

Short Term Monitoring Program

South Guildford, WA

Version Control

| Version 1: 18 June 2014 | |
|-------------------------|---------|
| Section | Summary |
| | |
| | |

Glossary of Terms

| | |
|------------------------------|---|
| A | Arrivals |
| Background noise level (L90) | The sound level in dB(A) that is exceeded 90% of the time |
| Correlated Noise Event (CNE) | A noise event correlated to an aircraft operation that flew through the capture zone |
| Correlation Summary | Percentage of captured aircraft operations correlated with noise events recorded by the noise monitor |
| D | Departures |
| Day | 6:00am to 11:00pm |
| H | Helicopters |
| LAmx | Maximum sound level in dB(A) |
| Local | Operation that departs and arrives at the same airport. Local movements include circuits and training flights. |
| Movement | An aircraft operation, such as an arrival or departure |
| Night | 11:00 pm to 6:00 am |
| NFPMS | Noise and Flight Path Monitoring System |
| Noise Event | A noise that exceeds the threshold sound level for longer than the threshold time that is set |
| NMT | Noise Monitoring Terminal |
| O | Overflight i.e. an aircraft movement that flew over the area but did not arrive or depart from the airport of concern |
| T | Local Operation (Departure and Arrival) |
| Threshold | Determined level on noise monitor that triggers a noise event when exceeded |

For further information on the metrics used in this report refer to Australian Standard 1055.1–1997 “Acoustics – Description and measurement of environmental noise”.

Airservices Noise Monitoring Program

Information about Airservices noise monitoring program is available on the Airservices website, including reports of the noise and operational data collected by the Noise and Flight Path Monitoring System, as well as fact sheets about topics related to aircraft noise. The website is available at: www.airservicesaustralia.com/aircraftnoise/

Contact Us

To lodge a complaint or make an enquiry about aircraft operations, you can go to WebTrak (www.airservicesaustralia.com/aircraftnoise/webtrak/) use our online form (www.airservicesaustralia.com/aircraftnoise/about-making-a-complaint/) telephone 1800 802 584 (freecall) or 1300 302 240 (local call –Sydney) fax (02) 9556 6641 or write to, Noise Complaints and Information Service, PO Box 211, Mascot NSW 1460.

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This report contains a summary of data collected over the specified period and is intended to convey the best information available from the NFPMS at the time. The system databases are to some extent dependent upon external sources and errors may occur. All care is taken in preparation of the report but its complete accuracy can not be guaranteed. Airservices Australia does not accept any legal liability for any losses arising from reliance upon data in this report which may be found to be inaccurate.

Deployment Purpose

Short term noise monitoring was conducted at South Guildford following recommendations made by the community.

The purpose of this report is to provide a technical summary of the recorded aircraft noise and operational data collected at South Guildford during April 2014.

An explanation of terms used within this report can be found in the Glossary on page 2 of the report.

Deployment Monitoring Period

31/31/2014 12:00 am – 28/04/2014 12:00 am

Noise Monitoring Terminal (NMT) Details

| | |
|--------------------|--|
| Location | Private Residence, Queens Road, South Guildford, WA 6055 |
| Latitude | 31° 54' 41.31" S |
| Longitude | 115° 58' 25.71"E |
| NMT Altitude | 56 ft above mean sea level |
| Capture Zone | 1.9 km radius with 8,000 ft (above ground level) height for noise data capture |
| Threshold Settings | 50.0 dB(A) to 55.0 dB(A) depending on time of day |

South Guildford Findings

- For more information please refer to Figure 1, Figure 2 and Table 1 on page 4.
- The noise monitor was located in South Guildford 2 km north of Perth airport.
- 4,422 movements flew through the capture zone during the reporting period. 4,233 of these were Perth operations.
- 71% of total operations that flew through the capture zone (as shown in figure 2) were Perth Runway 21 Arrivals.
- 4,389 correlated noise events exceeded 65 dB(A), 466 of these occurred during the hours of night.
- The number of correlated noise events exceeding 65 dB(A) in any one day ranged from 73 to 218.
- Residents of South Guildford experienced 3,492 correlated noise events that exceed 80 dB(A) during the reporting period.
- The loudest correlated aircraft noise event with a max level of 109.6 dB(A) was an Ilyushin Il76 Runway 03 departure. Two Chinese military Ilyushin Il76s were based at Perth Airport and took part in the international search for MH370 before being relocated to RAAF Base Pearce.
- The correlation summary for all movements was 98%. This is considered a good result based on reviews of fixed noise monitoring terminals nationally.

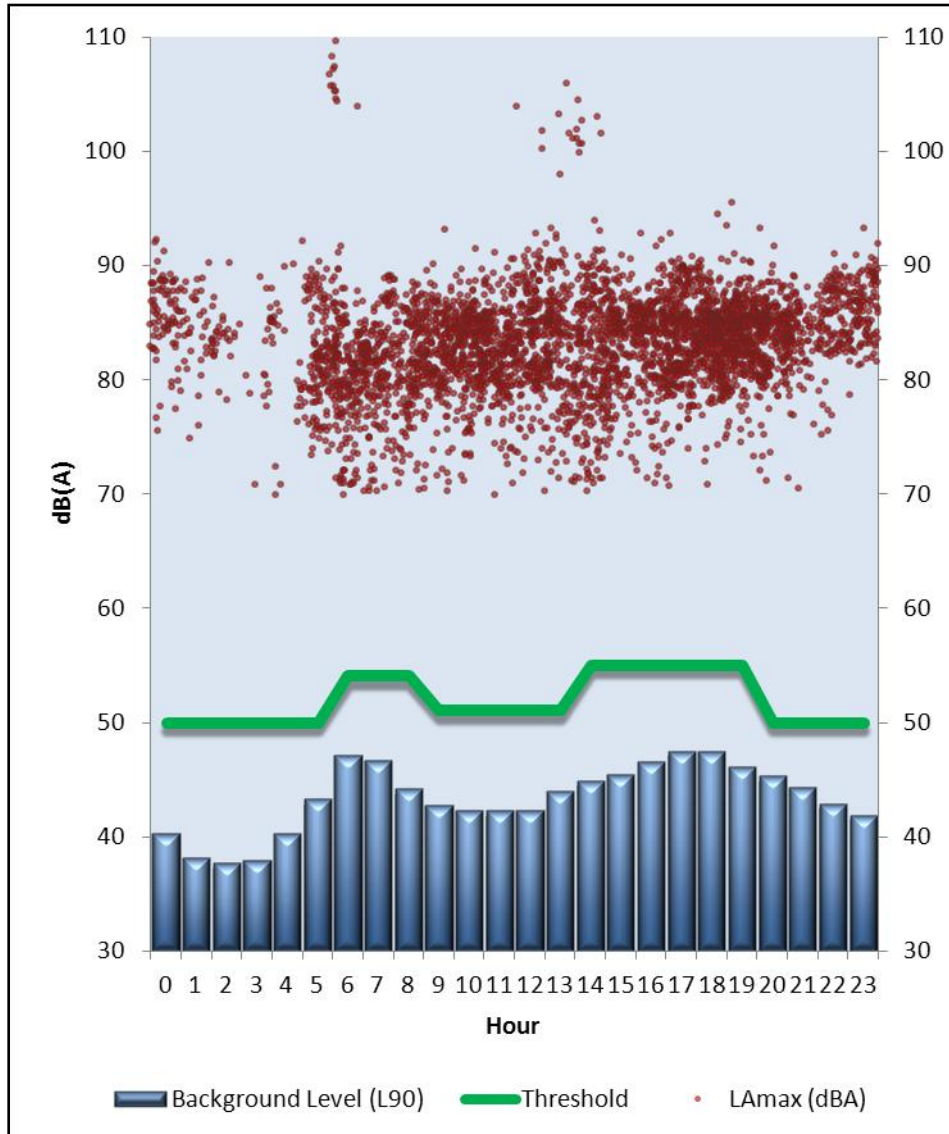


FIGURE 1: SOUTH GUILDFORD NOISE SUMMARY
31/03/2014 12:00AM – 28/04/2014 12:00AM

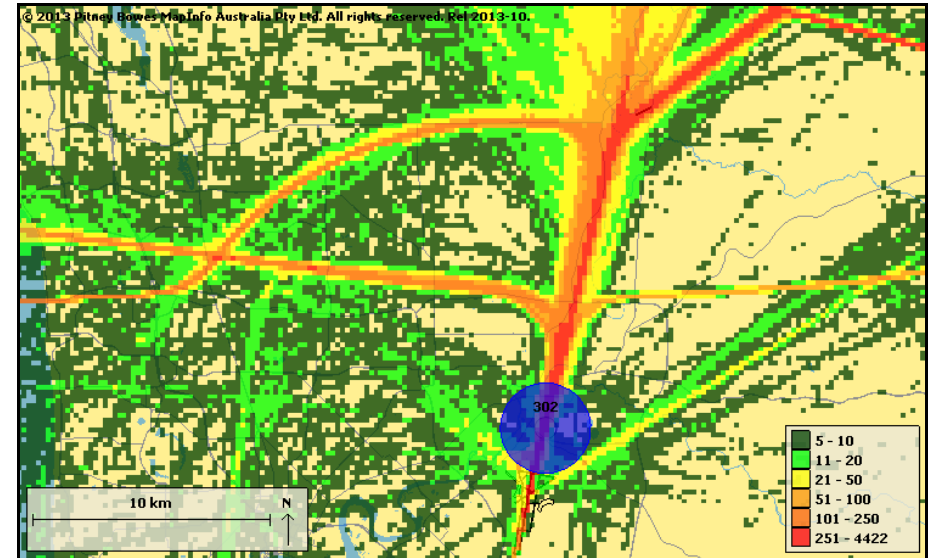


FIGURE 2: TRACK DENSITY OF OPERATIONS THAT TRAVERSED SOUTH GUILDFORD

TABLE 1: TOP 10 MOST CORRELATED AIRCRAFT TYPES OVER THE SOUTH GUILDFORD NOISE MONITORING TERMINAL

| Aircraft Type | Airport | Operation Type | RWY | No. Correlated Noise Events | LAmax dB(A) | |
|---------------------|---------|----------------|-----|-----------------------------|-------------|---------|
| | | | | | Average | Maximum |
| Boeing 737-800 (J) | Perth | A | 21 | 578 | 85.0 | 88.5 |
| Fokker F100 (J) | Perth | A | 21 | 467 | 82.5 | 95.5 |
| Airbus A320 (J) | Perth | A | 21 | 311 | 83.8 | 87.2 |
| Airbus A330-200 (J) | Perth | A | 21 | 258 | 87.0 | 93.9 |
| Boeing 717-200 (J) | Perth | A | 21 | 227 | 80.5 | 83.0 |
| Boeing 737-800 (J) | Perth | D | 03 | 200 | 80.5 | 86.4 |
| Airbus A330-300 (J) | Perth | A | 21 | 192 | 87.3 | 93.3 |
| Fokker F100 (J) | Perth | D | 03 | 170 | 81.7 | 86.4 |
| Airbus A320 (J) | Perth | D | 03 | 124 | 78.5 | 82.8 |
| Fokker F50 (T) | Perth | A | 21 | 115 | 85.4 | 88.5 |

Aircraft Category: Jet (J), Turboprop (T), Propeller (P), Helicopter (H), Unknown (U)
Operation Type: Arrival (A), Departure (D), Local Operation (T), Overflight (O)