MELBOURNE AIRPORT NEW THIRD RUNWAY

Industry Engagement

Proposed Controlled Airspace Changes

General Aviation

November 2025

Contents

Background

With the introduction of Melbourne's new third runway, some changes may be required to controlled airspace to contain updated departure, arrival and or approach procedures.

Scope

This engagement will focus on consultation with general aviation (GA) operators throughout the Melbourne Basin to inform the proposed changes to controlled airspace. The scope includes:

Stakeholder Engagement: Identify and engage with GA operators, flying schools, charter companies, and recreational aviation groups operating within or adjacent to the Melbourne Basin.

Operational Understanding: Gather detailed information on current flight operations, typical routes, training patterns, altitude profiles, and operational constraints specific to each operator.

Airspace Change Consultation: Present and discuss proposed changes to controlled airspace classifications, dimensions, and vertical limits, including any areas of reduced controlled airspace.

Impact Assessment: Analyse the operational and safety implications of lowered controlled airspace levels, particularly in areas where terrain or obstacle clearance may constrain VFR operations.

Feedback Integration: Document stakeholder concerns, identify potential risks, and integrate operational feedback into the airspace design process to ensure safe and practical outcomes for GA users.

This scope ensures the proposed airspace changes are informed by real-world GA operational needs and reflect the unique geographical and regulatory considerations of the Melbourne Basin.

Wider Melbourne basin AVSEF information on Melbourne runway operating modes and Noise Sharing Plan principles:

https://www.avsef.gov.au/consultations/melbourne-airport-noise-sharing-plan-proposed-airspace-flight-path-changes

Airspace

The proposed airspace changes are required to safely contain the new approach and departure procedures designed for independent parallel runway operations at Melbourne's new third runway. As part of this work, sectorisation and lower limits within the Melbourne Terminal Area are being reviewed to ensure they remain appropriate for the updated operating environment.

Any amendments will be driven by the need to provide compliant containment, reduce design complexity and ensure controller workload is managed effectively, while continuing to support the needs of the general aviation flying community.

While the overall structure of Melbourne's controlled airspace is expected to remain largely unchanged, two areas north and south of the airport may require targeted refinements to support safe integration of new parallel runway operations with existing traffic flows.

These refinements are anticipated to be limited in scope and subject to further technical assessment. They include increasing the size of the 2,500-ft and 3,500-ft Class C steps, particularly over Port Phillip Bay and in the northern corridor between Romsey and Kilmore, to ensure adequate protection of the new Runway 16/34 independent parallel operations in accordance with ICAO requirements.

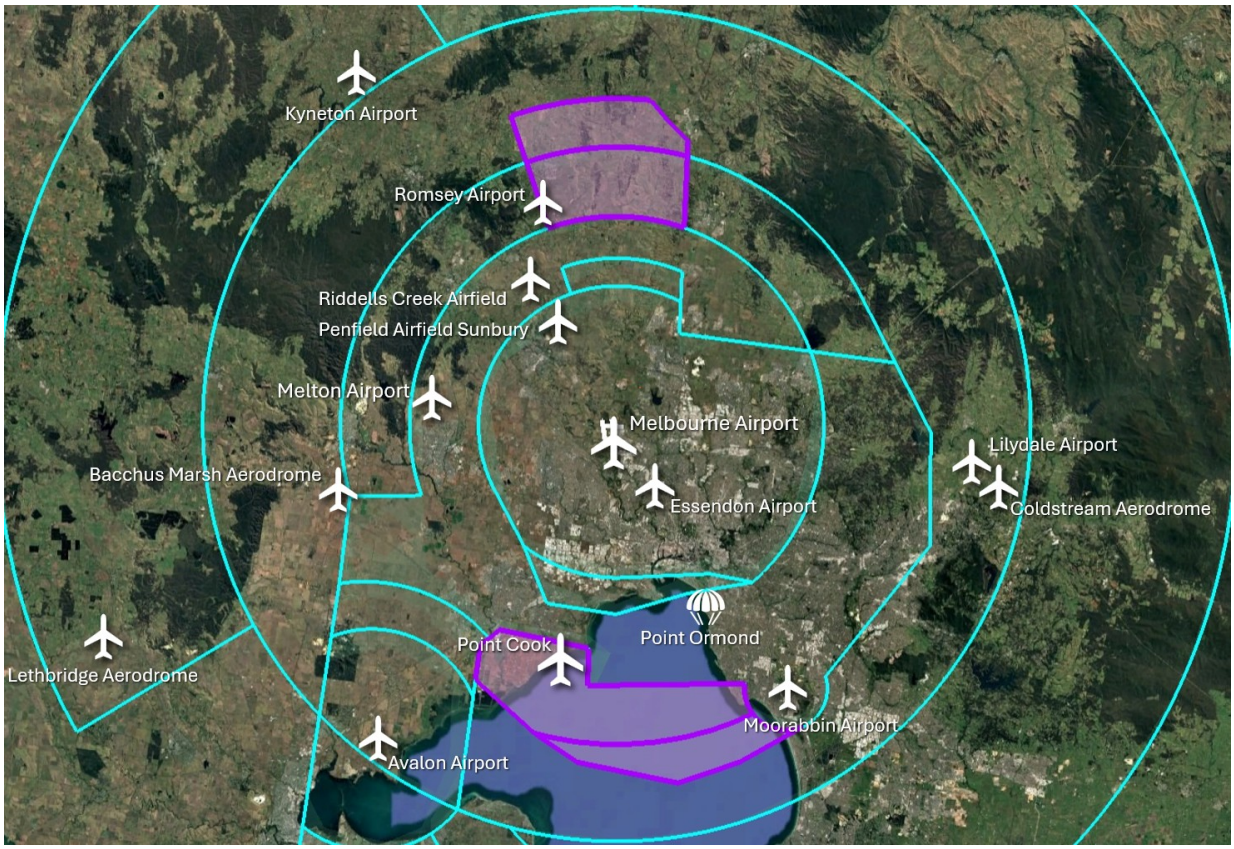

Figure 2 Existing airspace (Blue) and potential airspace changes (Purple)

Airspace to the North

The airspace to the north of Melbourne Airport was originally designed to accommodate arrivals onto single runway 16. With the inclusion of Independent Parallel Runway Operations (IPRO) as part of the M3R system, the existing northern airspace structure does not provide sufficient containment for the STARs and instrument approach procedures. Adjustments to the northern airspace will therefore be required to ensure compliance with separation standards and to support the safe and efficient management of parallel runway arrivals.

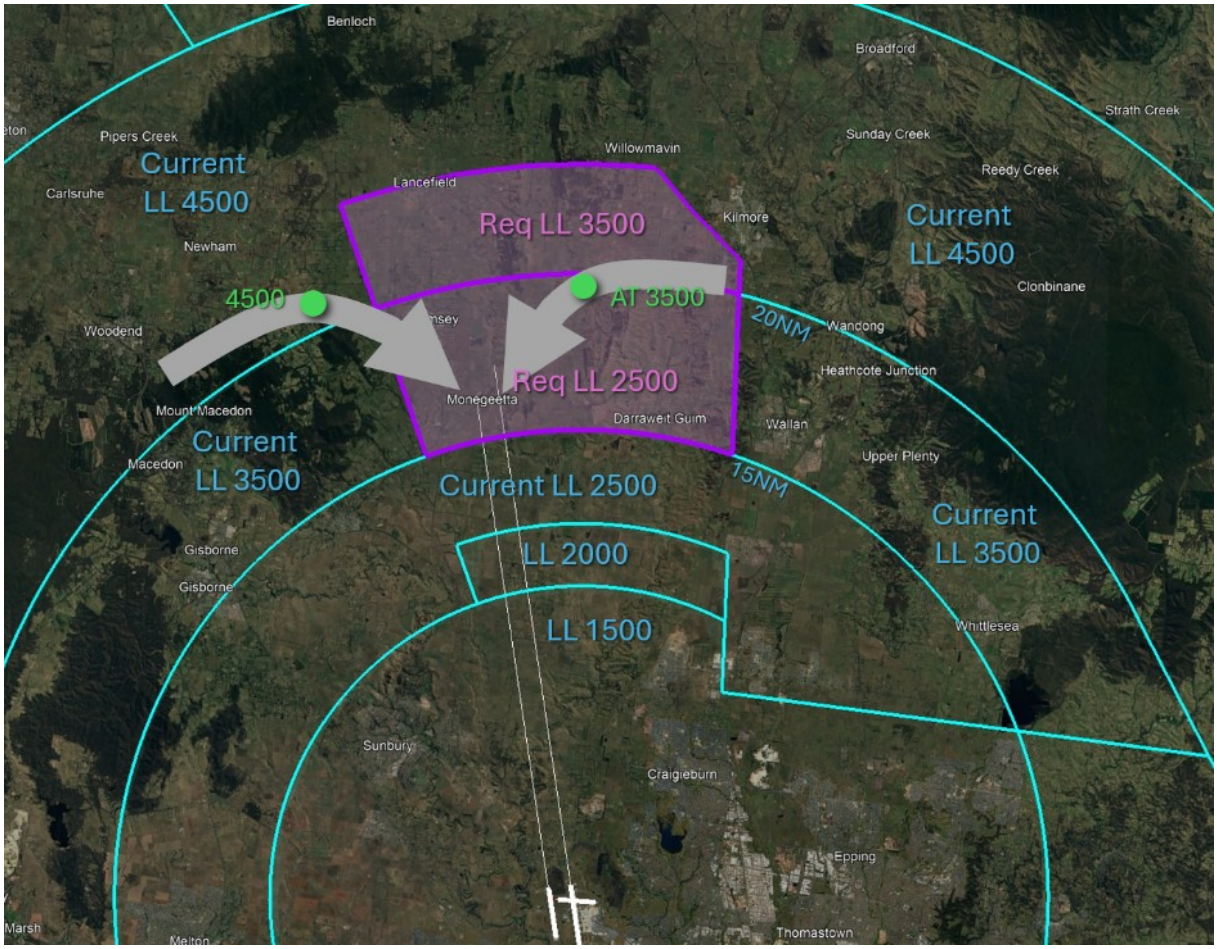

Figure 3 showing current and required step changes to the north with indicative aircraft altitudes on 16R and 16L independent parallel arrivals.

Figure 4, below, shows a representative subset of 2024 Essendon and Moorabbin aircraft tracking under the controlled airspace steps to the east of Melbourne. This inland route, which runs between Sugarloaf Reservoir and Kilmore, is one of the primary VFR corridors linking the Melbourne Basin with northern Victoria and is frequently used by both northbound and southbound traffic.

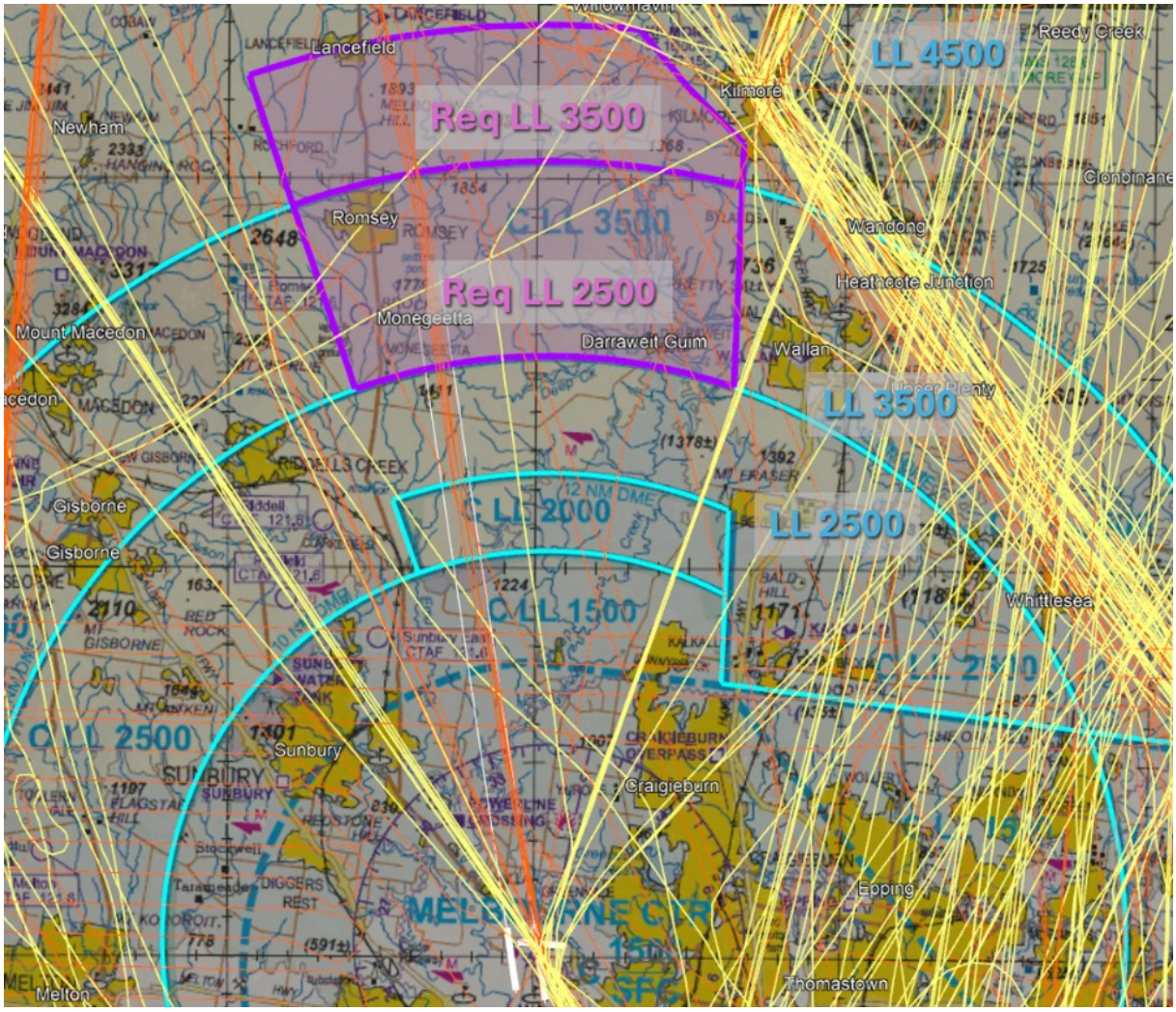

Figure 4 Essendon and Moorabbin 2024 radar tracks

The current LL of Class C airspace is 3500ft for the majority of the VFR route, this would be reduced to LL 2500 to the west of Wallan for aircraft heading northwest. This is followed by a LL reduction to 3500 west of Kilmore as shown above.

The northeast corner of the LL 3500FT has been designed to protect current VFR traffic Outside Controlled Airspace (OCTA) via Kilmore to maintain 4500FT.

Terrain analysis to the north.

A key consideration of the proposed airspace to the north of Melbourne Airport is the terrain in the area required for containment of parallel runway approaches onto RWY 16L and 16R into Melbourne.

Figure 5, below, shows areas in red that will no longer have 1000FT of vertical buffer to the base of controlled airspace. Currently there is a section over Mount Macedon and Cherokee in the 3500FT sector between 15-20NM Melbourne.

Within the proposed 2,500 FT area, sections of Romsey, Springfield and Monegeetta would not maintain 1000 FT vertical separation from the base of controlled airspace.

Feedback received from operators that currently use this airspace will ensure future design iterations ensure ongoing safe operation following the changes being implemented with Melbourne's new third runway.

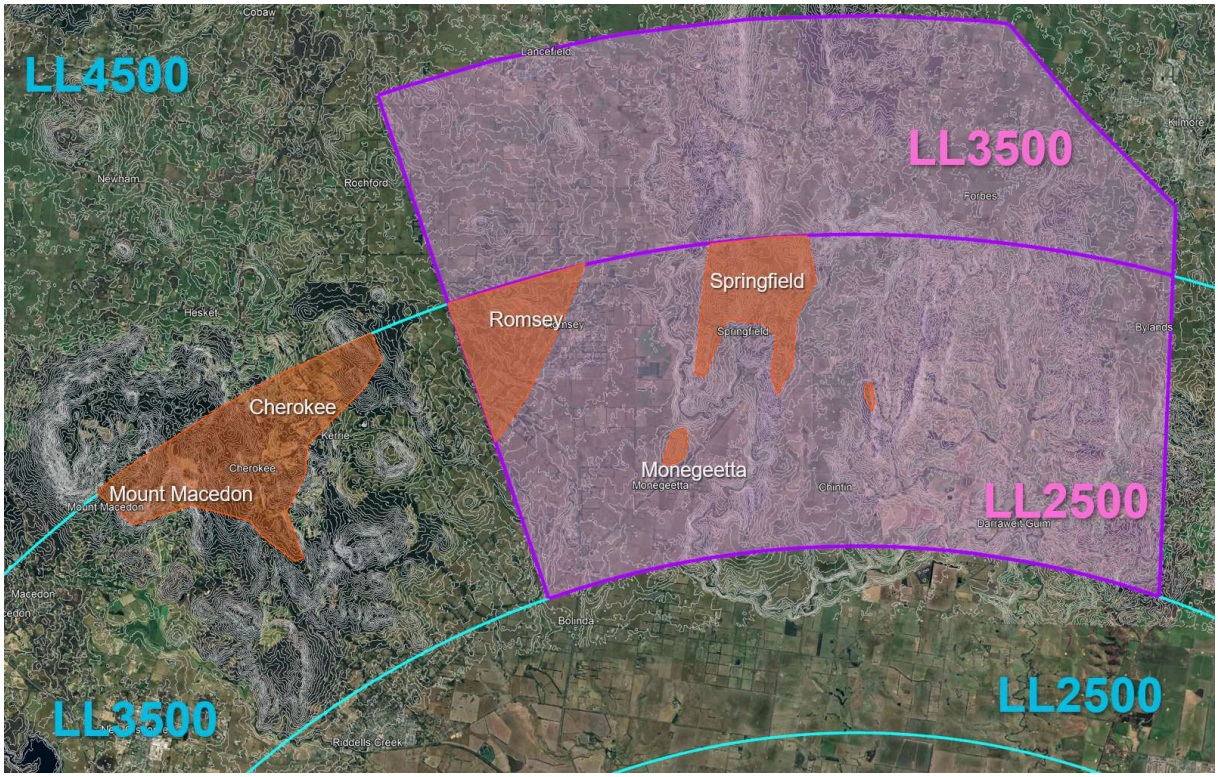

Figure 5 Northern Terrain Analysis

Airspace to the South

The airspace to the south of Melbourne Airport was originally designed to accommodate arrivals onto single Runway 34. With the inclusion of IPRO as part of the M3R system, the existing southern airspace structure does not provide adequate containment for the STARs and instrument approach procedures. Adjustments to the southern airspace will therefore be required to ensure compliance with separation standards and to support the safe and efficient management of parallel runway arrivals.

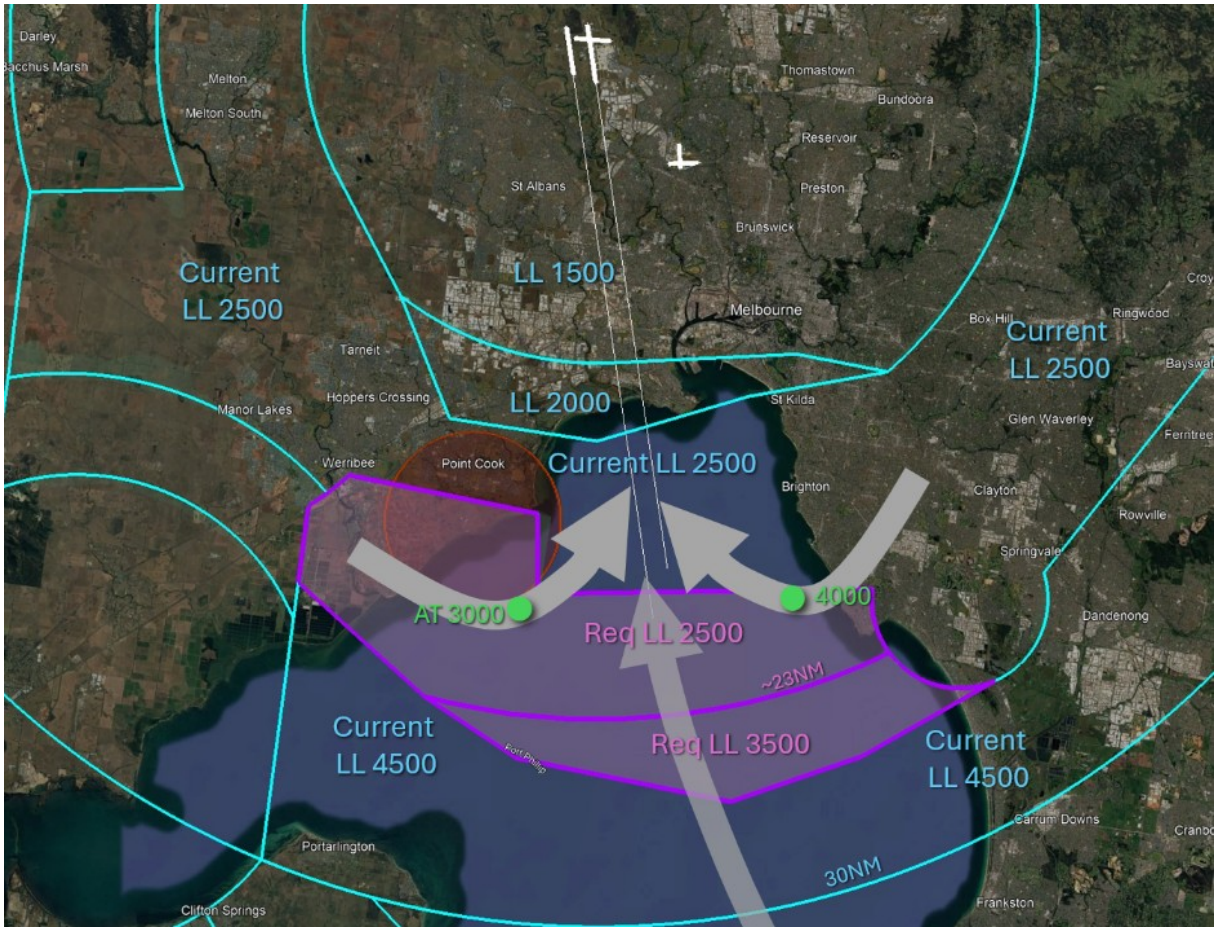

Figure 6 showing current and required step changes to the south with indicative aircraft altitudes on 34R and 34L independent parallel arrivals.

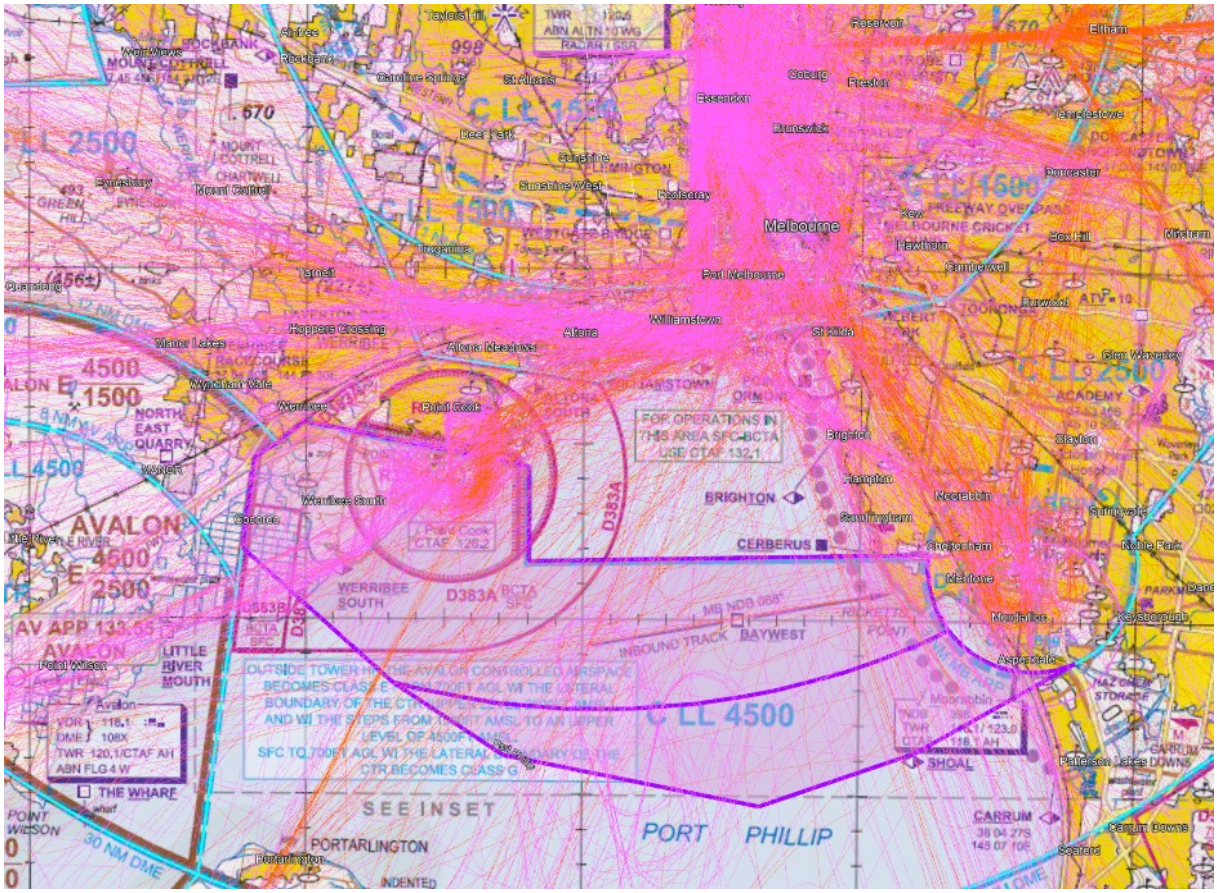

Figure 7 Historic aircraft tracks in Port Phillip Bay using the published VFR route with proposed airspace in purple.

The current established VFR tracking patterns around the coastline of Port Phillip Bay as shown by the historic orange and pink tracks in the image above, has consistent flows of recreational and training flights using this route. These operations are not expected be affected by the proposed changes, as the existing airspace steps remain unchanged, and the published VFR routes on the VTC will continue to be available without modification. There is a similar situation to the west of point cook airspace, where aircraft are seen to be tracking at or below 2500FT during the short transit to Avalon.

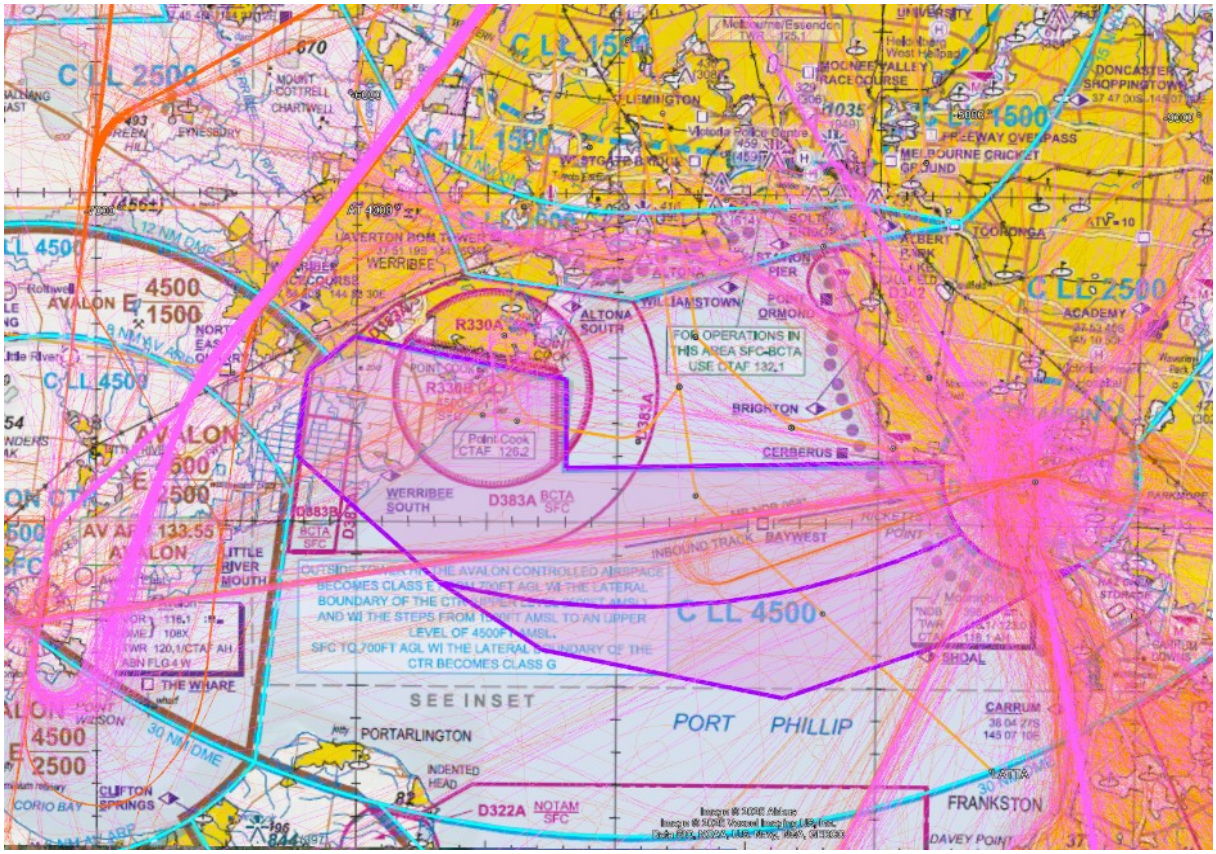

Figure 8 Historic aircraft tracks showing Avalon to Moorabbin flights through proposed airspace in purple.

Radar analysis from 2024 indicates that some VFR flights operate directly between Avalon (YMAV) and Moorabbin (YMMB), typically at altitudes between 1,500 and 4,000 feet AMSL. In future, to avoid entering the altered controlled airspace, these flights would need to remain at or below 2,500 feet AMSL.

Proposed amendments to controlled airspace in the vicinity of Moorabbin Airport (YMMB) would require a corresponding adjustment to the initial altitude of the NDB-A arrival procedure. This would be managed through a subdivision of the Minimum Sector Altitude (MSA), ensuring that instrument traffic remains vertically contained while allowing VFR operations to continue to transit outside controlled airspace.

Any adjustments to the NDB-A procedure would be designed to minimise disruption to this traffic, with refinements clarifying vertical containment and reducing the risk of interaction between VFR routes.

As part of this engagement process, it is important to confirm the current and anticipated future usage of the NDB procedure at Moorabbin. If the NDB remains in active use by operators or training schools, this should be reflected in the feedback provided, as it will directly inform the future design.

VFR Route Feedback Invitation

Pilots and operators are invited to provide detailed feedback on the VFR routes currently used in the northern parts of the Melbourne Basin, particularly corridors between Mount Macedon and Kilmore. This includes both established and informal routes used for transiting, training, access to local aerodromes, or navigating around terrain and airspace constraints. The purpose of this activity is to:

- Identify Common Practices: Capture informal and experience-based VFR routes that GA pilots regularly use today, including preferred tracking points, altitudes and geographical references.
- Understand Operational Drivers: Document the factors that influence route selection such as terrain, airspace step structures, local weather patterns, training areas and access to local aerodromes.
- Assess Opportunities for Standardisation: Evaluate whether commonly flown routes could potentially be formalised and published on VTC/VNC charts or incorporated into future airspace design to improve clarity, predictability and safety.
- Support Safe Integration: Ensure any potential VFR pathways minimise interactions with IFR flows, controlled airspace boundaries, terrain constraints, and restricted areas.

VFR Route locations

Current assessed VFR tracks are shown below:

1. The Inland VFR route between Sugarloaf Reservoir and Kilmore (red), and
2. The 'Ice-route' between Mangalore and Moorabbin (orange).
3. VFR tracking in Port Phillip Bay (purple)

All yellow dots represent common known tracking through or around the proposed CTA step changes to the north of Melbourne, the area of interest in this AVSEF.

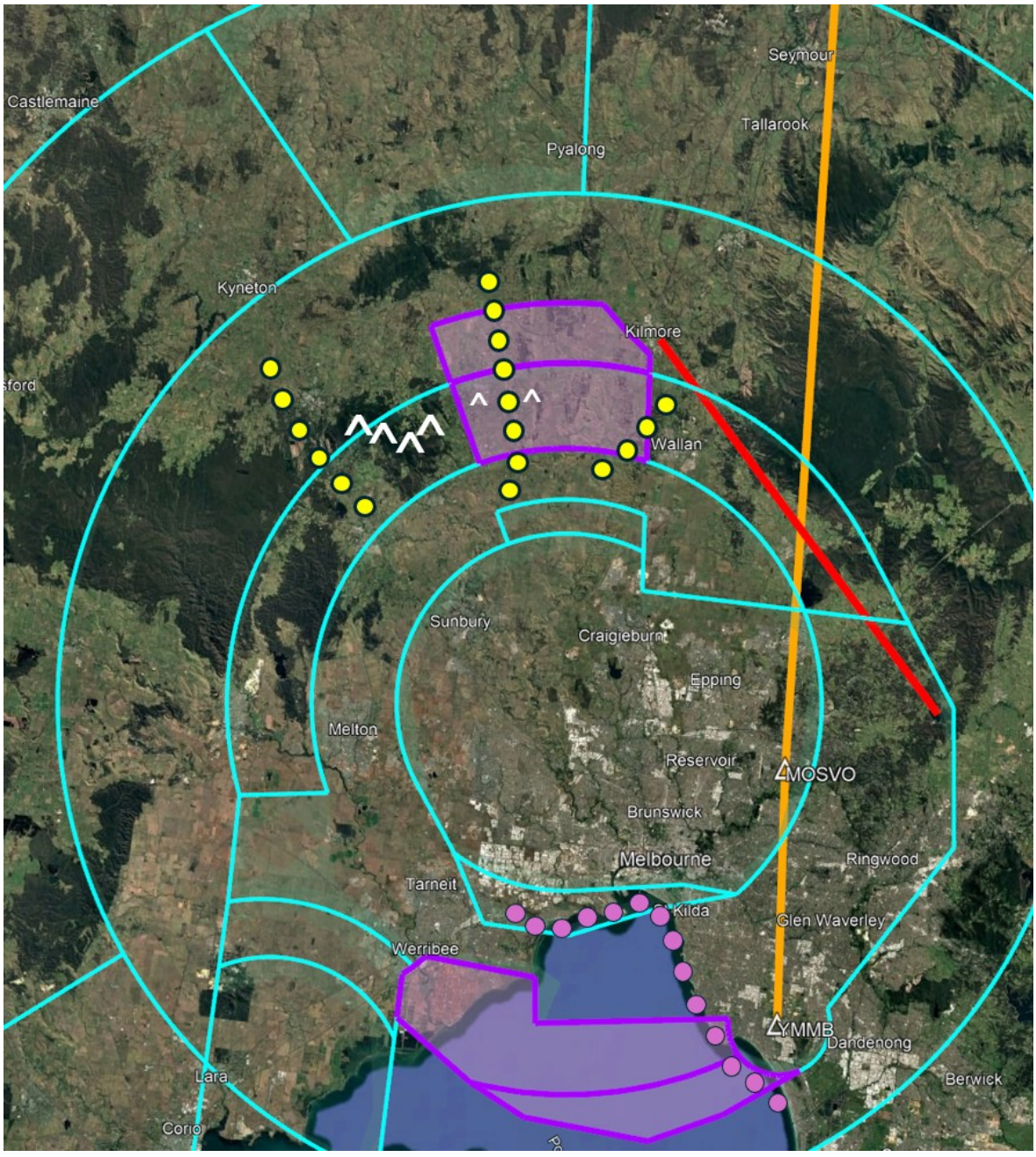

Figure 9 VFR Routes

Point Cook

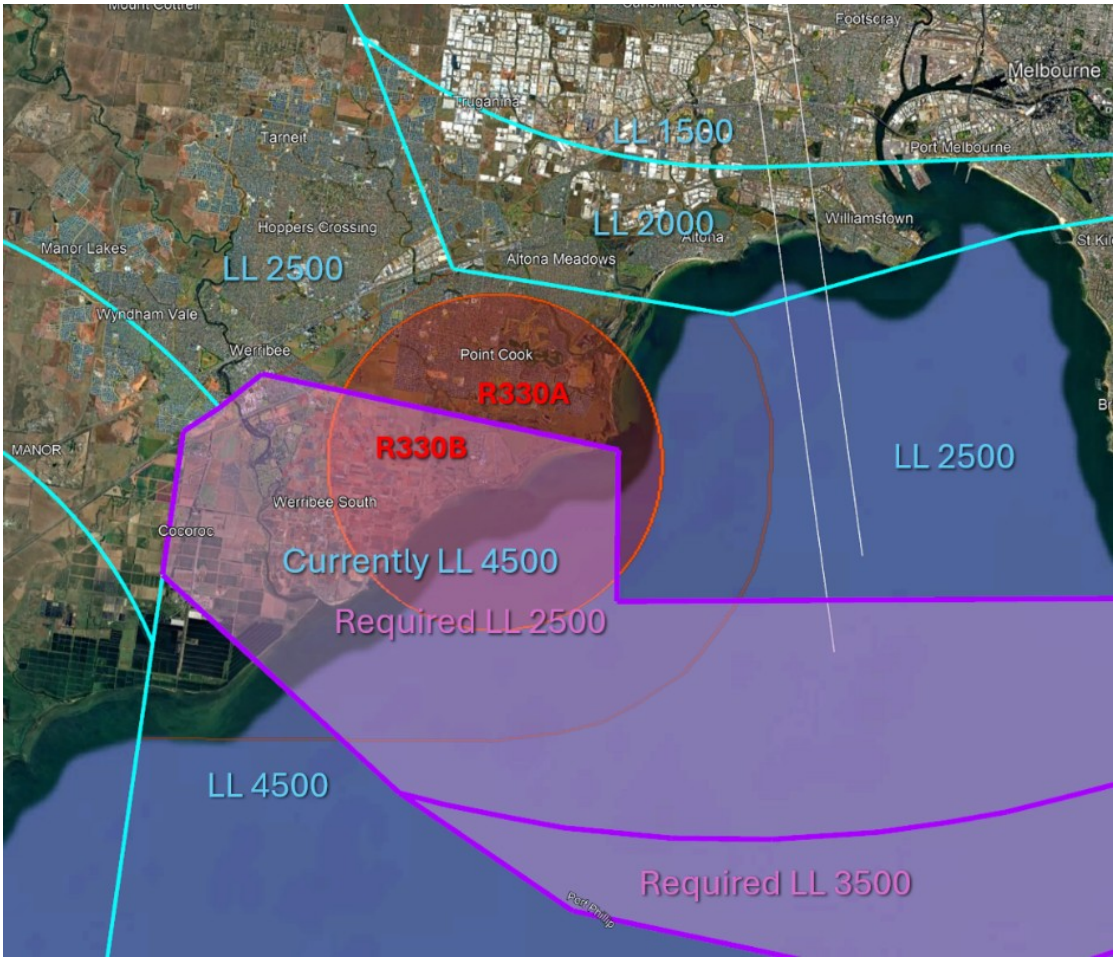

Figure 10 Point Cook Restricted Airspace

The Point Cook area is associated with restricted airspace R330A (SFC-2500) and R330B (SFC-4500), which overlay the aerodrome within a 3 NM radius of the aerodrome reference point. These restricted areas extend from the surface to the base of controlled airspace and are activated by NOTAM to support military flying activities and special events such as flying displays. Point Cook is also encircled by Danger Area D383A/B, which extends from the surface (SFC) up to the base of the control area (CTA) and is typically active during daylight hours, or as modified by NOTAM.

When R330A is inactive, VFR transit is available at 2,500 ft AMSL within 3 NM of Point Cook, or alternatively by remaining outside the 3 NM boundary, subject to weather conditions.

Proposed changes to accommodate Melbourne Airport's new third runway and associated independent parallel runway operations would see the controlled airspace above R330B lowered to LL 2500FT.

Mixed Mode operations on Runway 34 require the introduction of additional controlled airspace. Further feedback and design iterations are needed to clarify how Point Cook operations can be accommodated within the lowered CTA Class C airspace when other runway modes are in use.

Avalon

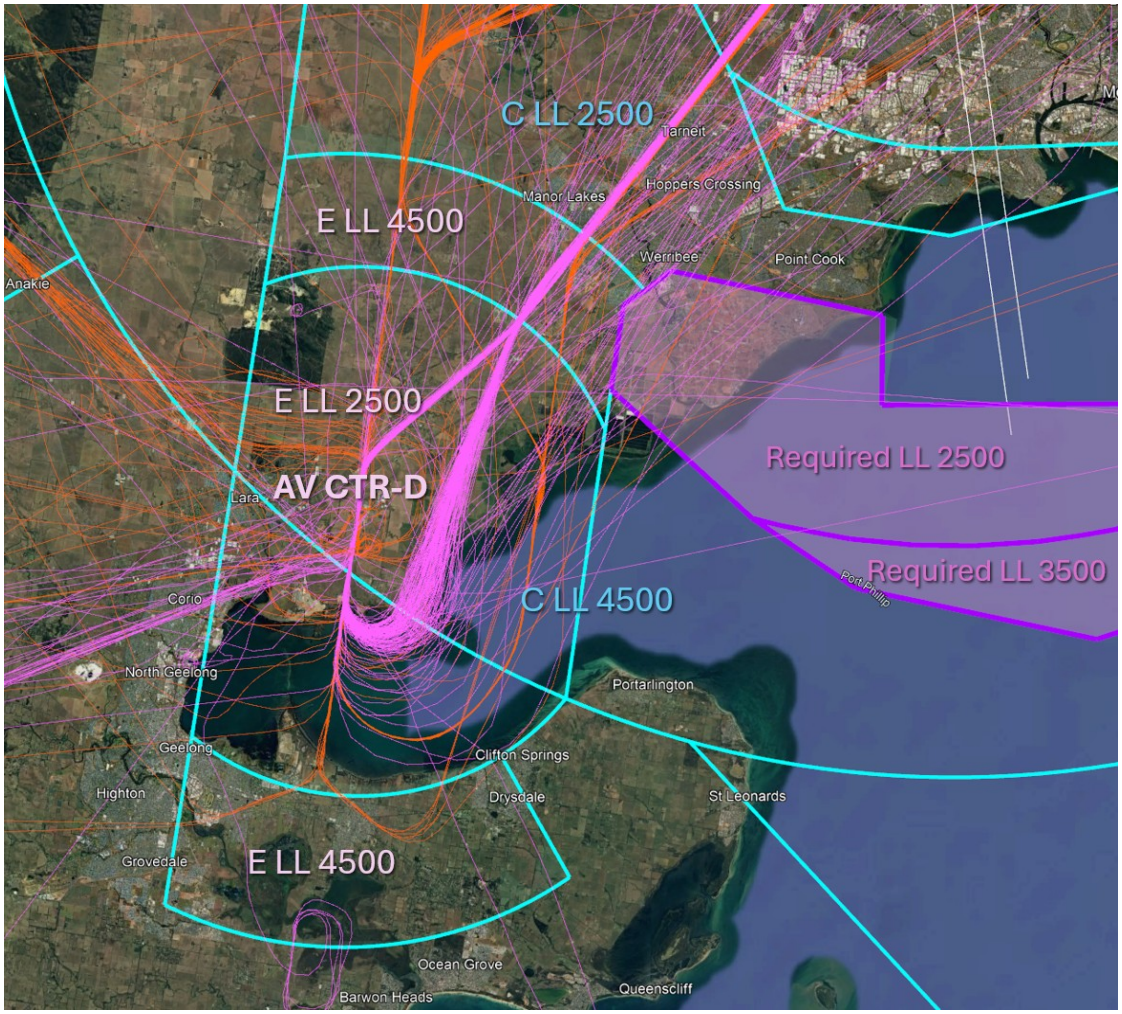

Figure 11 Avalon traffic – Orange arrivals and magenta departures.

Operations into Avalon are often complementary with Melbourne's mode due to the similar direction of the main runways.

The potential extended 2500 and 3500FT airspace change east of Avalon is not expected to impact Avalon operations, the vast majority of flights using Avalon operate in controlled airspace. Traffic management for RWY 36 at Avalon during Mixed Mode RWY 34 at Melbourne has been considered and will form part of future iterations of the design.

For general aviation activities operating out of Avalon, a reduction in the base of controlled to may affect flights transiting across the bay to Moorabbin as noted in Figure 8, however northeast flights along the coastline were assessed as operating at or below 2500FT currently.

Summary

This AVSEF engagement for Melbourne's new third runway will examine the implications of proposed controlled airspace changes on Training operators, General and Sports aviation operations.

This process aims to document existing GA activity within impacted areas and to collect operational feedback to inform the airspace design. Submissions are invited until **12 December 2025** and can be sent to **engagement@ghd.com**

Full information on Melbourne Airport's new third runway project, the associated noise sharing plan, and all engagement information can be found here:

Melbourne Airport – Major Projects Hub – Noise Sharing Plan – Aviation Industry Engagement