Main Runway & Taxiways Overlay Project

Version 01, October 2023

Adelaide Airport
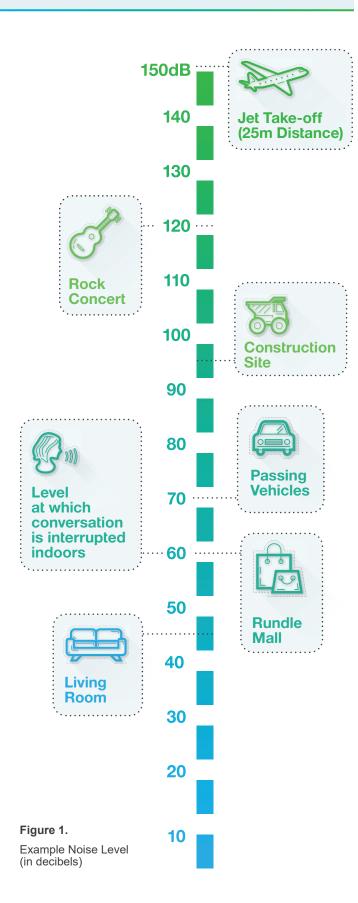
Aircraft Noise Fact Sheet

Number-above noise modelling is commonly used to identify the frequency of aircraft noise events above a specific decibel level.

Adelaide Airport has two runways – the main runway (oriented north-east to south-west) and the cross runway (which is oriented south-east to north-west). Adelaide's seasonal wind patterns influence which runway direction is used as aircraft typically take-off and land into the wind for safety and performance reasons.

Due to the prevailing wind conditions in Adelaide, the main runway is used for the majority of flights while the cross runway is typically used in strong crosswind conditions or when the main runway is not available for use.
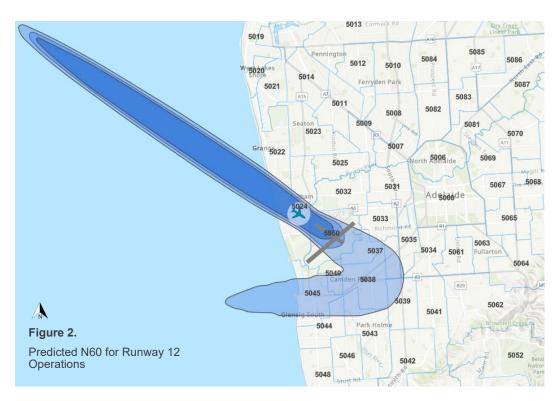
Noise-Above 60dB (N60)

150dB — Jet Take-off (25m Distance)

140

130

120 — Rock Concert

110

100 — Construction Site

90

80

70 — Passing Vehicles

60 — Level at which conversation is interrupted indoors

50 — Rundle Mall

40 — Living Room

30

20

10

Figure 1.

Example Noise Level
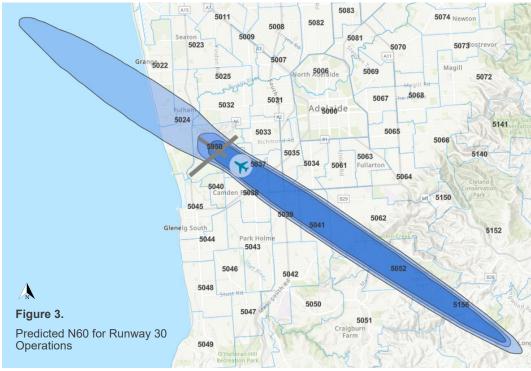(in decibels)

Noise Levels (in decibels)

N60 contours show areas that are likely to experience a predicted number of average daily noise events above 60 decibels (dB) from aircraft flying overhead. An aircraft noise level of 60 decibels outdoors is expected to be reduced by 10 dB in a house with open windows. A noise of 50 dB inside a house is considered to be close to the point at which noise could cause awakening.

More information about this project is available here.
Any enquiries or feedback can be made to the Project Team via prj-MRTOP@aal.com.au.

Noise Contour

The N60 diagrams show the areas where there is expected to be an average of two aircraft noise events (N60 = 2 contour), five aircraft noise events (N60 = 5 contour), and ten aircraft noise events (N60 = 10 contour) above 60 dB for cross runway (runway 12/30) operations during the night curfew period.

The N60 noise contours are shown separately for Runway 12 and Runway 30 operations. When the cross runway is in use during the night curfew period, it is expected that aircraft will most frequently arrive from the north-west and take-off to the south-east (referred to as Runway 12 operations) during late-spring, summer and autumn. During the winter months, there is likely to be increasing use of Runway 30, where aircraft arrive from the south-east and depart to the north-west of the airport.

Figure 2.

Predicted N60 for Runway 12 Operations

Figure 3.

Predicted N60 for Runway 30 Operations

Legend

- N60 = 2
- N60 = 5
- N60 = 10

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