

Modified flight path Roleystone, WA

What is being changed?

Some aircraft arriving from the north to land at the southern end of Runways 03 and 06 overfly residential areas including Roleystone. Airservices has investigated a change to move the southern portion of this flight path to the east to minimise overflight of residential suburbs. It is our intention to trial this change for 12 months commencing 22 August 2013.

Why is this change being considered?

Managing the impacts of aircraft noise remains a key challenge for an industry that is experiencing and forecasting high levels of growth. To date, the vast majority of air traffic management change processes are made for safety or efficiency purposes. While an assessment of noise impacts is one part of the change process, noise improvement opportunities has not been the primary purpose of previous proposals.

Airservices is now placing emphasis and working proactively to identify opportunities to improve aircraft noise impacts. A process has been implemented to analyse proposals as they come forward and report back accordingly.

Proposals come from a range of sources; internally via analysis undertaken by our Noise Complaint and Information Service, analysis of noise monitoring and periodical review of air traffic control procedures, and externally via the Aircraft Noise Ombudsman, Community Aviation Consultation Group meetings and directly from the community. To date, the majority of proposals under consideration have come as a result of direct community feedback to Airservices.

The southern end of this flight path crosses over the Roleystone residential area. Members of the Roleystone community have contacted the Aircraft Noise Ombudsman about the possibility of moving this portion of the flight path in order to avoid the Roleystone area. The Aircraft Noise Ombudsman has formally recommended this change to Airservices for consideration.

Why can't the whole flight path be moved?

Our first step in assessing the merits of any proposal to change a flight path is to look at the impact on safety – either to see if safety would be improved or that the current level of safety is maintained. Our initial safety assessment determined the northern end of the flight path could not be moved due to maintaining the required separation distances at crossover points with departure flight paths to the north-east (when this arrival flight path is being used, aircraft are also departing from Runways 03 and 06 to the north-east – the departures crossing underneath the arrivals). However, our analysis also showed that the portion of the flight path below the departure crossing points (i.e. the southern portion of the flight path) could safely be moved.

When would a trial start?

Due to the safety implications and potential for unintended impacts, trialling changes to flight paths and air traffic management procedures is an effective way to assess their merits. A trial like this takes some time to prepare and requires (by regulation) the publication of certain aeronautical information for set periods so that airlines can properly prepare flight crews about the change to the flight path location. From an operational perspective, our assessment is that the earliest a trial could safely start would be 22 August 2013.

We are also aware of our need to effectively and broadly consult with the community about this proposal so that those impacted by the current and trial flight paths have been informed to the extent possible and been given an opportunity to comment before a trial started. We have commenced that process in accordance with *Airservices Community and Consultation Protocol*. A copy of this document is available at http://www.airservicesaustralia.com/publications/corporate-publications/communication-and-consultation-protocol.

How long would a trial go for and how would it be assessed?

The trial will start on 22 August 2013 and go for at least 12 months in order to cover normal seasonal patterns (increased use during the winter months due to prevailing wind direction).

According to requirements established by the International Civil Aviation Organisation (ICAO) and Australian Government legislation, Airservices must regard a series of 'relevant considerations' when making decisions to change flight paths or aircraft management operations. These 'relevant considerations' are the potential impacts on: **safety** (always the primary consideration), **efficiency** (airports and airlines), the **environment** (noise, emissions and the natural environment) and **consultation** (industry and community). This process may be considered as working in the following way: after safety has first been assured, judgment about the various impacts on the environment and efficiency is informed through consultation and an 'on balance' decision can then be made.

We have already started seeking community and industry feedback about a trial through presentations to relevant Perth community forums, community representatives and the aviation industry. We will continue this work and expand our consultation activities, providing regular feedback to the community until a trial has been in place for 12 months. After 12 months we will consider the various costs and benefits (quantified and unquantified) about the trial and publish a report for further consideration. A final decision to continue or stop using the trial flight path will be made by Airservices, however the timing of that decision will depend on the trial outcomes.

What areas would be affected?

The flight path would move away from: Bickley, Byford, Carmel, Martin and Roleystone

The flight path would move closer to: Karragullen, Pickering Brook and Bickley East.

Has Airservices done an environmental assessment?

We have considered the impacts of several options to relocate the flight path over Roleystone and broadly identified a range of costs and benefits to industry and the community. The proposed trial flight path is the one that best balances the environmental and operational perspectives i.e. two options that overflew fewer people and would therefore have a smaller noise impact could not be safely implemented.

Our analysis concluded the environmental impact from this change is expected to be minor and recommended that the trial is formally reviewed. We will perform a Post Implementation Review once the trial has been operating for 12 months and before final decisions about the trial are made. This review will include noise monitoring and will be made available to the public for comment.

What is the noise impact going to be?

In this case, the proposal put forward by the Aircraft Noise Ombudsman looks to move noise from a populated area to less populated areas.

Aircraft associated with this trial will typically be about 9,000 feet (2,750 metres) above sea level (8,000 feet (2,450 metres) above ground) when near Pickering Brook and their noise measured at ground level is expected to be well below 50 dBA. Aircraft flying near Karragullen will typically be above 7,000 feet (2,150 metres) above sea level (6,000 feet (1,800 metres) above ground). This is similar to their current altitude when flying over Roleystone and the resulting noise impact at ground level is typically expected to be below 55 dBA.

Airservices recently located a noise monitor at the Roleystone Primary School for 4 weeks to measure the typical noise levels of aircraft flying over the area. The report from this monitor is at http://www.airservicesaustralia.com/publications/noise-reports/short-term-monitoring.

Results from this outside noise monitor show:

55% of flights were below the monitor threshold trigger of 45 dBA at night and 54 dBA during the day. This equates to 3,465 flights a year.

25% were between 55 dBA and 60 dBA (7% at night). This equates to 1,575 flights a year (441 at night).

15% were between 60 dBA and 65 dBA (3% at night). This equates to 945 flights a year (189 at night).

5% of flights between 65 dBA and 70 dBA (0.3% at night). This equates to 315 flights a year (19 at night).

The noise levels indicated at the Roleystone monitor is the 'package' that will transfer away from that area to adjacent areas.

Note that the outside noise level of 70 dBA is the threshold level beyond which interference will occur for most people with normal conversation or telephone, radio

and television use inside a house (walls generally create a 10 dBA reduction in noise level and 60dBA is the level of normal conversation between two people).

There were no aircraft using a Perth Airport arrival flight path recorded above 70 dBA at the Roleystone monitor. The outside level of 60 dBA equates to internal sleep disturbance level of 50 dBA as specified in AS2021 Australian Standard, as referred to in the Department of Transport and Regional Services, 2000, "Expanding Ways to Describe and Assess Aircraft Noise" – 3% of all flights recorded by the Roleystone monitor at night were above this level (equates to 189 flights a year).

We will conduct additional noise monitoring during the trial period to make sure the noise impact is manageable and will inform the community of the results.

Will the change in noise impact be noticeable?

This change to the flight path will move aircraft noise away from over 4000 people and result in more noise for about 250 people. As this change would take effect immediately the trial started, it is likely to be noticeable by both groups of residents.

The areas under the trial flight path are already overflown by arriving aircraft but not in great numbers. They are located at least 35-50 km from the runway with the aircraft generally above 5,000 feet (1,550 metres) above ground level when passing overhead.

How many planes use this flight path each year?

About one-third of arrivals to Perth Airport land at the southern end of Runways 03 and 06, with about a quarter of those using the flight path over Roleystone i.e. about 6,300 aircraft a year which equates to 9% of all arrivals to the airport or 4.5% of all flights.

While this is an average of about 18 aircraft a day, use of the flight path is seasonal with greater use during the winter months due to the prevailing wind direction (aircraft are generally required to land and take-off into the wind).

It also means the flight path is usually used for extended periods of time i.e. all or most of a day and/or for several days in a row rather than for small parts of each day. This pattern extends the noise impact but also means the respite periods are longer.

There would be no change to the number of aircraft overflying Roleystone that are operating to and from Jandakot Airport. These are generally light aircraft flying in uncontrolled airspace at lower altitudes (e.g. below 3,000 feet above ground level) and were the loudest aircraft recorded by the Roleystone monitor.

What about extra fuel and aircraft emissions?

Aircraft will track 5 nautical miles (9.3 km) further than the current flight path which equates to a total annual increase for all flights of approximately 350 tonnes of extra fuel worth about \$350,000. This amount of fuel would generate 1,100 tonnes of CO2 – the same as an additional 275 cars a year on the road.

What consultation community will occur?

We have already started seeking community and industry feedback about a trial through presentations to relevant Perth community forums, community representatives and the aviation industry. We will continue this work and expand our consultation activities, providing regular feedback to the community during the trial period.

We aim to directly inform all residents impacted by the current and trial flight path about this proposal and will keep the community informed as a trial progresses. A wide range of consultation activities are planned using both traditional (mail, letterbox) and electronic (email, website) means so that both groups of residents are informed about the trial before it commences.

We will visit communities as required before and during the trial with display material and have staff available to discuss the trial and answer questions.

Community feedback about the trial will inform our decision-making. After 12 months we will consider the various costs and benefits (quantified and unquantified) about the trial and publish a report for further consideration. A final decision to continue or stop using the trial flight path will be made by Airservices.

How can I have my say?

We have put in place a range of feedback mechanisms and we will respond to questions as quickly as possible. We will include all community views and comments in the trial assessment process.

Feedback can be provided through the following ways:

- Email community.relations@airservicesaustralia.com
- Phone 1800 802 584 to our Noise Complaints Information Service
- Post to Community Relations, GPO Box 367, Canberra ACT 2601.