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# Introduction

The Tãwhaki National Aerospace Centre (TNAC) is located at Kaitorete Spit, approximately 20 nautical miles (NM) south of Christchurch International Airport on the east coast of the South Island and immediately to the south of Lake Ellesmere. The TNAC site, which includes a 1km sealed runway, was established to support emerging technology research and development activities, enabling trials and testing for leading-edge advanced aviation and aerospace endeavours.

Since 2023 emerging technology operators have individually submitted applications for temporary Special Use Airspace (SUA) areas at the Kaitorete Spit site. This application now seeks to establish permanently designated areas which may be activated by NOTAM, as required, for different research and development activities.

# Proposed Areas - TNAC Planning for Future Operations from the Kaitorete site

The full Tawhaki SUA Proposal is available at Annex A.

This Proposal requests:

- Six Restricted Areas (RA) five RA to be active from surface to a maximum upper limit 6000ft AMSL, one RA to be active surface to a maximum upper limit 3500ft AMSL; and
- Six Danger Areas (DA) three DA to be active from surface to upper limit UNL, and three to be active from 6000ft to upper limit UNL.
  - The three DA active from 6000ft to maximum upper limit of UNL are coincident with five of the proposed RA; and
  - The three DA active from surface to maximum upper limit of UNL include one small area to the north of the TNAC site and two DA extending further southeast from the 12NM Territorial Sea Limit; see Proposal page 9.
- Existing Restricted Area NZR902, Kaitorete Spit, be integrated into the proposed RA airspace areas; NZR902 would be withdrawn.

The SUA areas would be activated by NOTAM, to the altitude level required for the specific activity, <u>at least 24 hours before use</u>. Only the areas required for the activity or activities taking place on any given date would be activated; for example, it may be the case that only one RA is required, or it may be a case of two RA and additional DA are needed. In summary, TNAC would only activate the areas within which operational activities will be taking place.

See on the following page, an extract from the Proposal document (page 9) depicting the requested SUA areas:

# 2.2 Visuals of Proposed Tawhaki SUA

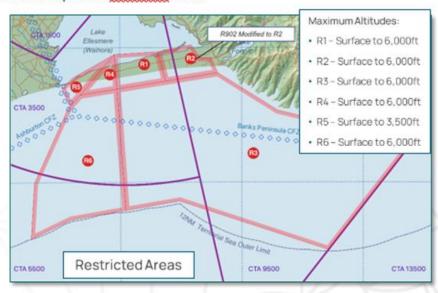


Figure 1 - Proposed Restricted Areas

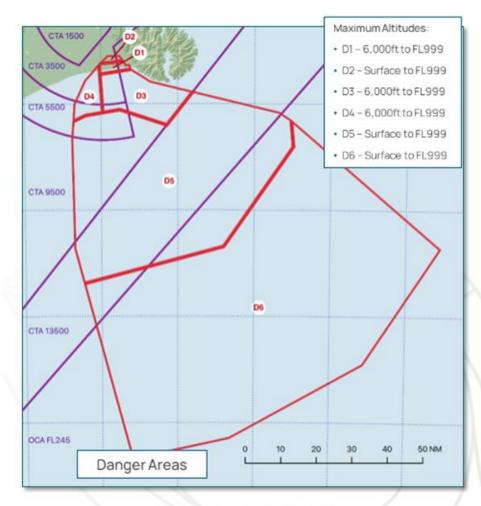


Figure 2 - Proposed Danger Areas

In preparing this application for permanent SUA to enable operations from the Kaitorete site TNAC staff have conducted extensive consultation with known aviation stakeholders operating in the area, including Airways New Zealand as the air navigation service provider; refer pages 27 to 30 of Annex A for summary of all stakeholder responses.

The TNAC Proposal includes the concept of a dedicated VHF frequency (SUA frequency) for communicating the activation status of the SUA areas; see page 19 of the Proposal, describing a proposed frequency to be published in the AIP, charted and included in NOTAM.

<u>CAA Note</u>: Civil Aviation Rule 91.217 Preflight Action requires pilots to obtain and become familiar with all information concerning their flight; therefore, given NOTAM will be issued at least 24 hours before any area is activated, pilots should always be aware of the status of the SUA areas before take-off. The rationale to include an additional frequency to convey SUA activation information that is already provided through existing aviation system channels has not been sufficiently justified in this proposal.

#### Civil Aviation Rules context

Civil Aviation Rule Part 71 provides the regulatory context to designate Restricted Areas and Danger Areas, as special use airspace. Specifically, 71.151 prescribes the criteria that the Director must consider in designating special use airspace below:

#### **71.151** General

- (a) The Director may designate special use airspace under this Subpart if the Director considers such airspace is necessary—
  - (1) in the interests of safety or security within the civil aviation system; or
  - (2) in the interests of national security; or
  - (3) for any other reason in the public interest.
- (b) The Director must ensure that each portion of airspace designated under this Subpart is as small as practicable consistent with the activities for which the area is required.

Civil Aviation Rule Part 71, 71.153 prescribes the criteria for designating restricted areas, describing the Director and administering agency responsibilities:

#### 71.153 Restricted areas

- (a) The Director may—
  - (1) designate a portion of airspace as a restricted area to restrict the activities of aircraft within that area
    - (i) within the territorial limits of New Zealand; and
    - (ii) within the territorial limits of another ICAO Contracting State in the Auckland Oceanic Flight Information Region upon request by that State; and
  - (2) impose conditions under which—

- (i) aircraft may be permitted to fly within that restricted area; and (ii) the administering authority responsible for the restricted area must operate.
- (b) The Director must—
  - (1) specify the type of activity for which each restricted area is designated; and
  - (2) specify the administering authority responsible for each restricted area; and
  - (3) identify each area by the ICAO nationality letters of the applicable State followed by the letter "R" followed by a number.
- (c) The administering authority responsible for a restricted area—
  - (1) must manage—
    - (i) the entry of aircraft into the restricted area; and
    - (ii) the operation of aircraft within the restricted area; and
    - (iii) the exit of aircraft from the restricted area; and
  - (2) if the restricted area is designated as being made active by NOTAM, must at least 24 hours before the restricted area is to become active, give to the New Zealand NOTAM Office notice of that restricted area becoming active, except that in the case of emergencies less than 24 hours notice may be given; and
  - (3) may, within any conditions imposed by the Director under paragraph (a)(2)(ii), impose conditions under which an aircraft may be operated within the restricted area.

Further, 71.161 prescribes the criteria for designating danger areas, describing the Director and using agency responsibilities:

# 71.161 Danger areas

- (a) The Director may designate a portion of airspace as a danger area to notify operators that there is a potential danger to aircraft flying in the area.
- (b) The Director must—
  - (1) specify the nature of the danger for which each danger area is designated; and
  - (2) if the Director considers it necessary, nominate a using agency as the contact point for a danger area; and
  - (3) identify the area by the ICAO nationality letters of the applicable State followed by the letter "D" followed by a number.
- (c) The using agency for a danger area must—
  - (1) be a person or organisation that is responsible for the activity that necessitated the danger area being so designated; and (2) ensure that the activities that necessitated the designation of the danger area are contained within that danger area; and (3) if the danger area is designated as being made active by NOTAM, at least 24 hours before the danger area is to become

active, give to the New Zealand NOTAM Office notice of that danger area becoming active, except that in the case of emergencies less than 24 hours notice may be given.

<u>CAA Note</u>: The Proposal at Annex A seeks to publish no single Using Agency for the proposed DA areas (Proposal page 21). However, it is CAA's view that given the location of the proposed DA airspace and the variable activity that may take place within these areas, a Using Agency should be promulgated for these DA areas. CAA envisages TNAC might act as Using Agency, meeting the Rule Part 71.161 (c) requirements through the development of agreements with operators; for example, TNAC staff required to confirm, for each activation of an area that an operator's CAA Certification and Operational Specification information permits the intended activity and the activity can be contained within the volume of the SUA areas selected to activate.

#### Possible effect to IFR aircraft

TNAC staff have collaborated with Airways New Zealand staff to understand the options available to reroute any affected IFR traffic when areas are active. Airways New Zealand have indicated they will be able to manage the air traffic service to avoid any active area and TNAC will be developing a Letter of Agreement between both parties to support operations at Kaitorete Spit. See Proposal page 22 at the Annex A for further information.

#### Possible effect to VFR aircraft

TNAC has expressed their intention to minimise the impact of the Tāwhaki SUA activation on airspace users and acknowledges there may be minor effect for some general aviation flights. TNAC has an existing Memorandum of Understanding (MoU) with Canterbury Aero Club and this MoU and associated procedures is planned to be updated in accordance with the Proposal; refer Proposal page 26.

#### Consultation

Prior to designating airspace, Civil Aviation Rule 71.9 requires the Director to consult with affected persons, organisations, and representative groups within the aviation industry before making a designation or classification of airspace.

The Director invites feedback regarding designation of the proposed Special Use Airspace areas.

This document will be sent directly to the organisations listed below. It would be appreciated if you would kindly forward the document to your members and stakeholders, for consideration and comment as appropriate.

# Operators, Organisations and User Groups

- Airways New Zealand
- Aeropath
- Air New Zealand
- Aircraft Owners and Pilots Association
- Aircraft Owners and Pilot association of New Zealand

- CAA, Aviation Safety Advisor South Island
- Canterbury Airspace User Group
- Canterbury Gliding Club
- Christchurch Helicopters
- Flying New Zealand
- Gliding New Zealand
- Model Flying New Zealand
- Mid-Canterbury Aero Club
- New Zealand Airline Academy
- New Zealand Aviation Academy
- New Zealand Aviation Federation
- New Zealand Airline Pilots Association
- New Zealand Agricultural Aviation Association
- New Zealand Helicopter Association
- New Zealand Hang Gliding and Paragliding Association
- New Zealand Defence Force
- New Zealand Army
- New Zealand Parachute Federation
- New Zealand Parachute Industry Association
- Recreational Aircraft Association of New Zealand
- Sports Aircraft Association of New Zealand
- Sports Aviation Corps
- South Canterbury Aero Club
- UAV New Zealand
- Jetstar
- Quantas
- Virgin Australia
- University of Canterbury (NZR902 Administering Authority)

# Aerodrome operators (charted aerodromes only)

- Ashburton Aerodrome
- Ashburton Medical Centre Heliport
- Christchurch International Airport
- Christchurch Hospital Heliport
- Fernside Fields Aerodrome
- Forest Fields Aerodrome
- Loburn Abbey
- Pudding Hill Aerodrome
- Rangiora Aerodrome
- Rakitata Island Aerodrome
- Springfield Aerodrome
- Timaru Aerodrome
- West Melton Aerodrome

Notification that this document will be posted online will be sent to CAA email notification subscribers to Airspace Notifications – Briefing Area 7, 8, and 9.

This document will be available on the CAA website at the following link: 2025 airspace reviews | aviation.govt.nz

#### **Submissions**

This document forms part of the consultation process. Submissions are sought from any interested person, organisation, or representative group.

Submissions are accepted either electronically or via mail, addressed to:

Team Coordinator Aviation Security and Infrastructure Civil Aviation Authority of New Zealand PO Box 3555

Wellington 6140 Email: <a href="mailto:aeronautical.services@caa.govt.nz">aeronautical.services@caa.govt.nz</a>

Reference: 2025-00295 Tāwhaki National Aerospace Centre – Special Use Airspace Proposal

Closing date for submissions in response to this Proposal is 18 April 2025

For questions regarding this application, in the first instance you may wish to contact:

Stan Topping Head of Aerospace Tãwhaki JV

Email: <a href="mailto:stan@tawhaki.co.nz">stan@tawhaki.co.nz</a>

For other enquiries contact:

Julia Fitness Technical Specialist - Aeronautical Services Unit Civil Aviation Authority of New Zealand P O Box 3555

Wellington 6140 Email: <u>Julia.fitness@caa.govt.nz</u>

**Appendix A** – Special Use Airspace Proposal, Enabling development flight operations at the Tãwhaki National Aerospace Centre

Version – A, dated 20 February 2025