



Understanding aircraft noise

- Perth Airport is committed to working with Airservices Australia, airlines, Commonwealth, State and Local governments to manage adverse aircraft noise impacts on the community.

Perth Airport operates 24 hours a day, seven days a week and is one of the most important elements of public transport infrastructure in Western Australia.

We support jobs growth, tourism and leisure, and provide economic, social, cultural and lifestyle benefits. Importantly, we play a critical role in economic development by providing transport services for companies, and supporting them to undertake their operations, service their customers and grow their businesses.

People living in the Perth metropolitan region can experience aircraft noise in varying levels at some point from either: Perth Airport, Jandakot Airport or RAAF Base Pearce. Noise from aircraft landing and departing from Perth Airport, and from aircraft operations on the airfield, is an unavoidable impact of providing air services.

Perth Airport is working with Airservices Australia (the air traffic management authority), airlines and Commonwealth, State and Local governments to seek to manage the adverse impact of aircraft noise on surrounding communities.

How is aircraft noise managed?

We have adopted the 'balanced approach' principles for aircraft noise management advocated by the International Civil Aviation Organisation (ICAO).

The 'balanced approach' includes defining the noise issue at an airport and then analysing the various measures available to reduce noise through the exploration of four principal elements:

- reduction at source (looking at how aircraft are manufactured and investigating ways to reduce the noise generated by aircraft,
- noise abatement operational procedures,
- land-use planning and management, and
- operating restrictions.

We also believe it is important to communicate aircraft noise information as simply as possible.

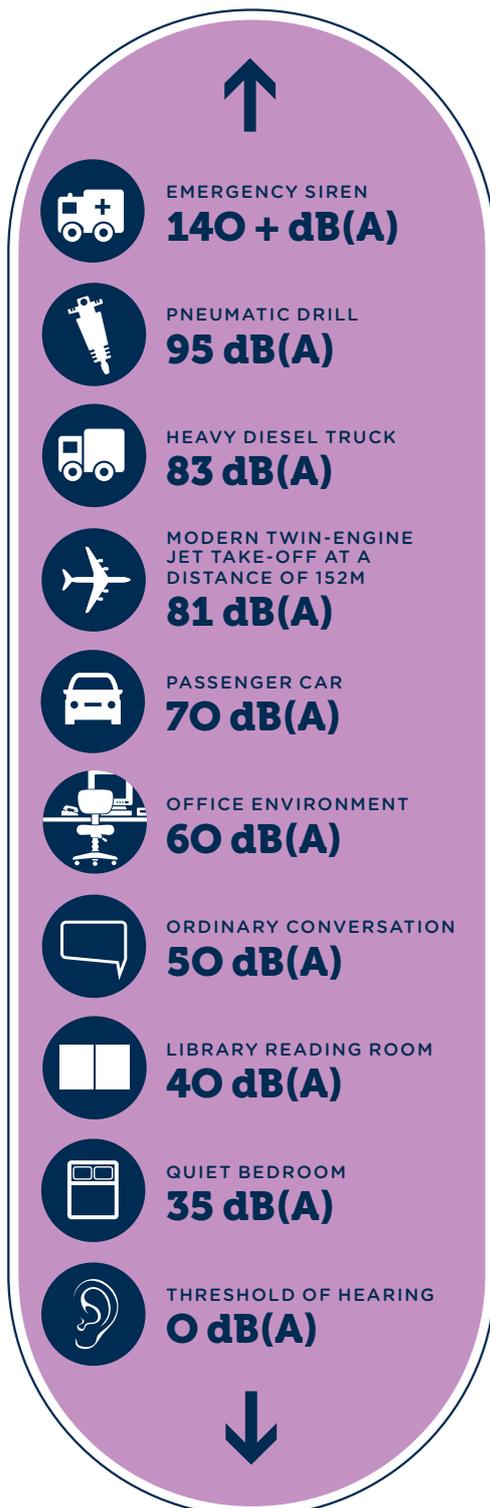
For further information regarding aircraft noise management visit: aircraftnoise.com.au and perthairport.com.au.

What is noise?

Sound is vibrations through the air that are received and interpreted or 'heard' by a person. Where as noise can be defined as unwanted or unpleasant sound.

A dB(A), or decibel, is a standard unit of measure to indicate sound pressure levels to account for the relative loudness perceived by the human ear. It is commonly used to measure environmental and industrial noise.

Typical sound levels



Why does Perth Airport operate 24/7?

Maintaining operational flexibility is critical to supporting Western Australia's economy. We are part of a national and global aviation network and, as such, flight times and schedules are not directly controlled locally. The viability of many of Perth's international air services depend on linking with connecting networks through hub airports, such as Dubai and Singapore. Any restrictions on the operations of Perth Airport would lead to a significant loss of air services, which may result in a reduction of service levels and a possible increase in the cost of flying for all travellers.

International aircraft seats are the lifeblood of the State's international tourism business and the many jobs directly and indirectly generated by that industry. The reduced level of international air services that would arise from restrictions on Perth Airport would have profound impacts on tourism and all those who depend on that industry.

What will the new runway mean to me?

The construction of a new runway, which will be parallel to the existing main runway and located between the current International Terminal 1 (Terminal 1) and Abernethy Road, has been planned for Perth Airport since the early 1980s.

Due to unprecedented growth, construction of the new runway has been brought forward, and it is anticipated that it will be operational by the end of the decade, subject to demand.

We are currently completing detailed assessment of the impacts of the project including aircraft noise. This will be communicated through an extensive public consultation and approvals process prior to construction. The Master Plan includes high level details on how the new runway will operate and associated flight path diagrams.

The Master Plan also includes the latest Australian Noise Exposure Forecast (ANEF) and associated concept flight paths.

What is an ANEF?

The Australian Noise Exposure Forecast (ANEF) system was developed as a land use planning tool and was aimed at controlling encroachment on airports by noise sensitive land uses.

The ANEF system was developed through a major socio-acoustic survey carried out in the vicinity of a number of Australian airports in 1980.

The ANEF is a central component of the Australian Standard 2021 - 2000 (Acoustics - Aircraft Noise Intrusion - Building Siting and Construction) which provides guidance on the acceptability of new building sites based on an ANEF zone.

The acceptability criteria varies depending on the type of land use, and the Standard specifies that land within an aircraft noise exposure level of less than 20 ANEF is acceptable for the building of new residential dwellings. The 20 ANEF contour corresponds to approximately 10 per cent 'seriously affected' level and 30 per cent 'moderately affected' level in the dose/response relationship that was established by the 1980 socio-acoustic survey.

The State Government has acted to restrict inappropriate development, mostly residential, in the vicinity of Perth Airport by adopting the Perth Airport ANEF into State Planning Policy 5.1 - Land Use Planning in the Vicinity of Perth Airport since 1997.

Perth Airport will continue to object to new or increased density residential development close to the airport, and in particular those areas located within an aircraft noise exposure level of greater than 20 ANEF.

Perth Airport recognises that the ANEF is a land use planning tool and does not effectively convey the impact or exposure of aircraft noise to the community, and for this reason, other metrics are required.

How many aircraft will fly over my house?

Flights paths can be considered 'highways in the sky'. They define three-dimensional routes that aircraft use to arrive at, or depart, from an airport.

Flight paths are often shown as a single line on a map, however, unlike a train on a railway line or a car on a highway, it is not always possible for aircraft to follow precisely along the line depicted. In practice, a flight path can vary up to several kilometres or more.

This occurs for a range of reasons, including:

- weather conditions,
- requirement to keep a safe distance between aircraft in the sky, and
- aircraft performance.

The Perth Airport Master Plan provides high level detail on future flight paths, however, prior to any new or significant changes an extensive consultation process will be undertaken by Airservices and/or Perth Airport.

'Number Above' noise contours illustrate the average number of events per day that exceed a certain sound level. This measure is closer to how you typically perceives noise. For example, an N65 contour would represent the average number of events per day over 65 decibels [65 dB(A)] for a particular area.

This is considered to be the sound level at which conversation and other indoor activities can generally be disturbed and corresponds to an indoor noise level of approximately 55 decibels [55dB(A)].

It is important to note, that the 'Number Above' noise contour represents an average day and not a typical day. On a typical day, residents may actually experience more events than the 'Number Above' contours suggest. This is because the traffic at Perth Airport varies significantly from weekdays to weekends, and on the runway being used at particular time.

For information on future noise impacts visit perthairport.com.au

Thinking of buying a property near the airport?

If you are thinking of moving into the area surrounding Perth Airport, it is important to understand how aircraft noise could affect you. Not everybody is affected by noise in the same way.

How aircraft noise may affect you personally will depend on many things, and some things to consider are:

- Are you sensitive to noise?
- Do you usually sleep with the bedroom windows open?
- Are you easily disturbed or wake up often?
- Is your home in an otherwise peaceful area, well away from major traffic and other noises that could mask aircraft noise?
- Is your home close to the airport or directly below regular aircraft flight paths?
- Is your home of lightweight construction or poorly insulated from noise?
- Are you usually home during the day?
- Do you regularly entertain outside?

If you answered 'yes' to a number of these questions, then you are more likely to be disrupted by aircraft noise.

What can you do to minimise the impact of aircraft noise inside your home?

If aircraft noise is a problem for you in your home, or if you are thinking of renovating, you may wish to consider making sound proofing improvements to your home. Some ways to improve a building are:

- installing sound insulation to ceilings,
- lining the eaves,
- upgrading windows and doors, and
- sealing up openings in the walls and roof.

A booklet with practical information about what you can do in your home - 'Reducing Aircraft Noise in Existing Homes' - is available on our website at perthairport.com.au.

Where can I find out more about aircraft noise?

RESOURCES	WEB ADDRESS
Aircraftnoise.com.au	aircraftnoise.com.au
Perth Airport	perthairport.com.au
International Civil Aviation Organisation	icao.int/
Airservices Australia	airservicesaustralia.com
WebTrak	webtrak.bksv.com
Aircraft Noise Information Reports	airservicesaustralia.com
Commonwealth Government Department of Infrastructure and Regional Development	infrastructure.gov.au
National Airport Safeguarding Framework	infrastructure.gov.au
Aircraft Noise Ombudsman	ano.gov.au
Commonwealth Aircraft Noise Regulations	infrastructure.gov.au

Aircraft Noise Information Portal

As part of our commitment to ensure the community and key stakeholders are fully informed and aware of noise implication and flight paths we have developed an interactive web-based Aircraft Noise Information Portal.

Through this portal you can view how flight paths, the ANEF contours and the N65 contours apply to your property, or that of a property you may be looking to purchase. Visit perthairport.com.au

How can I report my concerns about aircraft noise?

Airservices Australia manages enquiries and complaints regarding aircraft noise through the Noise Complaints and Information Service (NCIS).

› If you would like to make a complaint, you should first contact Airservices by:

- using WebTrak - visit: webtrak.bksv.com.
- completing the online form available at airservicesaustralia.com
- contacting the Airservices NCIS hotline on 1800 802 584
- emailing - ncis@airservicesaustralia.com
- writing to - Noise Complaints and Information Service, GPO Box 367, Canberra ACT 2601

For more information visit: airservicesaustralia.com.

If you feel your issue has not been effectively addressed, or you believe you have not been provided with adequate information, you may lodge a complaint with the Aircraft Noise Ombudsman.

Website: ano.gov.au

Email: ano@ano.gov.au

Phone: 1800 266 040

Post: GPO Box 1985, Canberra ACT 2601