within Williamtown airspace and associated RAs. Key considerations for Defence include:

- The requirement for access to suitable training airspace to conduct activities that support national security initiatives on behalf of the Australian Government.
- The F-35A Lightning II fifth-generation air combat aircraft is operated very differently to the F/A-18A/B Hornet. The aircraft has new tactics and profiles that are not suited to the current training area construct.
- Military aircraft use flying training areas to conduct high-speed abrupt flying manoeuvres, supersonic flight (where permitted), aerial refuelling and the employment of electronic measures which could cause interference. For these reasons, military flying requires segregated volumes of airspace to ensure safety of participants and non-participants, as well as provide surety that training outcomes can be met.
- Commitment to Flexible Use of Airspace (FUA) principles by using minimum dimensions required for proposed restricted area volumes to meet essential training outcomes only and enabling civilian airspace access when not in use.

DESIGN METHODOLOGY

The proposed changes within this paper are the result of incremental design development and validation involving multiple stakeholders. The design is currently at the later stages of the Design Phase and subject to change prior to publication.

Design Notes:

- Control area (CTA) protection is required for Williamtown instrument flight procedures (IFP).
- The vertical and lateral airspace divisions throughout the design enable scalable, limited activation in order to minimise RPT diversions and maximise civilian access.
- The proposed CTA design allows greater access to lower level airspace within 25NM Williamtown, but still caters for the intense and highly specialised military flying operations associated with the base.

OVERVIEW

The proposal involves:

- The standard CTR is reduced in size by 1 NM radius.

- A second CTR SFC - 2000ft between 11 and 25NM, from the north clockwise to the south, will only be activated when required.
- The R578 series has been replaced by blocks of Military Class C CTR/CTA.
- New uniform ceiling of Williamtown military-controlled airspace within 25 NM Williamtown (or part thereof) is FL125.
- D589A will no longer be required.
- The 3500FT step to the south west is no longer required.
- The 2500FT 'Maitland step' is required for CTA containment of RWY 12 arrivals from the south and west, and does not impact the Maitland RNP-W approach.
- R580, R583 series and R587 series have been replaced by R584 series and R588 series with minor amendments to dimensions. This allows for FUA and national standardisation of separation with RAs.
- R574 has been subdivided for FUA.
- Amendment and or creation of air routes that strategically separate with new RA boundaries and facilitate efficient and safe use of the new SIDs and STARs.
- An expansion of the current Williamtown Class E CTA volume to provide a 30NM radius WLM TAC A065 step

RATE OF EFFORT / ACTIVATION PERIODS

Military CTA/CTR/RA activation periods will be very similar to those currently used. Namely, daily ATS hours 0600-2200L of a primary CTR and CTA steps up to FL125 within 25nm (or part thereof), with a secondary CTR, CTA above FL125 and RAs activated for military operations. These operations will generally be 0900 - 2200 local Mon-Fri with minimal activation on weekends, public holidays or over the reduced activity period from mid-Dec to early-Jan.

IMPACTS

The changes to R578 series and R587A within 25NM Williamtown and surrounding CTA E are in support of FUA and the introduction of the strategic Williamtown TMP. The changes are significant for Air Traffic Control operations but not expected to have a major impact on civil and industry aviation. Airservices are leading an extensive industry and community engagement program in parallel with this stakeholder engagement.

Changes to R574 and new R584 / R588 are minor and in support of national separation standards and military operations. They are not expected to have any impact on current civil and industry operations.

The amended air routes are designed to ensure lateral separation with the proposed CTR/CTA and RAs and not expected to have a major impact on civil and industry operations.

CONCLUSION

Defence and Airservices continue to work collaboratively with agencies including the Civil Aviation Safety Authority to develop a solution that generates the least impost for all concerned, including industry and general aviation, yet one that provides appropriate airspace to conduct military activities.

It should be noted that these areas are currently in design phase while simulations and stakeholder engagement take place.

To assist in development of an appropriately consulted, well considered solution, Defence seeks feedback from stakeholders on this proposal. All feedback will be provided to CASA's Office of Airspace Regulation to assist in their assessment and decision making regarding this airspace change proposal.

PROPOSAL

The attachments detail the proposed airspace and air route change to be included in the Designated Airspace Handbook (DAH), with a desired target date of June 2023.
Note: The below information is in design phase, and while the design is mature, it is subject to further change as the design process completes all testing and consultation.