

AVIATION STATE ENGAGEMENT FORUM

Queensland

Submission date: 27/04/2022

TITLE	Mackay – Class D LL 1500 CTA Step to West
SUBMITTED BY	Nigel Morgan – Airservices: fpd@airservicesaustralia.com
CONSULTATION SUMMARY	The proposal is for a new Class D CTA step with a lower limit of 1500ft between 6-11 DME to the west of Mackay. Due to surveillance approach being introduced at Mackay, ATC require additional airspace to ensure CTA containment of high-performance aircraft departing via an initial westerly heading
KEY ISSUES	<ul style="list-style-type: none">• Equitable access to Class G airspace west of Mackay for VFR aircraft• CTA containment for RADAR SID departures on an initial westerly heading
FEEDBACK TO	Member to whom responses will be sent Flight Path Design - Airservices: fpd@airservicesaustralia.com
CLOSE DATE	19 May 2022
ATTACHMENTS	Not Applicable

OVERVIEW

Currently, the RADAR SID at Mackay is only used for the out of tower hours surveillance approach service. The RADAR SID is not available during tower hours due to the non-surveillance approach service provision. The RADAR SID will become available during tower hours with the introduction of surveillance approach services on 16 June 2022.

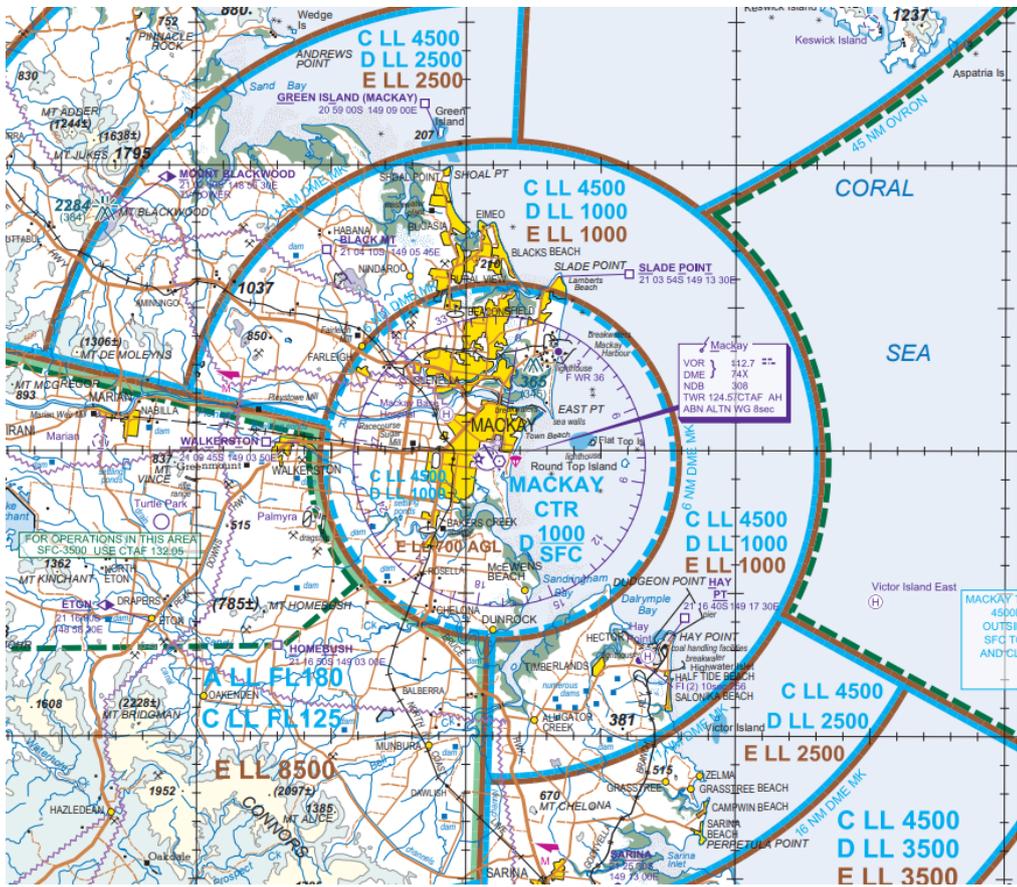
Due to the change in air traffic control procedures, particularly in IMC, aircraft departing on the RADAR SID will be under ATC navigation/vectors for the initial phase of the departure. Given the current airspace architecture to the west of Mackay is Class G between SFC-8500ft outside 6 DME MK, ATC have insufficient airspace to ensure CTA containment (of departures with an initial westerly heading).

PROPOSAL

Airservices propose to implement (eff. 1 December 2022) a Class D CTA step between 6-11 DME MK with a lower limit of 1500ft, transitioning to Class above 4500. A summary of considerations and justification regarding the choice of this level includes:

- The current Class D LL 1000ft step between 6-11DME MK to be extended completely around MK CTR. However, due to the average terrain height to the west (approximately 500ft), a lower limit of 1000ft would provide insufficient Class G airspace for VFR aircraft remaining west of MK CTR.
- A Class D LL 2500ft step between 6-11 DME MK to the west. This option was ruled out due to the significant impact on the gradient of the RADAR SID. Departures would be required to reach 3000ft by 6 DME MK.
- A Class D LL 2000ft step between 6-11 DME MK to the west. While this option gives VFR aircraft 500ft of extra Class G airspace compared to the option of 1500ft lower limit, the impact on the gradient of the RADAR SID for CTA containment assurance is significant. According to IFP design criteria, CTA containment requires an IFR aircraft to be 1000ft above the lower limit of an airspace if the lower limit is an IFR level. Therefore, like the option above, departures would also be required to reach 3000ft by 6 DME MK.
- Options above 2500ft have been disregarded due to causing the RADAR SID gradient to be too steep.

Current Mackay Airspace



Proposed Mackay Airspace

