## **MEMO**



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То:	Auckland International Airport Ltd	Date:	27 May 2024
Attention:	Jeremy Lo	Cross Reference:	ANCCG Report 2023 Q4 Nov-Jan
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From:	Stephanie King	No. Pages:	2 Attachments: No
Subject:	ANCCG - Responses to 2023 Q3 queries		

## Hi Jeremy,

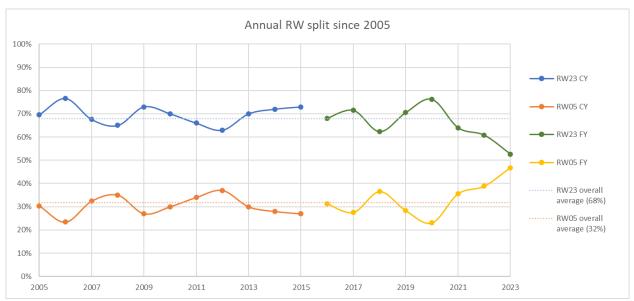
We have reviewed the queries from the ANCCG members from the ANCCG meeting in March and have the following responses.

- 1. Would it be helpful to show the aircraft noise levels for the complaints?
  - Short answer: it would be interesting information but overall, not feasible.
  - Not all complainants have a nearby noise monitor. And now that we've removed the Beachlands and East Tāmaki loggers there are even fewer monitors installed throughout Auckland.
  - For complainants that do have a nearby noise monitor, we have the ability to show the noise level at that monitor. But it might not be helpful information as we'd be reporting incomplete information and it's difficult for a layperson to understand and interpret single event noise levels.
- 2. Should we change the calculation methodology of the FY24 forecast contours? That is should we calculate it using a typical RW split rather than the previous year's RW split (in this case, using a 70/30 RW split rather than a 50/50 RW split)
  - Only the FY23 had an especially abnormal RW bias (see figure overleaf)
  - The current overall average is roughly a 70/30 split (68/32), and this abnormality issue has not happened in the last 20 years. But if the abnormal RW split persists (with changing weather patterns/climate change), we will look into adjusting the typical RW split.
  - Overall, our view is that it is unnecessary to change the methodology as we are following the
    designation. The designation says to use the ANC to calculate the forecast AANC (i.e. use the FY23
    Actual Noise Contour to calculate the FY24 forecast Annual Aircraft Noise Contour).
  - Out of interest, I modelled the FY24 AANC using a 70/30 scenario and there is only a minor change that shows it is likely that the properties "missing out" will be included in the next year's AANC.
- 3. Would it be worth adding a safety factor to the noise modelling?
  - I have looked through past comparisons of the actual measured and calculated noise level, and this is the first time the measured noise level has been larger by this much (2dB at the Velodrome). This is probably due to the higher RW05 usage.
  - Historically, the calculated noise level is usually larger, i.e. conservative.
  - Looking back at these historic comparisons, adding a safety factor would be overly cautious and
    unnecessary. Instead, since it seems we have only had this issue with higher RW05 usage, it would be
    good to update/refine the flight tracks for the next set of contours and see if this changes things.





Figure 1: Auckland Airport runway splits since 2005



Note: From 2005 to 2015 the annual compliance contours were based on the calendar year and after 2015, the annual contours used the financial year.