2023 Hawkes Bay control areas amendments and Gisborne / Napier control zones amendments

Final airspace changes – Decision document

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Introduction

The provider of air traffic services (ATS) in New Zealand, Airways Corporation of New Zealand Ltd (Airways), has progressively introduced performance-based navigation (PBN) instrument flight procedures (IFPs) at aerodromes for which they provide control services. To facilitate PBN procedures at the Napier and Gisborne aerodromes a review of the Hawkes Bay and Gisborne airspace initially commenced in 2017, with submissions from users requested at that time. However, due to circumstances Airways then delayed full implementation of PBN procedures at these locations until November 2018. Accordingly, the initial '2017 East Coast airspace review – Gisborne and Hawke's Bay' was put on hold. Unfortunately, subsequent delays occurred and PBN procedures, including the proposed airspace changes required for these procedures, were once again planned for November 2023.

In 2022, to inform their latest airspace application for these changes, Airways held a further round of stakeholder consultation meetings at Gisborne and Napier airports; meetings were held on 14 and 15 November 2022 respectively. The purpose of the meetings was to again inform local users about the PBN implementation concepts which Airways had developed. The Airways Team also sought feedback on potential issues, hazards and risks, and presented an anticipated Airways PBN implementation timeline; the Airways presentation information covered during these consultation meetings can be viewed on the CAA website airspace review links. Following these consultation meetings Airways submitted their airspace change petitions to CAA which include requirements for the proposed PBN route structure, Standard Instrument Departures (SIDs) and Standard Arrival Routes (STARs). For ease of reference, Airways submitted two separate petitions requesting controlled airspace changes for the Hawke's Bay and Gisborne areas.

Airways New Zealand – Applications for Designated Airspace

For full details and background information of the Gisborne and Hawke's Bay airspace applications, refer to the following documents available online:

- CAA consultation document '2023 Gisborne and Hawke's Bay Performance Based Navigation Airspace Changes Public Consultation' published 5 December 2022 <u>Gisborne and</u> <u>Hawkes Bay PBN and Airspace changes - consultation Dec 2022 (aviation.govt.nz)</u>; and
- Airways' petitions <u>2023 airspace reviews | aviation.govt.nz</u>
 - Napier Airspace Amendment Version 5, dated 22 November 2022
 - Gisborne Airspace Amendment Version 4, dated 1 November 2022

The CAA public consultation documents were published on the CAA website and emailed to identified stakeholders on 5 December 2022 with submissions invited from interested or affected parties; submissions closed on 18 February 2023.

Controlled airspace

Controlled airspace is designated in portions of airspace where the Director has determined that an air traffic control service is required to be provided in accordance with the airspace classification – Classes A, B, C, D and E¹.

- A control zone (CTR) is controlled airspace extending upwards from the surface to a specified upper limit.
- A control area (CTA) is controlled airspace extending upwards from a specified lower limit above the earth.

The boundaries of controlled airspace are designed solely to protect IFR routes and procedures. At Auckland, Wellington and Christchurch international aerodromes, all promulgated instrument approaches must be contained within controlled airspace. At regional aerodromes such as Napier aerodrome airspace designs should also consider VFR flights operating in uncontrolled airspace close to a controlled aerodrome, so as not to impose unnecessary restrictions on the operations of VFR flights in these locations.

Controlled aerodromes are established where the Director determines an aerodrome control service is required. An aerodrome control service is an air traffic control (ATC) service for all aerodrome traffic.

Rule 71.55 allows the Director to designate a control zone around an aerodrome if an aerodrome control service or an aerodrome and approach control service is required, where the traffic density and pattern requires controlled airspace. Primarily this is done where the number of regular passenger transport operations takes place over service level thresholds.

Rule 71.55(b) requires the CTR to be as small as practicable to protect the flight paths of IFR flights arriving at and departing from the aerodrome.

Additionally, the lateral limits of a CTR must -

- Encompass the paths of IFR aircraft arriving and departing under IMC
- Extend at least 5 NM from the centre of the aerodrome, in the direction from which instrument approaches may be made
- Take into account the category of IFR aircraft using the aerodrome.

CTRs are not designed to protect VFR flight paths and procedures. IFR aircraft conducting a visual approach are not flying an instrument procedure and pilots are responsible for their own containment within controlled airspace.

The Director has determined that approach control services are required for aircraft arriving at and departing from Napier and Gisborne aerodromes. An approach control procedural service is provided by aerodrome ATS staff within controlled airspace in the vicinity of Napier and Gisborne aerodromes.

¹ CAR 71.51(a), ICAO Annex 11, Doc 4444

The CTR and CTA airspace in the vicinity of Napier and Gisborne aerodromes are Class D airspace. Within Class D airspace, the air traffic service provided to IFR and VFR aircraft is shown in Table 1 below:

Type of flight	Separation provided	Service provided	ATC clearance required
IFR	IFR from IFR IFR from Special VFR	Air traffic control service traffic information provided about VFR flights (and traffic avoidance advice on request)	Yes
VFR		Air traffic control service VFR/VFR traffic information VFR/IFR traffic information (and traffic avoidance advice to IFR and VFR on request)	Yes
Special VFR	Special VFR from special VFR when flight visibility less than 5000 m	Air traffic control service, traffic information between special VFR flights when flight visibility greater than 5000 m (and traffic avoidance advice on request)	Yes

Table 1 – air traffic service provision in Class D airspace

Overview of Submissions Received

No submissions were received regarding the proposed Gisborne airspace changes.

Three submissions were received regarding the proposed Napier airspace changes and expressed similar views, including the following thematic concerns:

- The proposed airspace changes to the south of Napier negatively impacting Hastings aerodrome area traffic.
- The probable impact for access through Napier controlled airspace for VFR and IFR traffic from Hastings aerodrome.
- Increasing airspace complexity for VFR users with poorly located/visually defined CTA boundaries.
- Changes to Napier controlled airspace and the impact on the Hastings CFZ.

CAA Aeronautical Services Unit staff, CAA Aviation Safety Advisors and CAA Flight Examiner/Flight Standards Part 91 staffs reviewed the 3 detailed submissions and in February 2023 concluded, given

the concerns expressed regarding the reduction in the lower level of controlled airspace around Hastings aerodrome, that the complex airspace design in the vicinity of Hastings aerodrome could not proceed in its proposed form. Therefore, on 24 February 2023 CAA requested the Airways PBN design team engage again with stakeholders, specifically the Hawkes Bay and East Coast Aero Club (HBECAC) and Air New Zealand, to re-consider the Napier IFP procedures and airspace design options in the Hastings aerodrome area.

CAA comment:

The main concerns raised were around striking a balance between airspace containment for the instrument flight procedures at Napier and releasing controlled airspace overhead Hastings aerodrome. As per 71.55 (b) the CTR must encompass the paths of IFR flights arriving and departing in IMC. CAA notes that although there is internal CAA guidance on the geometries of airspace containment of instrument flight procedures, this is only one mechanism of compliance. Further, airspace containment of IFP within CTA's must be considered at regional aerodromes in New Zealand where appropriate, in coordination with CAA, all other airspace stakeholders and the level air traffic service provided, to ensure appropriate safety margins.

CAA also notes that a number of existing IFP are currently not contained within controlled airspace at Napier, and any change to ensure containment will provide a larger area of CTA's whilst providing safety benefits to regular passenger transport aircraft.

The complex nature of the south Napier CTR and associated CTAs in Airways proposal was acknowledged, with further refinement of these areas possible to ensure safe operations at Hastings aerodrome, whilst ensuring the majority of instrument flight procedures are still contained within controlled airspace.

Airway New Zealand – Addendum to Napier Airspace Version 5 Submission.

In March 2023 Airways New Zealand ATS and Procedure Design staff collaborated with HBECAC and Air New Zealand staffs to identify other airspace design options which would be acceptable to wider stakeholders; whereby any airspace changes in the vicinity of Hastings aerodrome would not unduly impact Hastings and their associated flight training activities whilst retaining airspace containment of IFP at Napier aerodrome. On 14 March 2023 Airways provided an Addendum to the Napier Airspace Amendment Version 5 (dated 22 November 2022) application which they emailed to submission stakeholders for their further consultation. The Addendum was subsequently published on the CAA website on 17 April for wider awareness of the ongoing application change, available at link:

Hawke's Bay Airspace Review - Airways Submission Background (aviation.govt.nz)

The main changes were the rationalisation of airspace to the south of Napier aerodrome, incorporating a 2000 ft and 2500 ft CTAand extending the Napier CTR slightly to the south to ensure airspace containment. This is shown in the figure below:



The HBECAC, Air New Zealand and Airways New Zealand all agreed the amendments proposed in the Addendum were acceptable and the airspace application changes were subsequently accepted by CAA on 10 May 2023.

Concurrent airspace changes

CAA received a request for a restricted area north of Gisborne, for a 'Vortex Power Systems' technology. This proposal, CAA work request 22/ASD/37, was consulted on separately to the Gisborne controlled airspace changes; the assessment of this airspace and effect on airspace users considers the final airspace changes at Gisborne aerodrome from November 2023 and associated IFP.

https://aviation.govt.nz/assets/airspace-and-aerodromes/airspace-reviews/22-ASD-37-Proposed-Gisborne-restricted-area-airspace-user-consultation.pdf

Further information on this airspace proposal will be updated on the CAA website as this request progresses.

Final Airspace Changes

Gisborne and Napier – Controlled airspace amendments Effective: 30 NOV 23

The following amendments are prescribed to facilitate the safety of air navigation as a result of the 2023 Gisborne and Hawkes Bay airspace review.

<u>Gisborne</u>

Gisborne control zone CTR/D (NZA450) is disestablished. New Gisborne control zone CTR/D (NZA455) is designated as follows:

NZA 455 Gisborne CTR/D

transponder mandatory.

Upper limit:	2500 ft AMSL.
Lower limit:	Surface.
ATC unit:	Gisborne Tower.

The following Gisborne control areas (CTA/D) are disestablished:

Airspace	Code
Gisborne CTA/D, 3500 ft – 9500 ft	NZA430
Gisborne CTA/D, 5500 ft – 9500 ft	NZA431
Gisborne CTA/D, 6500 ft – 5500 ft	NZA432

New Gisborne control areas (CTA/D) are designated as follows:

NZA 444 Gisborne CTA/D

(transponder mandatory).

Upper limit:	3500 ft AMSL.
Lower limit:	2500 ft AMSL.
ATC unit:	Gisborne Tower.

Gisborne CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	3500 ft AMSL.
ATC unit:	Gisborne Tower.

NZA 445

NZA 446 Gisborne CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	4500 ft AMSL.
ATC unit:	Gisborne Tower.

NZA 447 Gisborne CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	6500 ft AMSL.
ATC unit:	Gisborne Tower.

Napier

Napier control zone CTR/D (NZA456) including Hill Sector (NZA456_A), Instrument Sector (NZA456_B) and Port Sector (NZA456_C) are disestablished.

Airways New Zealand did not include a revised Napier Instrument Sector in their airspace petition and therefore no Instrument Sector at Napier will be published on the November 2023 VNC.

New Napier control zone CTR/D (NZA457) is designated as follows:

NZA 457 Napier

(transponder	
mandatory	
Upper limit:	2500 ft AMSL.
Lower limit:	Surface.
ATC unit:	Napier Tower.

The following Napier control areas (CTA/D) are disestablished:

Airspace	Code
Napier CTA/D, 2500 ft – 9500 ft	NZA440
Napier CTA/D, 3000 ft – 9500 ft	NZA441
Napier CTA/D, 4500 ft – 9500 ft	NZA442
Napier CTA/D, 6500 ft – 9500 ft	NZA443

Napier CTA/D, 3500 ft – 9500 ft	NZA540
Napier CTA/D, 6500 ft – 9500 ft	NZA541

New Napier control areas (CTA/D) are designated as follows:

NZA 458 Napier CTA/D

(transponder mandatory).

Upper limit:	2500 ft AMSL.
Lower limit:	1500 ft AMSL.
ATC unit:	Napier Tower.

NZA 459 Napier CTA/D

(transponder mandatory).

Upper limit:	2500 ft AMSL.
Lower limit:	2000 ft AMSL.
ATC unit:	Napier Tower.

NZA 452 Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	2500 ft AMSL.
ATC unit:	Napier Tower.

NZA 453 Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	3500 ft AMSL.
ATC unit:	Napier Tower.

NZA 533

Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	4500 ft AMSL.
ATC unit:	Napier Tower.

NZA 454

Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	4500 ft AMSL.
ATC unit:	Napier Tower.

NZA 531 Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	5500 ft AMSL.
ATC unit:	Napier Tower.

NZA 437 Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	5500 ft AMSL.
ATC unit:	Napier Tower.

NZA 532 Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	6500 ft AMSL.
ATC unit:	Napier Tower.

NZA 438 Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	6500 ft AMSL.
ATC unit:	Napier Tower.

NZA 449

Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	7500 ft AMSL.
ATC unit:	Napier Tower.

NZA 433

Napier CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	8500 ft AMSL.
ATC unit:	Napier Tower.

The following Ohakea control area (CTA/C) is amended:

Airspace	Code
Ohakea CTA/C, 9500ft – FL600	NZA347

The following Bay control areas (CTA/C and CTA/D) are disestablished:

Airspace	Code
Bay CTA/C, 13500 ft – FL600	NZA435
Bay CTA/C, 9500 ft – FL600	NZA436
Bay CTA/D, 6500 ft – 9500 ft	NZA439

New Bay control areas (CTA/C and CTA/D) are designated as follows:

NZA 469 Bay CTA/C

(transponder mandatory).

Upper limit:	FL600
Lower limit:	13500 ft AMSL.
ATC unit:	Bay Approach 119.5MHz.

NZA 465 Bay CTA/C

(transponder mandatory).

Upper limit:	FL600.
Lower limit:	9500 ft AMSL.
ATC unit:	Bay Approach 119.5MHz.

NZA 467 Bay CTA/D

(transponder mandatory).

Upper limit:	9500 ft AMSL.
Lower limit:	6500 ft AMSL.
ATC unit:	Bay Approach 119.5MHz.

Prescribed pursuant to Civil Aviation Rules, Part 71 *Designation and Classification of Airspace*, under a delegated authority issued by the Director of Civil Aviation.