

Memo

To: Aircraft Noise Community Consultative Group

From: Kylie Higgs

Date: June 2024

Subject: Plane Sense correspondence received 6th May 2024

Purpose

The purpose of this memo is to:

- advise members of correspondence (set out at Appendix A) from Plane Sense, a Wellington-based community group, relating to the upcoming planned redesign by Airways of the current Missed Approach Procedure (**MAP**) at Auckland Airport; and
- provide Auckland International Airport Limited's (**AIAL**) response to matters raised in the Plane Sense correspondence.

Introduction

The Plane Sense correspondence relates to the proposed Divergent Missed Approach Protection System (**DMAPS**) flight path change scheduled to be implemented at Auckland Airport from 29th November 2024. AIAL presented a memo¹ at the December 2023 Aircraft Noise Community Consultative Group (**ANCCG**) outlining the proposed changes, including providing results from Marshall Day Acoustics (**MDA**) on the potential impacts on communities in the Ōrākei and Waitākere Ranges Local Board areas. AIAL also presented directly to the Ōrākei Local Board on the 14 March 2024 and the Waitakere Ranges Local Board on the 23 May 2024 and is currently developing a communications plan to be disseminated to the communities that may be affected by this change.

To understand the matters raised by Plane Sense (many of which are based on the approach taken to DMAPS in Wellington) and AIAL's response, it is helpful to first understand the context of the changes at Wellington Airport and the differences to the changes proposed at Auckland Airport.

Wellington Airport Context

Prior to 1 December 2022, the MAP and the Jet Standard Instrument Departure (**SID**) at Wellington Airport followed the same flightpath. This created complexities because Air Traffic Control (**ATC**) has separation requirements between aircraft on the same flightpath that are required to be met under Civil Aviation Rules².

To overcome this issue, ATC employed unpublished procedures to manoeuvre aircraft that were undertaking a MAP. Changes to the operational environment and enhancements in navigation technology resulted in a reluctance from airlines to continue to use unpublished procedures which were not subject to the same 'safety by design' rigour of published

¹ Auckland International Airport Limited "Memo - Missed Approach Procedure Change", link [here](#).

² Civil Aviation Rules Part 172 Consolidation (2021, 8 Feb), s 172.259 Longitudinal separation by distance, link [here](#)



procedures. Therefore, during 2018 Airways designed a new MAP, called DMAPS (which is a published procedure) for Wellington Airport.

Under the new DMAPS system at Wellington Airport, the Northern SID changed from tracking straight off runway 340° directly north over Johnsonville and Newlands areas to a new track overflying the northern suburbs of Johnsonville, Broadmeadows and Khandallah (see Figure 1).



Figure 1

Residents from Wellington’s northern suburbs have formed a community group named Plane Sense. This group is currently pursuing legal action to have the DMAPS flight path at Wellington Airport altered.

What is the difference between Wellington Airport and Auckland Airport DMAPS?

It is important to outline to members that although both the MAP changes for Wellington Airport and Auckland Airport are named DMAPS, they involve different flight path designs and have different noise effects. The table below outlines the key differences:

	Wellington Airport	Auckland Airport
Tracks impacted	Jet aircraft departing to the North	Turboprop aircraft departing to the North. No change to the Jet departure track.



Number of flights currently departing on the new tracks	On average there are 25 Jet Aircraft departures daily from runway 340°.	Currently 12 turboprop aircraft depart daily to domestic northern airports and aerodromes (Great Barrier Island, Kaitāia, Kerikeri and Whangārei). This increases during summer with peak traffic increasing to 38 turboprop aircraft.
Noise modelling	Wellington Airport commissioned MDA to conduct modelling to predict the noise effects of the flight path changes. The results predicted any impacts would be within <u>reasonable limits.</u>	Auckland Airport commissioned MDA to conduct modelling to predict the noise effects of the flight path changes. The results predicted there would be <u>no significant impact</u> to communities.
Noise monitoring	Wellington Airport installed a temporary noise monitor on 28 October 2022. The monitor recorded noise levels for approximately five weeks prior to the DMAPS flight path changes. The noise monitoring results verified MDA's assessment that any impacts would be within <u>reasonable limits.</u>	Auckland Airport will commission a follow-up study with MDA to validate its 2023 modelling. This follow-up study will include the placement of temporary monitors to capture real time data, pre and post implementation, under the new Turboprop North flight paths for both 23L & 05R

Response from AIAL to matters raised by Plane Sense

The matters raised by Plane Sense directly relevant to the Auckland Airport DMAPS changes are addressed below. Please note that AIAL cannot respond to concerns from Plane Sense relating to Official Information Act information involving Wellington International Airport Limited and Airways Corporation of New Zealand Limited.

Plane Sense Concern	AIAL Response
AIAL is minimising the potential impact on residents of the new flight paths being created for aircraft, where aircraft have not necessarily been concentrated before.	The flight path changes required to implement DMAPS at Auckland Airport involve the movement of Turboprop aircraft that depart to the North. Currently these new Turboprop flight paths (Māngere East – Mt Wellington/Stonefield's and Manukau Harbour – South Titirangi) have Jet aircraft operating over the area. It was, however, important to AIAL to quantify the possible change in noise for the relevant communities. The results of this study were presented to members at the 11 December 2023 ANCCG. MDA's study concludes that the implementation of DMAPS would have no effect of any significance on the overall community noise exposure.
The impacted suburbs don't have ANCCG representation and	The ANCCG membership has Local Board Representatives from both impacted communities



<p>therefore this change could result in an unwelcome shock to the community.</p>	<p>namely the Ōrākei Local Board and the Waitakere Ranges Local Board. AIAL presented the Missed Approach Procedure Change for Auckland Airport³ on 11 December 2023 to the ANCCG where both the Ōrākei Local Board and the Waitakere Ranges Local Board representatives were present. AIAL has also presented to the Ōrākei Local Board on 14 March 2024 and the Waitakere Ranges Local Board on 23 May 2024.</p>
<p>Auckland Airport should undertake a full consultation process before implementation.</p>	<p>A full consultation was not considered pre implementation because the noise report is clear that there will be no effects of any significance on the overall community noise exposure. Full consultation may be considered if the follow-up noise monitoring study indicates this is not the case.</p>
<p>AIAL won't deliver the community communication plan presented in the Missed Approach Procedure Change for Auckland Airport Memo at the 11 December 2023 ANCCG.</p>	<p>AIAL has been working with the Ōrākei Local Board and the Waitakere Ranges Local Board to develop a communications plan. This draft communication plan will be presented at the June 2024 ANCCG to allow for feedback before the plan is finalised and implemented ahead of the introduction of DMAPS at Auckland Airport in November 2024.</p>
<p>Marshall Day Acoustics (MDA) modelling data may not be accurate.</p>	<p>MDA is a highly regarded acoustic consultancy, certified in accordance with ISO 9001-2015, that AIAL engages for its specialist skills in acoustic analysis. MDA was commissioned to complete a study to quantify the possible changes in noise from the implementation of DMAPS. AIAL is comfortable with the results of the initial study, however, to provide further reassurance to the community we are commissioning a follow-up study with MDA to validate the initial 2023 modelling. This follow-up study will include the placement of temporary monitors to capture real time data, pre and post implementation, under the new Turboprop North flight paths for both 23L & 05R. The results from this study will be presented to the ANCCG at the March 2025 meeting.</p>
<p>The increase in decibel levels proposed by Marshall Day in your Mangere East and Mount Wellington - Stonefields suburbs, of +10dB is concerning. There is a focus on average noise (including periods aircraft aren't operating) vs peak/ambient noise.</p>	<p>MDA has sent the below response:</p> <p>MDA is not proposing noise levels, rather we have predicted what may occur in practice.</p> <p>The report clearly acknowledges a potential increase of individual aircraft flyover noise levels up to 10 decibels for a given event using the new DMAPS procedures. The assessment considers both:</p> <ul style="list-style-type: none"> • the individual noise level from specific events; and

³ Auckland International Airport Limited “Memo - Missed Approach Procedure Change”, link [here](#).



	<ul style="list-style-type: none"> • the noise exposure level when all aircraft events are considered. <p>The individual noise level assessment is important because it allows consideration of the change of noise levels from a single event. However, the noise exposure level is also important because it allows an assessment of the number of such events that occurs, as well as taking account of the absolute noise level of each event.</p> <p>The two methods are complimentary, and there is no focus on one over the other. A 10 decibel increase in noise level would be considered significant. However, the increase in absolute noise level (to a noise level typical of other common environmental noise sources that would be present) combined with the small number of events would mean there is unlikely to be any discernible noise effect.</p>
<p>Please consider the effects of mental health with increased noise, lack of sleep and stress, there will be residents suffering with mental health in your community.</p>	<p>Aircraft noise is an issue for airports all over the world and Auckland Airport partners with airlines, government agencies and the community to ensure how we manage aircraft noise reflects international best practice.</p> <p>There are six main things Auckland Airport, and the aviation industry is doing to manage aircraft noise:</p> <ul style="list-style-type: none"> • developing quieter planes • designing smarter flight paths that generate less noise over residential areas • working to avoid the establishment or intensification of activities sensitive to aircraft noise (such as residential dwellings and schools) near the airport • giving the public direct and timely access to aircraft noise information so anyone can monitor, and enquire about, specific flights online. • providing noise mitigation packages for qualifying homes, preschools and schools located within the high and moderate noise contours for the airport; and • supporting the health and well-being of our neighbours in communities which are most affected by aircraft noise.



Appendix A: Correspondence received from Plane Sense on 6 May 2024

Kia ora,

We are a Wellington-based community group and are reaching out to you about the proposed DMAPs flight path change in Auckland. Please can you forward our email on to the Auckland Airport Aircraft Noise Consultative Group and confirm receipt of this email.

The DMAPs flight path change happened in Wellington on 1 December 2022 and we are pushing back against the path because of the resulting excessive increased noise. We would like to provide your committee with information that we think will be helpful and hopefully constructive for you/your residents. Through our research, we understand that Auckland Airport issued a memo in December 2023 to the Aircraft Noise Community Consultative Group with details of the planned DMAPs flight path change in Auckland, for November 2024. We have read this and have the following feedback for you, based on our experience here in Wellington. You can find extensive research, FAQs, resident impact stories and information on our website, including details from Official Information documentation obtained from Airways - planesensewellington.com

Whilst Auckland Airport has briefed you prior to the implementation of DMAPs (which wasn't the case with Wellington Airport), we are concerned that Auckland Airport is repeating potentially misleading information and mistakes. We are also concerned that the Airport is relying on Marshall Day's modelling data, as did Wellington Airport.

Our concerns, about the 11 December 2023 Memo: Missed Approach Procedure Change, based on our experience in Wellington, are:

- New flight paths are being created for aircraft, where aircraft have not necessarily been concentrated before (Figure 4. Mangere East – Mt Wellington/Stonefield's and Figure 5. Manukau Harbour – South Titirangi). Whilst it appears your current flight path is being used for the jets (unlike in Wellington), Auckland Airport is using similar/the same language minimising the potential impact on residents (AA appreciates that the change to flightpaths proposed by Airways under the DMAPS project may be noticed by some residents. While aircraft will not be present in areas that they have not been in before, some people will notice fewer flights, while others notice more).
- If, as is the case in Wellington, these suburbs don't have representatives from their community on your committee this could be an unwelcome shock resulting in backlash. It could be worth asking Auckland Airport for a full consultation process before implementation. Whilst this memo ends with a statement about a resident communication plan, communication plans were discussed between Airways and Wellington Airport from November 2021 to implementation on 1 December 2022, but the first communication was a webpage update on 20 December 2022 in response to the first complaints. Official Information documentation shows that Airways communicated to Wellington Airport that the local community could be a 'roadblock' and that "impact frequently comes down to perception, influenced by publicity". Please be mindful that Airways is aware of the backlash in Wellington while it has sought approval for implementation in Auckland.
- It is important to note, that Plane Sense has uncovered OIA information suggesting there were internal concerns about the safety of DMAPs in Wellington due to gaps, and it wasn't universally supported. Including an Air Traffic Control staff email that we



obtained via the Official Information Act that details concerns about reducing gaps between flights.

- Plane Sense has investigated the sustainability information released about Wellington DMAPs and considers the information to be 'green-washing'.

- We are concerned for your residents that Auckland Airport is making decisions based on Marshall Day modelling data. Wellington Airport did the same and the actual noise differs greatly from the modelled data. We recommend you ask Auckland Airport to install sound monitors along the new flight paths (where residents will be most affected) to collect pre-implementation flight path data. This was not done in Wellington before DMAPs was implemented. We did get sound monitors installed after implementation but we now do not have comparable data to push back with. Our otherwise quiet suburbs experience single noise event increases of 30-40dB when jets fly over our suburbs and this disturbs residents from the early morning until late at night.

- As this memo states, missed approaches are rare. In Wellington, DMAPs was implemented for 1 missed approach in 270 flights, meanwhile, residents are experiencing the effects of noise for every departure flight.

- The increase in decibel levels proposed by Marshall Day in your Mangere East and Mount Wellington - Stonefields suburbs, of +10dB is concerning. Particularly if, as in the Wellington case, the modelling is inaccurate and results in further increased noise. We appreciate as a committee representative you are aware of Marshall Day's measurements, however, a frustration of our community is the focus on average noise (including periods aircraft aren't operating) vs peak/ambient noise. Residents don't experience averages, they experience sudden noise events. You may be able to input into the measurement criteria Marshall Day uses to evaluate noise after implementation, as we did post-implementation.

- Whilst some residents will experience less noise, residents make decisions on where to settle for their health and well-being needs and you, like us, may have young, elderly and vulnerable people who would never have settled under a flight path for these reasons. We believe it isn't fair to compare those who knowingly settled under a flight path with those who purposefully didn't. Please consider the effects of mental health with increased noise, lack of sleep and stress, there will be residents suffering with mental health in your community. This could have serious repercussions for members of your community - as it has ours - planesensewellington.com/people.

- In case it is helpful, this is the email address for Wellington's Ministry of Health Public Health, with whom we have been in constant contact and who have attended our meetings with the Airport and Airways. They may be able to advise who you can contact in Auckland for guidance. Please note our contacts have organised for a consultant to evaluate the noise in Wellington and this may be an option for you also.

- Please note, Official Information documents obtained indicate that Airways and its subsidiary Aeropath Limited designed and promulgated DMAPS on technical grounds without regard to section 4(1)(c) of the State-owned Enterprises Act 1986, namely that it is required to be "...an organisation that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates and by endeavouring to accommodate or encourage these when able to do so."



- Once implemented, Airways will be VERY opposed to considering alternatives, even with post-implementation data. Whilst Auckland Airport's reassurance about collecting this data is comforting, Airways is single-minded when it comes to DMAPs. You may be able to establish some agreement with Auckland Airport about metrics for change if noise levels are excessive.

We feel it is our responsibility to share information of the DMAPs flight path change with the communities involved. We will soon release a public awareness post in local community social media groups in Auckland, to ensure this information is shared. We are not comfortable withholding any information that could have safety implications, and in this case that includes resident health and wellbeing.

Our committee is currently considering a Judicial Review, to have the previous flight path reinstated by court order. If we are successful this could set a precedent, should the Auckland community need to leverage that in the future. We are at the stage of fundraising right now and are searching for donations - should any of your community wish to invest in our cause, in case it helps them going forward.

Please find out more by visiting planesensewellington.com (and please see our FAQ page here - planesensewellington.com/faqs).

