

Rural and Regional Affairs and Transport

QUESTION ON NOTICE

Additional Estimates 2023 - 2024

Infrastructure, Transport, Regional Development, Communications and the Arts

Committee Question Number: 44

Departmental Question Number: SQ24-000044

Division/Agency Name: Agency - Airservices Australia

Hansard Reference: Spoken, Page No. 73 (12 February 2024)

Topic: Airservices - SID Height Markers

Senator Janet Rice asked:

Senator RICE: You say that it's available, but could you take on notice getting the analysis of how much higher the planes actually were over particular communities?

Mr Curran: Yes. We can provide the quarterly reports that we've published as well as the full-length departure noise benefit trial from Perth from 2012.

Answer:

The noise improvement trial was recommended by the previously established Brisbane Airport Post Implementation Review Advisory Forum (BAPAF) based on community feedback it had received. The aim of the trial was to restrict the use of intersection departures off the new runway over the city. It did not extend to changing aircraft climb gradients or height requirements at particular locations.

The trial was undertaken on the basis that aircraft using the full length of the runway would gain altitude more quickly with the additional runway length compared with using a shorter departure from an intersection of the runway. The community requested this trial through BAPAF in the belief that intersection departures were creating more noise as aircraft would be at a lower altitude than using the full-length departures. The outcomes of the trial resulted in a less than one decibel difference as aircraft gained slightly higher altitudes earlier, but not sufficient altitude to make a perceptible noise difference over residential areas.

Following completion of the trial, the results were consulted with the Brisbane Airport Community Airspace Advisory Board (AAB) which replaced the previous BAPAF, who requested further investigation be undertaken to understand what the establishment of a minimum climb gradient or height requirement could mean for the trial results or noise improvements. This was completed by Airservices and the results were presented in November 2023. It was identified that to have a perceptible noise difference (greater than 3 decibels) at the first community overflowed from the new runway (Ascot), aircraft would need to be 50 per cent higher. This would involve a climb gradient of 24 per cent. We engaged with airlines and were advised that this climb gradient is in excess of the capability of most aircraft. Aircraft that could not meet the climb gradient would have to be diverted off the Standard Instrument Departure, resulting in newly overflowed communities.

The noise improvement trial ran from February 2022 to February 2023, with quarterly reports provided on the Brisbane Airport Flight Path Changes Post Implementation Review page on *Engage Airservices* (<https://engage.airservicesaustralia.com/brisbane-airport-flight-path-change>):

- June 2022 – [Quarterly Update 1](#)
- September 2022 – [Quarterly Update 2](#)
- December 2022 – [Quarterly Update 3](#)
- March 2023 – [Quarterly Update 4](#)

The aircraft altitudes achieved during the trial are detailed in attached table.

Aircraft Runway Entry	Runway End 19R	Hamilton	Bulimba	New Farm	St Lucia
B738 - intersection	1,700	2,400	3,300	4,150	6,150
B738 - full length	1,700	2,350	3,300	4,150	6,100
A320 - intersection	1,550	2,250	3,100	4,000	6,300
A320 - full length	1,500	2,200	3,050	3,900	6,400
B712 - intersection	2,450	3,050	3,750	4,850	7,000
B712 - full length	2,400	2,950	3,700	4,650	6,800
B737 - intersection	1,850	2,800	3,700	4,500	6,300
B737 - full length	1,900	2,850	3,800	4,600	6,450

These altitude and noise level results are largely consistent with those identified in a trial conducted by the Aircraft Noise Ombudsman at Perth Airport in 2012 - *Full length departures – Potential noise benefits (Perth)* https://ano.gov.au/wp-content/uploads/2022/03/full_length_departures_perth.pdf