

## GLADSTONE AIRPORT CHANGES TO APPROACH PROCEDURES

Airservices will implement changes for aircraft arriving to Runway 10/28 at Gladstone Airport from late February 2020.

## **Background**

Since 2007, the <u>International Civil Aviation Organization (ICAO)</u> has encouraged its members to implement approach procedures with vertical (straight up and down) guidance to improve safety for aircraft arriving at airports.

One way to do this is through the use Baro-VNAV technology. BARO-VNAV stands for Barometric vertical navigation.

Baro-VNAV is a technology available on most large modern aircraft. The technology increases the likelihood of a stabilised approach being flown by the aircraft through the provision of vertical guidance to the pilot during their descent to the runway without relying on ground based navigation equipment. It also reduces the workload for pilots and decreases their reliance on visual assessments on approach, making landing safer. Baro-VNAV approaches reduce the frequency of an aircraft needing to either circle or complete a missed approach as they give pilots greater accuracy.

Airservices has worked with the <u>Civil Aviation Safety Authority (CASA)</u> and identified more than 100 locations for the roll out of Baro-VNAV approach procedures across Australia.

Some of these locations, including Gladstone Airport, will see minor changes to their existing approach procedures to support the introduction of Baro-VNAV.

## What will change at Gladstone Airport?

The Gladstone Airport Instrument Landing System (ILS) will be decommissioned in early 2020 and the existing RNAV procedure will be amended to enable aircraft to use Baro-VNAV, providing the safety and operational benefits that this will bring.

The introduction of Baro-VNAV will result in the existing initial approach segments to Runway 10 shortened and moved approximately 2-5 km to the south-east to ensure aircraft can continue to fly an approach that is aligned to the runway (Figure 2 yellow tracks).

Aircraft which currently arrive to Runway 10 using the ILS are likely to fly the Baro-VNAV approach. While some communities may notice a different pattern of aircraft arriving to Runway 10, the majority of aircraft will continue to operate as they currently do, as both the Baro-VNAV approach and existing ILS approach are runway aligned (Figure 1 red tracks). –

Typical aircraft arriving at Gladstone Airport include the Dash 8 (DH8D, turboprop) and Fokker 70 (F70, turbofan jet). The number and type of arrivals will not change as a result of these changes.

Approximately 10 aircraft are expected to fly the Baro-VNAV approach to Runway 10 on a busy day, arriving to the airport from several directions.

The community of **Yarwun** will continue to experience aircraft operating between 1,100 – 1,750 feet on descent to Runway 10 at noise levels above 40 decibels (dB(A)) but below 60 dB(A), depending on how close residences are to the flight path. Approximately 10 aircraft will continue to arrive along this path on a busy day.

Residents of **Mount Larcom** will continue to experience approximately 3 aircraft on a busy day to the east of the township with the current associated noise levels of approximately 46 dB(A). These aircraft will be operating between 3,500 and 4,000 feet on descent to Runway 10.

Residents of **East End** will continue to experience approximately 3 aircraft operating approximately 0.5 kilometres to the east of the town centre. These aircraft will be operating at approximately 4,000 feet on descent to Runway 10 with the current associated noise levels of approximately 49 dB(A).

Residents near the new approach segment to the south-east of the Rundle Range National Park may notice that some aircraft fly slightly closer to **The Narrows** in order to join the new approach procedure. Where aircraft fly will depend on the track that the pilot chooses to take in order to join the procedure. Aircraft joining the procedure near The Narrows are expected to be operating at or above 5,000 feet on descent to Runway 10. Residents in this area can expect to see approximately 3 aircraft on a busy day joining the new procedure.

The community of **Ambrose** will continue to experience aircraft holding patterns and while aircraft will be operating further to the east of this community, residents may continue to visibly notice approximately 4 aircraft arriving to Runway 10 on a busy day. Residents will continue to experience noise levels of approximately 40dB(A).

The community of **Darts Creek** may notice a reduction in overflight as aircraft will fly to the south of the community to join the runway-aligned procedure. Residents will experience a reduction in noise levels to below 40dB(A) and may continue to visibly notice approximately 4 aircraft arriving to Runway 10 on a busy day.

Residents to the north-east of **Mount Larcom** township will continue to experience aircraft arriving from the north-west, west and south to commence the runway-aligned approach as they currently do at heights of approximately 3,500 feet. Noise levels experienced from these aircraft will continue to be above 50dB(A) but below 60dB(A). Residents in this area can expect to see approximately 4 aircraft arriving to Runway 10 on a busy day.

Residents of **Targinie** may continue to visibly notice aircraft operating approximately 2 kilometres to the south of the town centre on descent to Runway 10.

## Have a question?

For questions about this change and /or current aircraft operations, contact our Noise Complaints and Information Service (NCIS) on:

- http://www.airservicesaustralia.com/aircraftnoise/about-making-a-complaint/
- 1800 802 584 (free call)
- 131 450 (interpreter service)



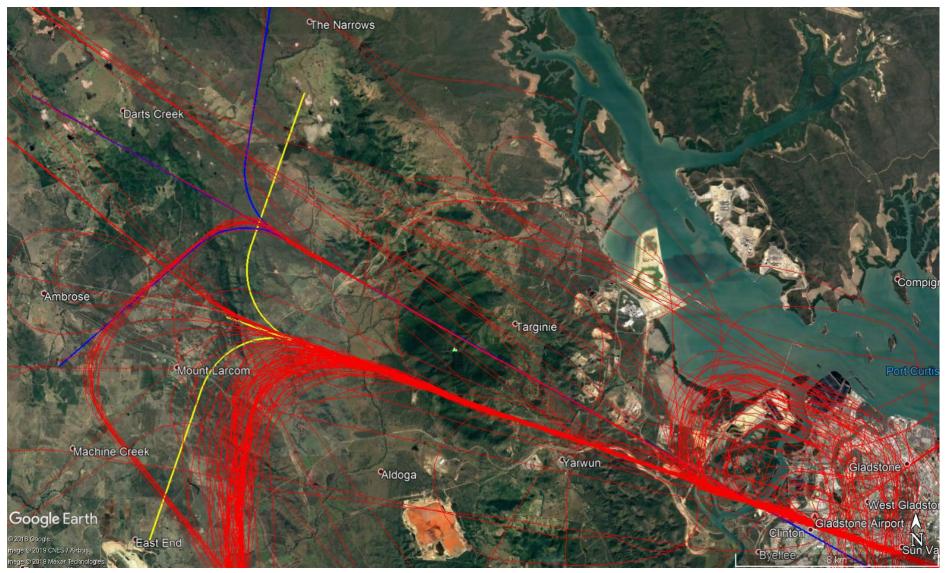


Figure 1: Existing runway - aligned ILS procedure (red tracks), existing RNAV procedure (blue flight paths) and initial segments of new approach procedure (yellow flight paths)

This information is produced using Airservices Operational Data Analysis Suite (ODAS). Aircraft movement numbers are calculated on the assumption that all aircraft arriving to Runway 10 at Gladstone Airport will use these flight paths. Heights are approximate and measured in feet (ft).

dB(A) = Decibels adjusted to reflect the ear's response to different frequencies of sound Australian Standard 2021-2015.

As this chart is a graphical representation only it may be incomplete, contain preliminary conclusions and may change. No duty of care to you or any third party is accepted for any loss suffered in connection with the use of this document.



Figure 2: Existing RNAV procedure to Runway 10 (blue flight path) and runway-aligned procedure with Baro-VNAV (yellow flight path)