

# Memorandum

**To:** Aircraft Noise Community Consultative Group  
**From:** Kylie Higgs  
**Date:** September 2024  
**Subject:** Flat Bush noise monitor investigation

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## 1.0 Purpose

The purpose of this memo is to update members on the results of the Flat Bush noise monitor investigation.

## 2.0 Background

At the June 2024 ANCCG meeting, members queried the number of 65+ Single Event Noise (LA<sub>max</sub><sup>1</sup>) events presented in the Quarterly Noise Report from Marshall Day Acoustics (MDA) measured by the Flat Bush noise monitor.

Auckland International Airport Limited (AIAL) requested MDA investigate the data from the Flat Bush noise monitor to provide assurance to members that

- the Single Event Noise (LA<sub>max</sub>) events are not potentially disturbing and
- that AIAL is meeting its compliance obligations under the Auckland Unitary Plan.

Please note that we provide data on Single Event Noise (LA<sub>max</sub>) in the Quarterly Noise Report however, our compliance obligations are measured in Noise Exposure (L<sub>dn</sub><sup>2</sup>) and our compliance limit for Flatbush is 60 dB L<sub>dn</sub>.

## 3.0 Investigation Results

MDA investigated both the Single Event Noise (LA<sub>max</sub>) events and the overall Noise Exposure (L<sub>dn</sub>) from the Flatbush Monitor and concluded:

### Single Event Noise (LA<sub>max</sub>)

It is not unexpected for the Flat Bush monitor to register this number of LA<sub>max</sub> events above 65 or 70 dB LA<sub>max</sub>. As the monitor sits on the Auckland Unitary Plan Moderate Aircraft Noise Area (MANA) contour it will experience more noise events than the other temporary monitors. The

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<sup>1</sup> LA<sub>max</sub> is a parameter used to define the maximum noise level of a noise event. LA<sub>max</sub> does not provide an indication of the total noise energy of an event but gives an indication how loud, the loudest part of the event was which is an important factor in assessing the degree of disturbance caused by a noise event.

<sup>2</sup> The day-night average sound level (L<sub>dn</sub>) is the average noise level over a given period (days, weeks, months). This is the measurement used to ensure AIAL is compliant with our noise limit obligations.

number of potentially disturbing noise events is typical (and as expected) for the monitor's distance from the airport.

Noise Exposure (Ldn)

The noise levels measured at Flat Bush are under the MANA 60 dB Ldn limit and are therefore compliant with Auckland Unitary Plan.

(For the full report see Appendix A).

**4.0 Next Steps**

AIAL has reviewed the report form MDA, and we are comfortable that there is no further course of action at this time.

**Appendix A**

*Please refer to separate attachment: ANCCG Responses to 2024 June Queries*