

SHELLHARBOUR AIRPORT

CHANGES TO APPROACH

PROCEDURES

Airservices is modernising the approaches for aircraft arriving to Shellharbour Airport from 15 July 2021.

BACKGROUND

Shellharbour Airport services Scheduled Passenger Transport, charter, commercial, training, general aviation and helicopter rescue operations, and provides freight and passenger access to the South Coast region of New South Wales. The airport's main runway (RWY) is RWY 16/34, (aligned north/south) that operates in both directions depending on the wind at the time of take-off or landing.

Area navigation (known as RNAV) approaches are available to both ends of the runway. These are currently 'off-set' (not aligned with the runway) and can add unnecessary complexity for pilots conducting approaches.

Airservices is seeking to modernise and improve the safety of the existing RNAV approaches at Shellharbour Airport. This includes moving the RNAV approaches to be aligned with the runway, and introducing Barometric Vertical Navigation (Baro-VNAV) technology approach procedures.

Airservices has been working with the Civil Aviation Safety Authority (CASA) to roll out as Baro-VNAV as part of a national safety improvement program, which has identified more than 100 suitable aerodromes across Australia, including Shellharbour Airport.

Baro-VNAV is a technology available on most modern aircraft. It increases the likelihood of a stabilised approach by providing 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, making landing safer and reducing the likelihood of pilots needing to conduct a missed approach¹ in poor weather.

CURRENT OPERATIONS AT SHELLHARBOUR AIRPORT

Wind conditions at Shellharbour mean that both ends of RWY 16/34 are used equally for arrivals.

On average, there is a total of six (6) arrivals to RWY 16/34 per day, with three arrivals to each end of the runway.

On a busy day up to ten (10) aircraft arrive to RWY 16/34, with up to five (5) arrivals to each end of the runway.

The most common types of aircraft operating at Shellharbour will continue to be the C208 (Cessna 208 Caravan) and the SF34 (Saab 340).

WHAT WILL CHANGE AT SHELLHARBOUR AIRPORT?

The existing approach to RWY 16 will be moved approximately 4 km west of its current location and overlaid with a Baro-VNAV approach (**Figure 1**). There will be no change to the altitude at which aircraft fly on the new approach.

Baro-VNAV will also be introduced to RWY 34, however this will occur later in 2021, subject to CASA flight validation.

¹ A go-around, or missed approach, is a safe and well-practised manoeuvre that sees an aircraft discontinue its approach to the runway when landing. Adverse weather conditions, including strong winds, experienced by the aircraft on final approach are the most common cause of go-arounds. For more information see <https://www.airservicesaustralia.com/about-us/our-services/how-air-traffic-control-works/unusual-activities-on-the-ground-and-in-the-air/>

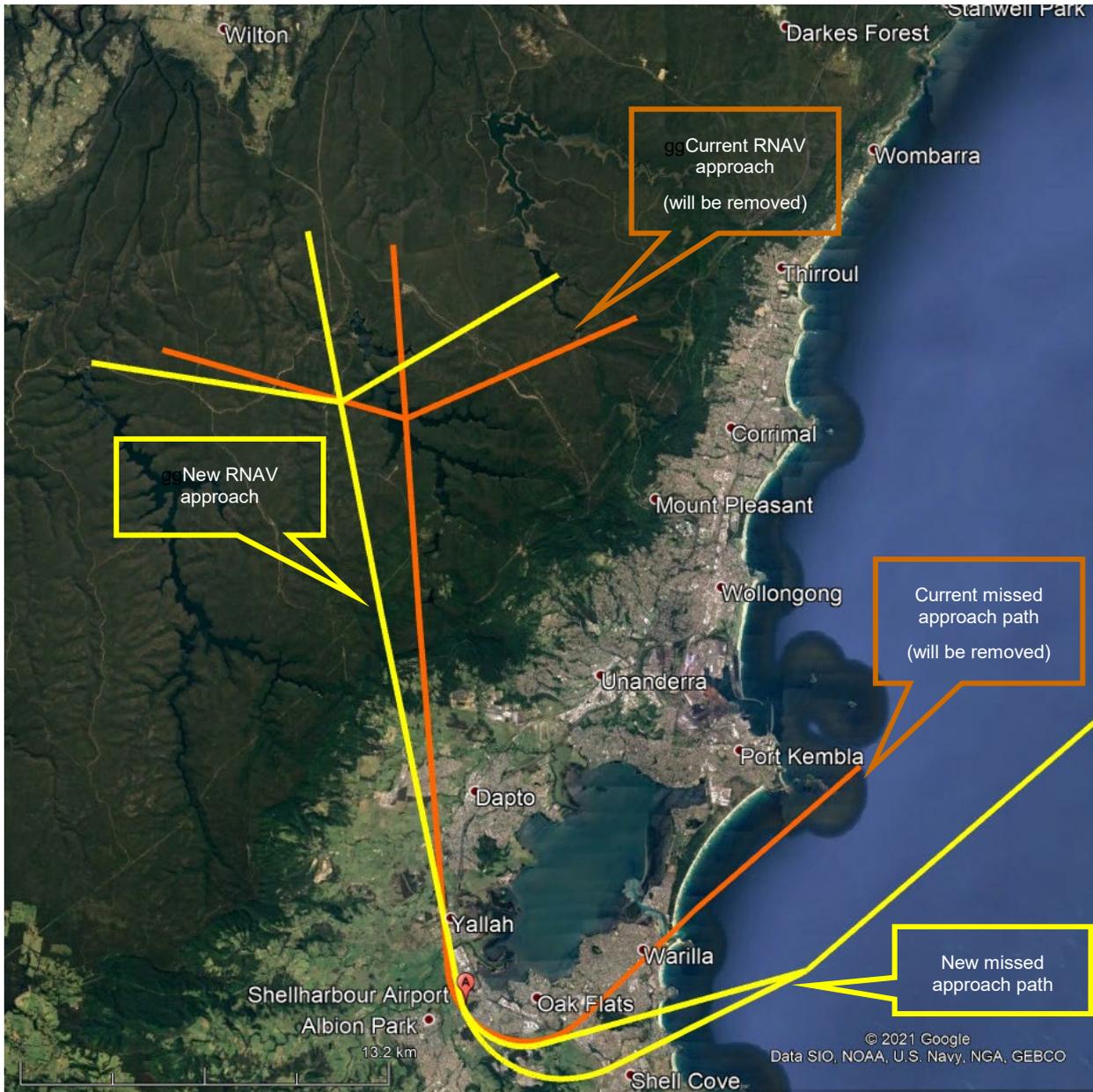


Figure 1: Existing RNAV approach to RWY 16 (orange), new RNAV with Baro-VNAV overlay (yellow), current missed approach path (orange) and new missed approach path (yellow)

WHAT WILL I SEE AND HEAR?

Residents in the area of Wilton may notice aircraft operating closer to them on arrival to RWY 16, and may experience an increase in aircraft noise by up to 10 decibels (dB(A)), with noise levels at approximately 50 dB(A) when aircraft are operating on this approach (**Figure 1**). Residents will continue to experience aircraft occasionally operating in a holding pattern in this area.

The new approach will move west of the community of Dombarton (**Figure 2**). Residents in this area will continue to experience aircraft noise levels up to 60 dB(A).

Residents in the area of Wongawilli may notice aircraft operating closer to them and experience aircraft noise levels of up to 60 dB(A), from current levels of approximately 50 dB(A).



Figure 2: Existing RNAV approach to RWY 16 (orange) and new RNAV with Baro-VNAV overlay (yellow)

The communities of Horsely, Cleveland and Penrose will continue to experience aircraft operations. The new approach will track over the western areas of Horsely and Penrose, and residents may experience an increase in aircraft noise by up to 10 dB(A) with noise levels between 60 and 70 dB(A) when aircraft are operating on this approach.

The new approach will track closer to the community of Cleveland than it currently does. Residents in this area may experience an increase in noise by up to 10 dB(A), with aircraft noise between 60 and 70 dB(A) when aircraft are on this approach.

The communities of Huntley and Avondale may notice aircraft tracking closer to them than they currently do on arrival to RWY 16. Residents in these areas will continue to experience aircraft noise up to 50 dB(A).



Figure 3: Current missed approach path (orange) and new missed approach path (yellow)

The communities of Yallah and Haywards Bay will continue to experience aircraft operations as aircraft are on final approach to the runway in this area.

Aircraft conducting a missed approach on arrival to RWY 16 will now track south of the suburbs of Blackbutt, Barrack Heights and Barrack Point, away from the suburbs of Oak Flats, Warilla and Shellharbour City Centre. Residents in these areas may notice aircraft operating closer to them when performing a missed approach and may experience aircraft noise levels of between 60 and 70 dB(A) (**Figure 3**). Missed approaches are rare when aircraft are intending to land and the majority of aircraft operating at Shellharbour will use the inner missed approach path. High performance aircraft, such as a Boeing 737, may use the outer missed approach path; however it is unlikely that these type of aircraft will be operating at Shellharbour.

Other aircraft will continue to operate in the area, including those undertaking circuit and flight training, medical and other emergency flights, helicopters and military operations.

WHEN WILL THIS OCCUR?

Effective from 15 July 2021.

HAVE A QUESTION?

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

w: <http://www.airservicesaustralia.com/aircraftnoise/about-making-a-complaint/>

t: 1800 802 584 (free call)

t: 131 450 (interpreter service) 