

Noise Monitor Strategy and Locations

ANCCG induction Training Day



Noise Monitors in the field

Mandatory Noise Monitors

Designation 1100

Auckland Airport is required under Condition 5 of Designation 1100 of the Auckland Unitary Plan to have three permanent noise monitors, located at:

- Prices Road
- The Velodrome
- Puhinui Road

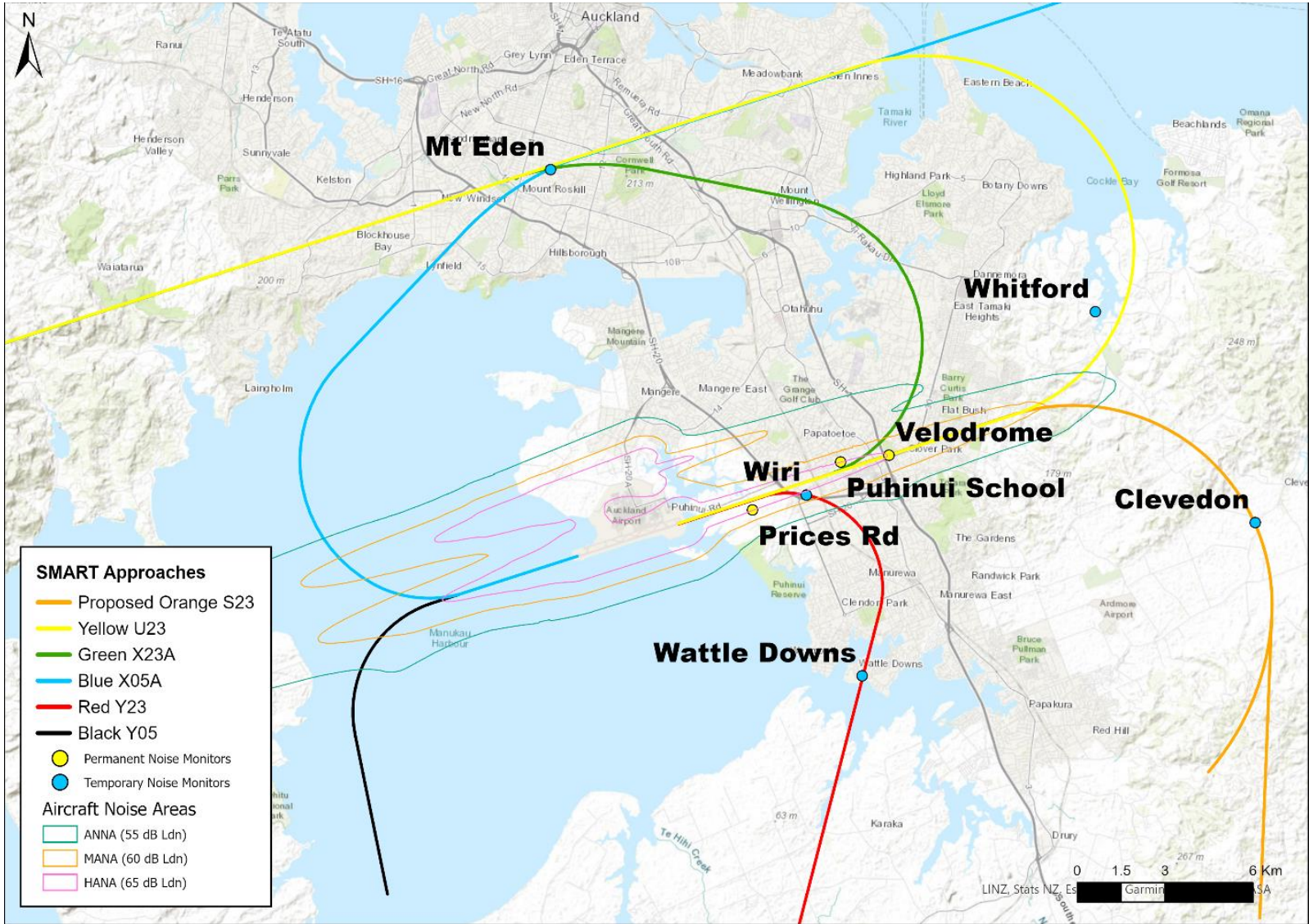
In the future, when the Northern Runway is commissioned, two further permanent noise monitors are also required under the Unitary Plan.

Voluntary Noise Monitors

There are five voluntary noise monitors in the field around Auckland at the following locations:

- Mt Eden – LOSGA
- Wiri
- Wattle Downs
- Flatbush
- Beachlands

Noise Monitor Locations 2022



Strategy for deploying noise monitors

The Airport's policy in relation to additional voluntary monitors is to locate these where there is a demonstrated need to:

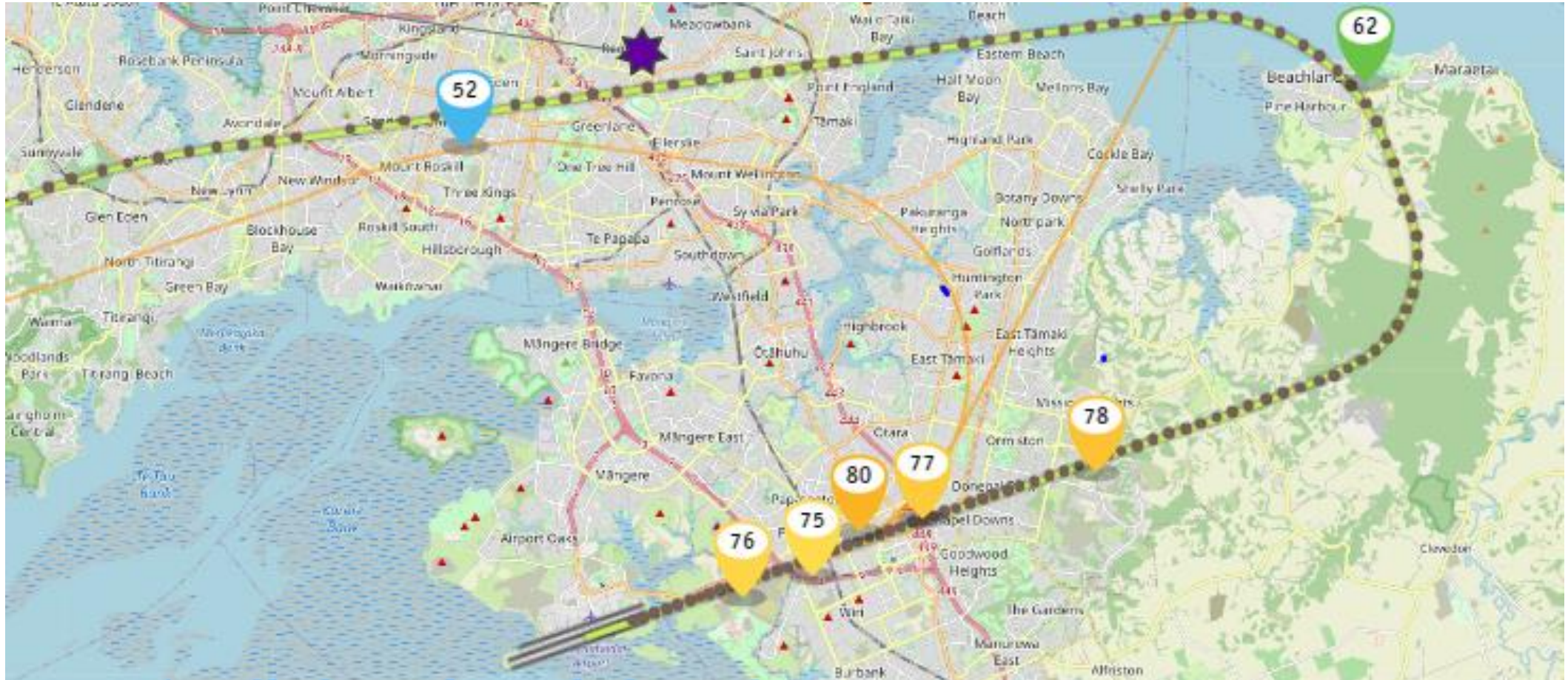
- Monitor noise under areas of future/proposed approach/departure paths
- Monitor current approaches/departures
- Assess areas where a number of approaches/departures intersect
- For other Airport operational reasons

Once a trial of changes to a flight path is concluded noise monitors will be redeployed (eg monitors under the Yellow and Orange SMART Tracks and most of the monitors under the Green SMART Track have been redeployed).

Noise Monitor Locations 2023



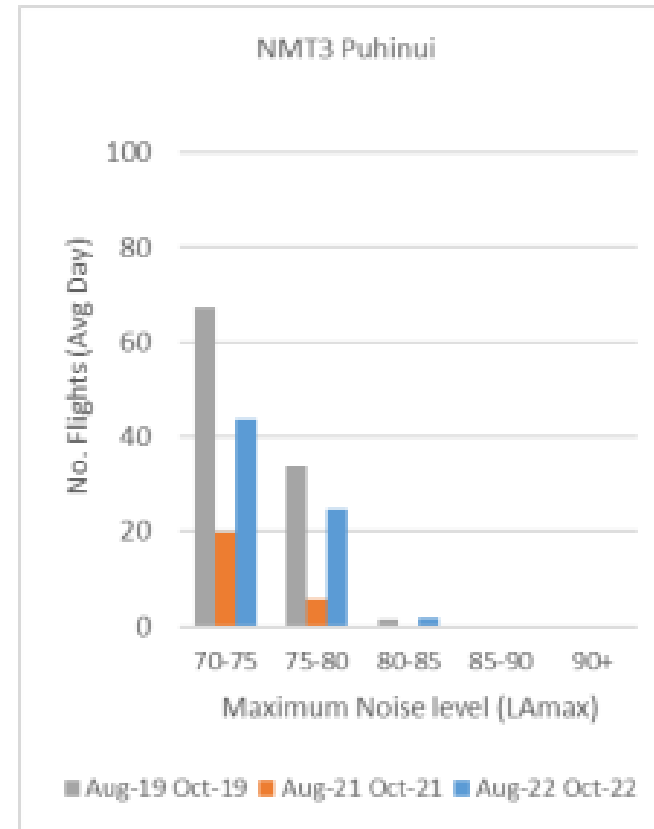
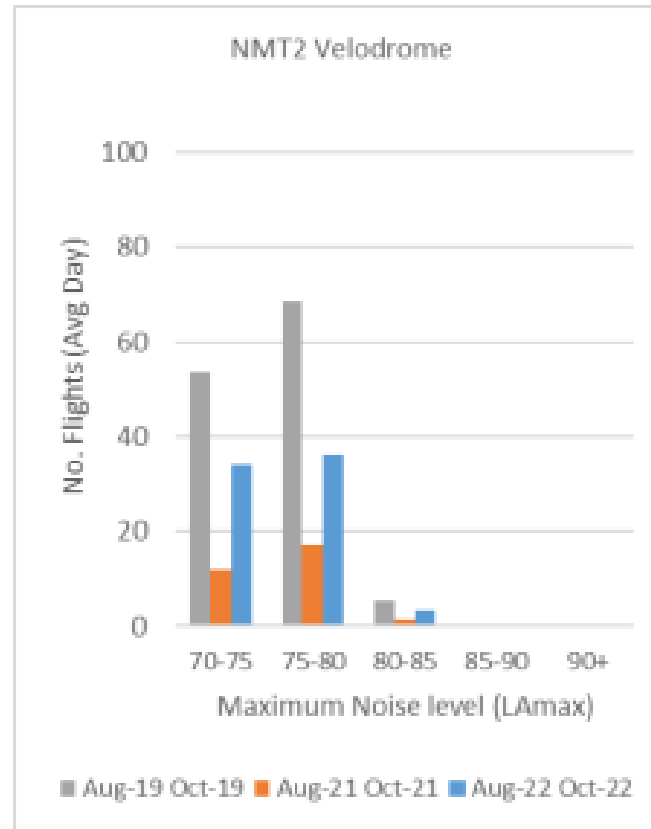
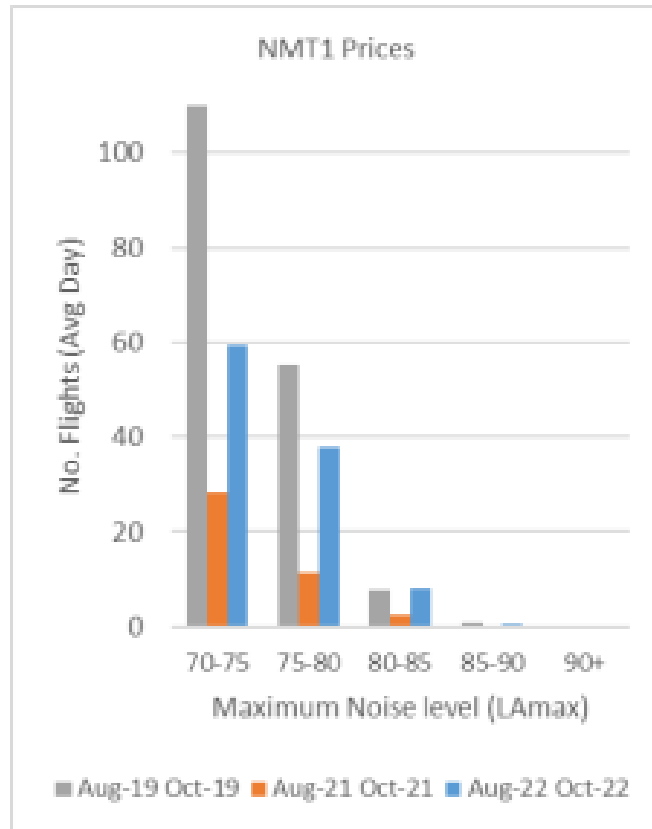
Example of Noise Records for a Flight



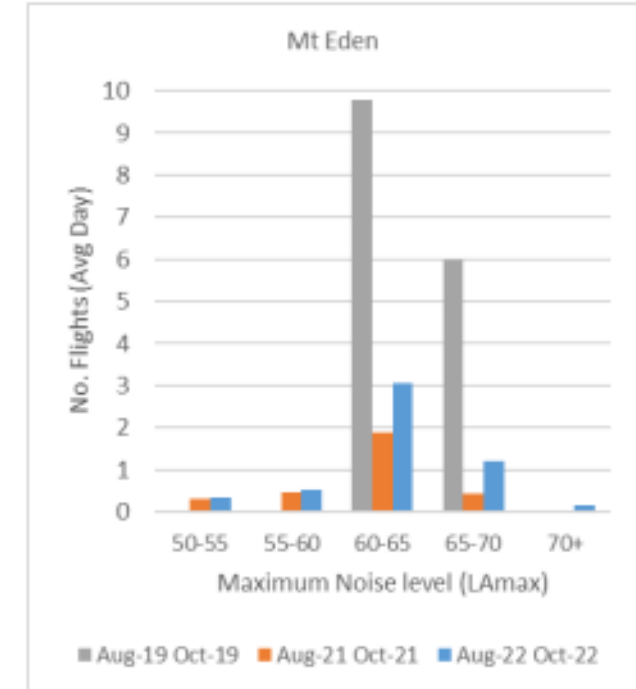
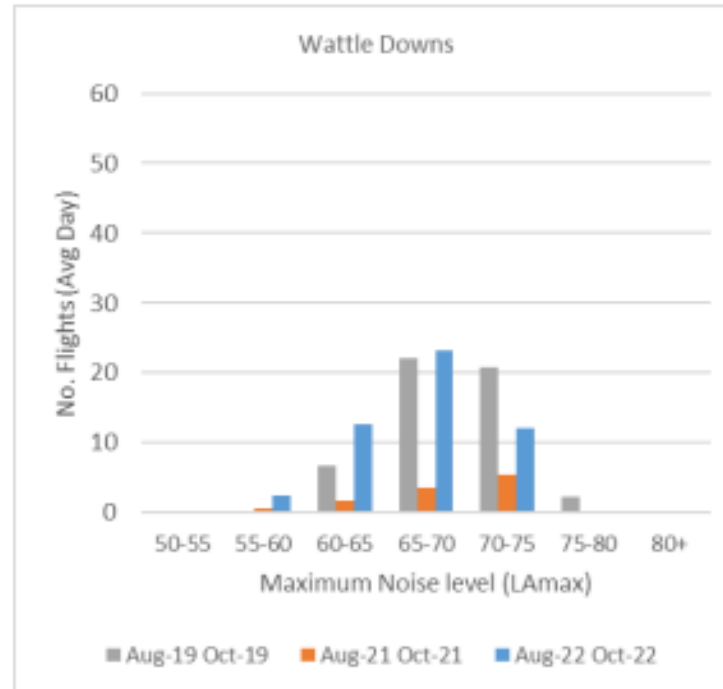
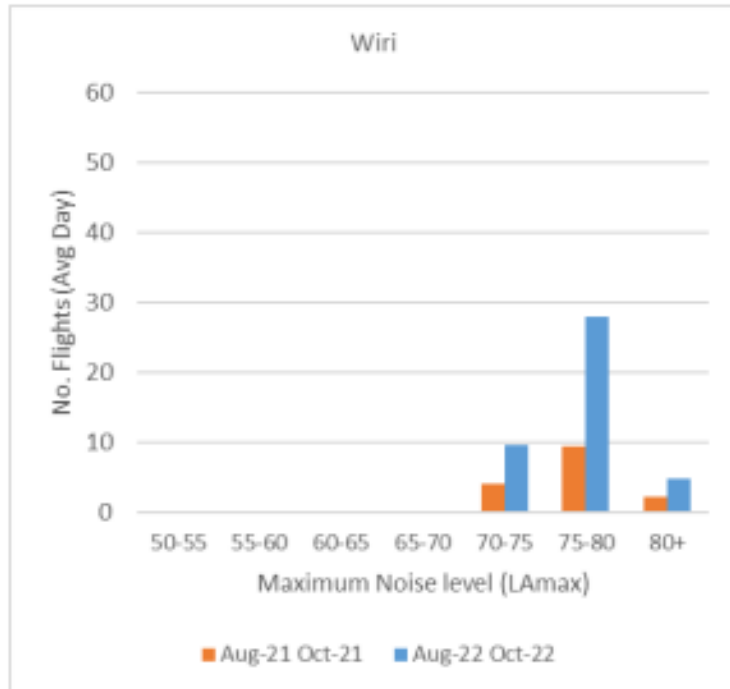
Noise Monitor Results

Location	Installed	Rationale	dB L _{dn} (average)	L _{Amax} (average)	# noise events >70dB (daily average)
Prices Rd	Circa 2000	Designation requirement	57.9		56
Velodrome	Circa 2000	Designation requirement	56.5		35
Puhinui Rd	Circa 2000	Designation requirement	56.4		30
Mt Eden	2015	Installed originally for Green SMART trial. Continued as it captures Yellow/Green/Blue SMART flights as well as conventional arrivals.	39	62	<1
Wiri	2017	Installed as area receives noise above the NZS6805 guidance of 55 dB L _{dn} . Captures Red SMART track flights.	58	74	7
Wattle Downs	2017	Installed to measure noise under the Red SMART track	46	67	9
Clevedon	2018 - 22	Installed in anticipation for the Orange Track trial (trial is still in progress)	31	58	0
Whitford	2019 – 22	Installed to measure noise from the modified Yellow SMART track post trial.	42	60	0
Beachlands	Oct 22	Where the Standard Arrivals path for flights from the North and East turn to join the centre approach			
Flatbush	Dec 22	The edge of the Medium Aircraft Noise Area contour (predicted 60 dbL _{dn})			

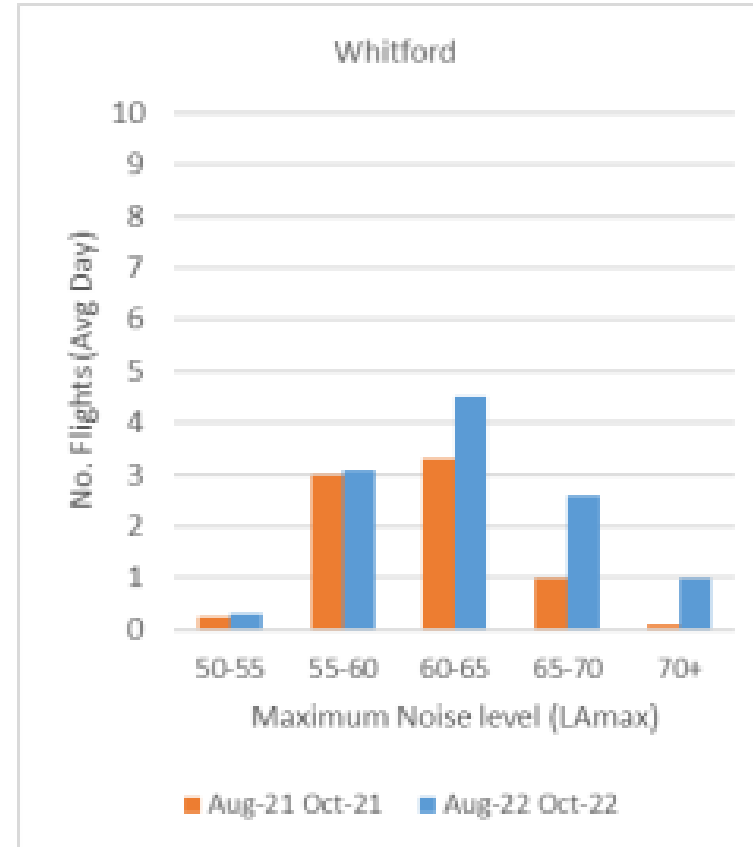
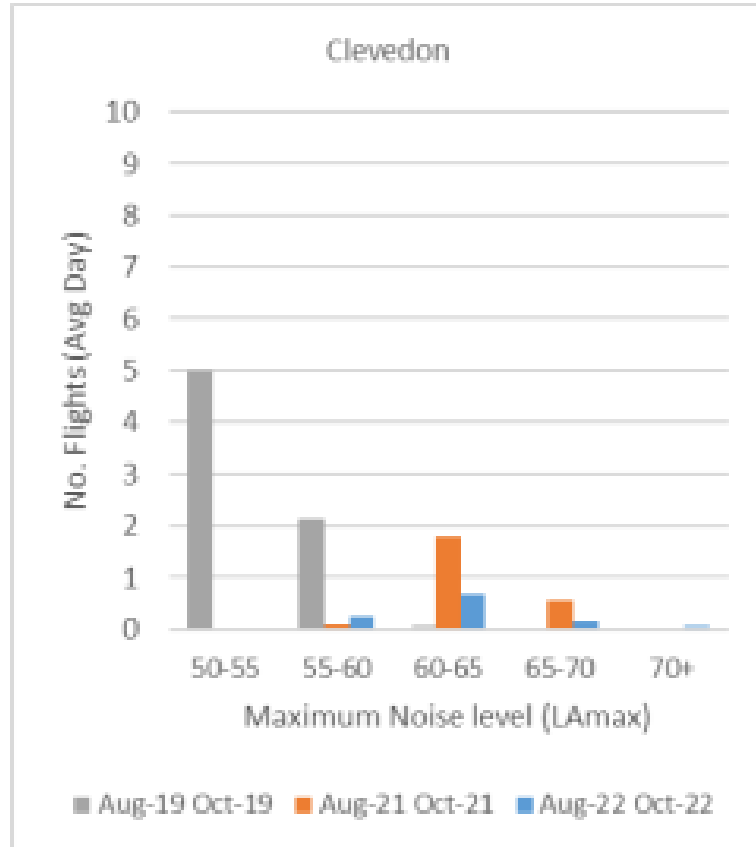
Noise Monitor Results



Noise Monitor Results



Noise Monitor Results



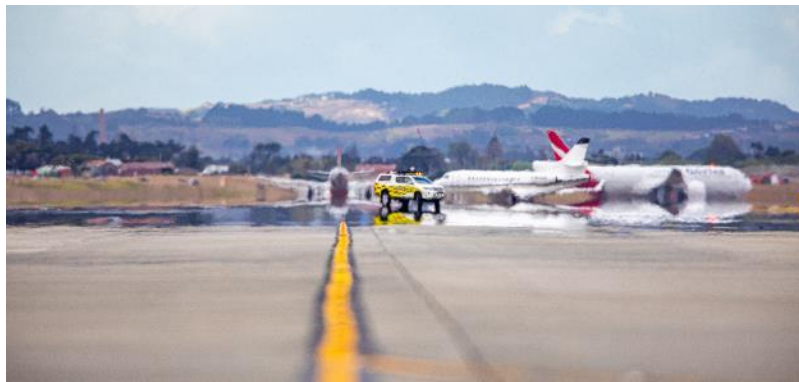
Annual review of noise monitors

Noise monitor locations reviewed every June with the ANCCG.

In 2022 we proposed and ANCCG supported relocating Whitford and Clevedon monitors to Beachlands and Flatbush.

In 2023 we are acquiring a sixth voluntary monitor – to provide an additional short-term monitor plus act as a reserve in case any of the key monitors are destroyed or need longer term repair.

Possible location of additional monitor could be in East Tamaki area under Green Smart approach for arrivals and the departure route for a number of aircraft in easterly wind conditions (which we have been experiencing at greater than historic levels).



Questions?