

Memo

To: Aircraft Noise Community Consultative Group

From: Catherine Harland, ANCCG Independent Chair

Date: 7 June 2024

Subject: Chair Reflections

Purpose

To reflect on my time since February 2019 when I became Independent Chair of the Aircraft Noise Community Group (ANCCG) and provide some thoughts for the future as my term concludes in July 2024.

Recommendation

That members of the ANCCG receive the report of the Independent Chair and note:

- (a) the initiatives progressed over the last five years;
- (b) areas for future work; and
- (c) opportunities to progress initiatives for Auckland and lifting information and practices within the wider network of airport consultation groups.

Acknowledgements

Firstly, I would like to thank Auckland International Airport Limited (AIAL) and Auckland Council for appointing me to serve in the role that has traversed a period from the highest number of aircraft operations per month and Unitary Plan provision in 2019 for a future Northern Runway, down to the lowest flight operations due to the Covid pandemic and is now well along the recovery pathway back to pre-pandemic levels.

I would also like to thank the many former and current supporting staff and consultants that have assisted complainants and provided input to the work of the ANCCG over that period. It includes, but is not limited to, the following:

AIAL

Charlotte Day (Aeronautical Performance and Policy Development Manager)
Emma Howie (Manager Statutory Planning)
Matthew Dugmore (Statutory Planner)
Kristina Cooper (Manager Operations Policy & Integrity)
Steve Hardwick (Operations Knowledge Manager)
Helen Twose (Communications Manager)
Jeremy Lo (Operations Risk and Assurance Business Partner)
Kylie Higgs (Head of Operations and Risk Assurance)
Andrea Marshall (Head of Master Planning and Sustainability)

Auckland Council

Phil Wilson (in his previous role as Director Governance & CCO Partnerships, now Chief Executive)
Nicholas Lau (Senior Policy Planner)
David Wong (Principal Planner)
Louise Mason (General Manager Local Board Services)

Marshall Day Acoustics - Consultants

Laura McNeill, Pranaya Thaker, Steve Peakall, Stephanie King

Industry

Justin Tighe-Umbers (BARNZ); Cath O'Brien, Patrick Whelan and Hugh Pearce (BARNZ), James Evans (Airways), Sophia Healey (Airways), Geoff Hounsell and Karl Taylor (Airways)

All the above along with other past, current and alternate members of the ANCCG have enabled positive progress across a range of aircraft noise matters. In particular community representatives Mark Easson and Helen Futter have gone the extra mile to raise questions, identify options, push for improvements and actively participate in having changes made. Local Board members have also contributed their concerns on behalf of the various communities they represent. That energy is valuable for creating space to investigate and explore opportunities for change. Thanks to you all.

Summary of Initiatives

Over the years, there have been a range of initiatives progressed to help mitigate aircraft noise, community concerns, and to enhance the operation of the ANCCG itself. These are set out in the sections below.

A. Air Management Initiatives

Initiatives set in place prior to my involvement were progressed or enhanced further by AIAL and Airways with support of the airlines and BARNZ, as follows.

SMART Approach Flight Paths

- Four SMART approach flight paths operated for some years (2 from north and 2 from south):
 - Black Y05 first implemented 2011 - 24hrs per day & uncapped volumes
 - Implemented following 2012/13 trial: Blue X05A & Green X23A – 7am-10pm & 10 per day max; Red Y23 – 7am to 10pm & uncapped – domestic arrivals
- A fifth SMART approach (third from the north) Yellow U23 was trialled (Sep 2015-Aug 2016), modified post public feedback to become U23A, and then permanently introduced on 31 March 2019 – 7am to 10pm & 6 per day max with the ability to increase to 10 per day subject to certain conditions and consultation with the ANCCG.
- The sixth SMART approach (third from the south) Orange S23 was trialled (with a track adjustment) during 2019, however it was impacted by the COVID-19 lockdowns, so the trial recommenced (Oct 2020-Sep 2021), and with minimal noise impact arising in the Clevedon area with no complaints from residents, it was permanently introduced in late 2021 – 7am to 10pm & uncapped volumes.

Night Flights - STARs (Standard Instrument Arrival) and SIDs (Standard Instrument Departures)

- Night STARs for Runway 23L between 11pm and 6am take over 60% of Tasman traffic clear of the city i.e. Brisbane Night STAR crosses north of Auckland (also used by any North Australian flights); Melbourne Night STAR crosses south of Auckland (also used by any South Australian flights).
- A series of flight path initiatives resulted in changes that mean when Runway 05R is in use at night (11pm to 6am) arriving international aircraft no longer fly over the city but cross to the north or south avoiding that area. Arrivals from a range North American and Pacific Island airports cross North of Auckland and subsequently turn west to join Runway 05R, or arriving aircraft (e.g. from Eastern North American airports such as New York, Chicago, Houston) fly south via a new track over the Coromandel crossing north of Thames township to then join the Domestic flight path tracking south of Papakura over the Franklin area and arriving from the South of the City.
- The above initiatives were supported in part by funds released from withdrawal of the Mt Wellington noise monitor in June 2021 for a period of 15 months (during the Covid pandemic when flights were minimal) being reallocated by AIAL to enable Airways to redevelop North American Night STAR routes, with the permanent changes in place since December 2021.
- Airways testing confirmed it was possible to raise the altitude at the LOSGA waypoint by 1,000ft (from 6,000 to 7,000 feet) for night flights arriving from various destinations via the Sydney Night STAR Track without unintended consequences (eg aircraft needing to deploy flaps to reduce speed at Beachlands when turning at the VIBAG waypoint when there is a tail wind). The 7,000ft altitude at LOSGA for Sydney Night STAR Arrivals Track on Runway 23L was confirmed with CAA, Aeropath was engaged to proceed and it was implemented on 10 August 2023.

Other air management initiatives

- A substantive Discussion Document reviewing options for managing Sydney Night flights arriving on Runway 23L was prepared by AIAL with input from Airways (see 14 Mar 2022 Agenda Item 7 and accompanying slide pack). It was prepared in response to requests from the Ōrākei Local Board Representative seeking a Sydney Night STAR to be developed which removes these flights from over-flying central Auckland. Supplementary information was provided at the June 2022 meeting and a further decision paper was provided to the September 2022 meeting. The latter drew together information in the earlier papers, feedback from ANCCG members at the meetings and via an on-line survey or in discussions. Taking into account all the material and feedback, AIAL decided to retain the existing approach for Sydney night flights via the Central-Western route and work with Airways to raise the aircraft height at LOSGA by 1,000ft.
- In March 2022 Kristina Cooper alerted the ANCCG to a recent noise-related decision by Auckland Airport to decline a new request for permission to have five landings per day four times per week by an Ilyushin “Chapter 2” type aircraft (banned due to its noise profile under CAR 91.803) that the Ministry of Transport had approved to operate services in NZ.
- In February 2023 Airways commenced trialling an early morning (before 0700) flight path on Runway 05R for departing South Australia bound narrow body aircraft to turn much sooner after take-off and fly over the Manukau Harbour earlier to avoid flying over Manukau/Chapel Downs/Totara Heights/Conifer Grove residential areas. That was subsequently confirmed and introduced in July 2023.
- A trial of the Runway 05R early turn for narrow body aircraft departing to Sydney was signalled as a possibility dependent on the outcome of the South Australian initiative. It has yet to occur.
- Fleet changes have resulted in older, noisier aircraft being replaced. For example, during the Covid-19 period Air NZ halved its 777 fleet and replaced these with the considerably quieter 787 aircraft. The result being it is predominantly 787s or A350s flying from Asia to Auckland Airport.
- In October 2023 Airways commissioned new equipment that automates the issuing of departure instructions and flight routes based on the time of day. It replaces the need for manual intervention for issuing noise management initiatives eg. Night STARs.
- Previous initiatives in place for many years and worth noting include: Enforcement of 250kts maximum below 10,000ft at night over built-up areas; Most North American, Rarotonga and Tahiti flights off Runway 23L are turned left passing south of Papakura; All departures over built-up areas between 10pm and 7am remain on SIDs; Jets not allowed to do Visual Approaches from north of the Runway Centreline at any time; Non-Jet SIDs turning north at 500ft not used between 10pm and 7am.

B. Noise Mitigation Initiatives

The Airport’s Noise Mitigation Programme is a requirement under the provision of the Auckland Unitary Plan (prior to that the Manukau District Plan) and has been operating for many years. There are two main aspects to the mitigation required.

1. Noise Mitigation Packages (“NMP”)

The first relates to managing the effects of aircraft noise via mitigation packages offered on annual basis to owners of homes (built prior to December 2001) located in the high aircraft noise area (“HANA”) and the moderate aircraft noise area (“MANA”). NMP installations are subsidised by Auckland Airport, 100% if located within the HANA and 75% if located within the MANA via the Auckland Airport Community Trust. People in the MANA who are in financial hardship can apply to the Trust for funding to cover the remaining 25% of the cost. Initial legal advice (up to \$300 exc GST) and registration of a covenant on the property’s Record of Title (up to \$1,500 exc GST) are also covered by Auckland Airport.

Over the past five years the ANCCG has provided feedback to the AIAL with a view to enhancing awareness of the programme through the affected community including:

- During the Covid pandemic period the reduction in flights meant the Annual Aircraft Noise Contours (“AANC”) contracted significantly reducing the eligible properties accordingly. However, in response to ANCCG feedback, AIAL chose to continue offer the NMP to properties located in the pre-pandemic 2019-2020 AANC, notably going beyond what was strictly required.
- Translations into other languages (Te Reo, Hindi, Mandarin, Tongan, Samoan) of the overarching “Managing Aircraft Noise in the Community” fact sheet brochure (available on the website) and offer letter were initiated.
- The brochure itself was iterated to become clearer with the latest version now entitled “Noise Relief Packages – Are you eligible?” website link [here](#). Access was also improved to the interactive online map to show whether a property is eligible or not, link [here](#).

- Offer letters are now provided to the physical address of eligible properties known to be rented, not just to a property owner's address, enabling tenants to draw the opportunity to the attention of their property manager/owner. The cover envelope of offer letters was also enhanced to entice recipients to open the letter to learn more about the NMP.
- Advertising of the annual offer was broadened with greater use of social media, local radio as well as print newspapers, and most recently a targeted online advertising campaign. Community posters are erected in key locations and notices are also used.
- Community Information Sessions were previously by invite only, but that was opened up to be held in more public, community spaces.

AIAL has also progressed other initiatives to help overcome barriers to participating in the programme including information sharing on the covenant registration process with law firms in the South Auckland area and instituting a change in project managing the physical installation of the NMP, along with improved post-installation "close-out" checks and information provision.

AIAL is also alert to potential Auckland Unitary Plan changes or other initiatives with a view to avoiding intensification of or establishment of Activities Sensitive to Aircraft Noise (ASAN).

2. Auckland Airport Community Trust ("AACT")

In accord with the Operative Manukau District Plan 2002 the AACT was formally established through a Trust Deed signed on December 11, 2003 and officially registered on January 9, 2004. An initial contribution by AIAL of \$250,000 was made with a requirement for annual contributions (adjusted for CPI inflation) thereafter. Five trustees are appointed (2 AIAL, 2 Auckland Council - independent, 1 ANCCG – Nick Bakulich was appointed at the 4 March 2019 meeting) and serve 3-year terms for no more than 9 years. The Trust is required to hold and apply the Trust Funds for charitable purposes for the benefit of those living and working in the Area of Benefit and affected by noise from aircraft operations.

As identified above, the Funds are used to subsidise the NMP and are also distributed in grants to "support learning opportunities for children and young people, improve the health & well-being of the community, support inclusiveness, promote diversity and bring communities together". Since its creation the AACT has distributed more than \$5.5 million in community grants.

As part of the ANCCG's Work Plan, the AACT now attends and formally presents its Annual Report and outcomes to the Group.

C. Complainant and General Information Initiatives

The ANCCG has also focused on improving mechanisms for complainants and addressing the "information asymmetry" that inherently exists within the Group whereby industry members and supporting consultants and specialists have greater information/knowledge. A lack of understanding can constrain the ability of non-industry members to effectively pursue the purpose and activities of the ANCCG. Steps taken include:

Complainant Initiatives

- Information on the Auckland Airport website relating to noise matters and the ANCCG was incrementally improved over time with a series of wording and text formatting changes. ANCCG Community Representative Helen Futter worked closely with airport staff on these aspects and is thanked for her dedication to that.
- In September 2022 the noise section of the Auckland Airport corporate website was being revised to simplify its structure to six key areas in order to improve navigability for members of the public, and that structure remains in place (link [here](#)):
 - Understanding aircraft noise
 - Noise Mitigation Programme
 - Community engagement on Aircraft Noise (ANCCG information appears here)
 - Auckland Airport Community Trust
 - How to Make a Complaint
 - Flight Paths
- Complaints/Enquiries are generally submitted online using a standard form within the CASPER online flight monitoring system. Complaints related to an aircraft flight do not have to be made instantaneous with the event which can be particularly unsettling if sleep is disrupted. Instead, individuals can note down the day/time and then go online when it suits them to submit complaint

details and identify the specific flight involved (flight details remain online for public use for 30 days).

- A deep dive into options for improving CASPER during 2023 resulted in reordering and three additional categories being added to the primary reason's list ('Too frequent'; 'Vibration' and 'Ground noise'). The option to add a secondary cause for complaint was not progressed.
- Given the diverse array of Languages Spoken in different Local Board Areas (Census 2018 analysis, see Sep 2023, Item 10), it was recommended that users be advised to open the Flight Tracker and Noise Complaint Form in Google Chrome to activate the translation plugin if it was preferable for them to use a language other than English. That prompting advice is now provided in a number of relevant places on webpages.
- The option of calling Auckland Airport's noise enquiry centre on 09 256 8133 and the addition of a freephone 0800 466473 (0800 4 NOISE) number to minimise costs for complainants, was made more explicit on the website. Calls can be made 24 hours x 7days.

Information/Education Initiatives

- On becoming the Independent Chair in 2019, it was apparent to me that the sector was overwhelmed with specialist terms and acronyms and the Quarterly and Annual Noise Reports provided glossaries limited in scope with a focus on noise. The wider aviation, resource management, regulatory and other terms that arise in ANCCG were not covered. To address that I felt a more comprehensive Glossary of Terms for use by members and the wider public could be developed and improved over time as a readily accessible resource. As Auckland Airport was not administratively resourced to provide that support, I voluntarily developed the first iteration (7 May 2020). It took a substantial amount of time to research and develop easy-to-understand explanations and was subsequently updated (version 2-30 May 2022). As new matters emerge (eg DMAPS) and links to website documentation change, it is appropriate that the Glossary of Terms continues to be iterated and updated, my expectation being that AIAL support staff will proactively update it and every 18 months check-in with ANCCG members as to aspects they might see as valuable additions for republication.
- Induction for non-industry members of the ANCCG had primarily consisted of a Noise 101 presentation by Marshall Day Acoustics, along with ad hoc educational presentations over time from various parties (e.g. Airways, Aeropath, CAA). The result being that new Local Board members, their alternates and other lay-representatives were left struggling to understand aircraft noise issues and how they could assist to beneficially progress matters for affected communities. Ella Kumar and Bobby Shen (previous Puketāpapa Local Board ANCCG member and alternate) picked up the challenge and worked closely with Kristina Cooper from mid-2021 into 2022 to develop a formalised Induction Programme that took into account July 2021 survey findings and other suggestions made by ANCCG members. The result being:
 - A more comprehensive Chair's Welcome Letter and information pack provided to new and returning members in December 2022, compared to 2019.
 - An induction and refresher training day for new (and interested existing) ANCCG members on 13 February 2023. The induction involved speakers from Auckland Airport on CASPER, NMP, Northern Runway, Auckland Airport Community Trust, Marshall Day on acoustics and aircraft noise, Airways on the development of flight paths, BARNZ on airline roles in managing noise and flight paths and Russell McVeagh overviewing the regulatory framework surrounding Aircraft Noise and other topics. The day was to be in-person but switched to online Teams due to the anticipated arrival of adverse weather from Cyclone Gabrielle.
 - The visit to the Airways Contingent Control Centre was subsequently held on 12 June 2023.
 - Reflections post-induction indicated it would have been beneficial to have a pilot's perspective on the day, to bring a technical perspective and explain aspects such as the effects of tail wind, flaps, and speed break deployment on an aircraft. (Hugh Pearce presented on those aspects at the 12 June 2023 ANCCG meeting).
- On-going information and education sessions occur in response to matters raised at ANCCG meetings or where opportunities arise eg. in-person visit by Australian-based CASPER senior executives, or by online attendances.

D. ANCCG Operations

The general arrangements and administrative protocols for the Group have moved to a more structured approach. These are now more closely aligned with the systems local government members of the Group are familiar with, enabling greater transparency of the ANCCG's work for both members and the public.

Key meeting protocols introduced have been:

- Agendas circulated to members 10 days in advance (allowing members flexibility in terms of time for review)
- Introduction of Matters Arising section to track actions raised and progress over time with addressing and completing these.
- Introduction of a rolling Work Plan to ensure key presentations, annual and less frequent activities are captured and scheduled for ANCCG consideration. That has been beneficial in guiding supporting staff, consultants and industry especially when changes in personnel have occurred.
- Draft minutes circulated post the meeting for member review and structured to clearly identify attendance (in-person or online) by members/alternates and others in attendance. Once member feedback is given, the draft minutes are able to be posted on the website, in advance of formal confirmation at the subsequent meeting.
- The Covid pandemic prompted the move away from fully in-person to online Teams meetings in June 2020. Since restrictions eased, a hybrid approach has been adopted. The benefits include a reduction in down-time and costs for members due to travel which in my view has facilitated attendance, particularly by elected members (Councillor and Local Boards). It also reduces costs and facilitates attendance by industry specialists and consultants who provide input to aircraft noise matters. Costs for hosting the meetings substantially reduced as Auckland Airport no longer hires a space at a nearby hotel, nor provides large group catering. The downside is less opportunity for face-to-face interaction on more significant matters and informal engagement.

Reporting changes:

- The Quarterly Aircraft Noise Monitoring report has had incremental changes over time to provide additional analysis and information that more clearly explains to ANCCG members and members of the public what the tables, graphs and figures mean. The changes include:
 - Slide pack to include the notes prepared by Marshall Day Acoustics (MDA), enabling pre-reading by members and review by members of the public who access the material via the website.
 - Showing time of day and aircraft types over four quarters; Runway use over 13 months so same month year on year comparison is shown; Additional SMART approaches included (e.g. Yellow U23 and Orange S23); Marking particular spikes in noise complaints on graphs to explain basis of these (e.g. Aug-Oct19 high spike due to one person; Nov22-Apr23 spike due to two people in East Tāmaki and May-Jul23 spike due to one person in Titirangi); Clearly identifying Local Board areas on Map of Noise Complaints; improved categorisation of suburbs into areas where complaints are made; Showing noise complaints over four quarters for time, runway, aircraft type and operation (landing/takeoff); Including complaint location on image showing flight paths and height of specific aircraft identified; New table outlining noise monitor maintenance work to give assurance that monitors are regularly being maintained and checked with repairs undertaken as required (eg noise monitors being recalibrated and microphones or hardware replaced as required); Improved marking of gaps in rolling noise exposure information for all monitors and a new table showing the annual (FY) noise exposure for permanent monitors; Standardised x-axis band grouping displays for noise event graphs for temporary monitors; Improved title descriptions and explanatory notes on slides; Inclusion of pre-pandemic data for comparison purposes where relevant.
 - Scrutiny of the information provided also resulted in further investigations and work being undertaken to improve correlation of aircraft operations and captured noise events on the permanent noise monitors (particularly the Velodrome) where results had been less than 80% which is considered reasonable.
- A general move to more formalised reports and memos for key issues, rather than relying on verbal updates. That enables non-attendees to provide input and for prior information to be re-presented to members as they change or where past information provided has been overlooked.
- Inclusion of regular written, quarterly reporting on the Noise Mitigation Programme to enable a focus on improving approaches for offers and reporting on outcomes.
- An annual presentation of the Auckland Airport Community Trust Annual Report.
- As a minimum, annual reporting reviews of both noise monitor locations and noise complaint procedures including CASPER complaint system.
- Opportunity for early discussion and input by the ANCCG in relation to current and potential future noise reduction initiatives for inclusion in AIAL's required Financial Year Annual Noise Management Report. Previously the ANCCG had limited input as it received the fully developed report immediately prior/at the same time as it was submitted to Auckland Council.

Other areas of change

- Practice of facilitating alternative appointments by Local Boards embedded in process post the last election, and also making that more explicit for the AIAL, BARNZ and Airways quorum members.
- Position Descriptions developed and adopted for Representatives of the Governing Body, Local Board, Community and Industry. A Position Description also developed for the Independent Chair role.
- Code of Conduct for all ANCCG members (adopted and endorsed 13 June 2022).
- Process for enabling mana whenua (Te Ākitai Waiohūa Iwi Authority and Te Ahiwaru) engagement on aircraft noise issues worked through in discussions and modified from May 2022 via notification to Auckland Council. Engagement and input to become part of the monthly AIAL kaitiaki meetings that cover Statutory Planning matters amongst other items. AIAL would seek feedback via the Kaitiaki Forum and pass that onto the ANCCG. Te Ākitai Waiohūa Iwi Authority and Te Ahiwaru remain members of the ANCCG, continue to receive all materials and are able to attend meetings at any point.
- As part of the three-yearly review of Community Representative appointments, AIAL identified a well-qualified candidate that lived within the HANA noise contour area and could add value to the ANCCG. As such, the AIAL considered it appropriate to voluntarily fund having three community representatives from December 2022. The move would provide resilience if a community representative was not able to be present and future resiliency if one of the two existing community representatives needed to step down during the term. The addition of a fourth community representative was considered by the ANCCG and at the September 2023 meeting results from a questionnaire of members indicated the majority view was to not add a fourth Community Representative.

Future Work, Observations and Opportunities

Having reviewed the initiatives and noting some substantive improvements, there is more that can be undertaken. Some are administrative and require sufficient AIAL and Auckland Council staff resource with specialists accountable from across internal divisions to be applied, others require industry collaboration to focus on mitigating and avoid aircraft noise impacts for the people that live and work beneath the flight paths and close to the Airport runways. Other opportunities and risks arise when looking to the medium-long term future.

Outstanding tasks

- **ANCCG Terms of Reference (ToR) Review.** As part of updates arising from the Northern Runway designation process (concluded in 2019), minor alterations to the ToR occurred but these did not take into account many practical aspects of the ANCCG operations. It is timely to address these (see 10 Jun 2024, Agenda Item 7). In addition, if Auckland Council's six yearly review of representation arrangements (currently underway) affects the future structure of Local Boards wording should provide for incorporation of potential changes.
- **Procedures for Public Component of the Meeting.** These were developed during the tenure of the previous Independent Chair and adopted at the ANCCG 17 June 2017 meeting. Minor administrative wording updates were made in September 2021. A review to ensure obligations and examples are up-to-date and provide for online "Public Forum" speaking arrangements, potential for observers (at discretion of Chair) and improved delineation of what constitutes confidential items. During my tenure there were a couple of in-person public forum attendances early on and since Covid-19 no requests for addressing the meeting. AIAL, and MDA staff where necessary, have worked with complainants.
- **Runway 05R early turn for narrow body aircraft departing to Sydney.** As noted previously this was signalled as a possibility dependent on the outcome of the South Australian initiative and has yet to occur (may be covered in 10 Jun 2024, Agenda Item 11).
- **Auditing of Noise Mitigation Packages for Compliance.** To ensure in-home NMP installed do achieve an internal noise environment of 40 dBA L_{dn} or less with all windows and doors closed, AIAL engaged MDA in 2019 to measure the internal noise environment of four properties where the package had been installed in the last 12 months. The work was carried out in just two properties – one MANA (verification measures 1 Aug 2019) and one HANA (verification measures 28 Feb 2020) revealing that the measured noise level in various rooms was compliant, as was the ventilation system noise. As the Covid pandemic impacted both flights (reduced) and the installation programme (stalled), auditing has not restarted. It is important that the verification work does occur and AIAL progresses it at a future time, reporting back outcomes to the ANCCG.

Administrative resourcing

- **Glossary Of Terms Updating.** As outlined previously dedicated administrative resource should be applied to proactively update this document, anticipating and explaining all relevant terms in a manner useful for non-industry members, elected members and the public. It should no longer sit with the Independent Chair.
- **Council Appointment Process.** Administrative system in place to prompt Auckland Council/Local Boards as to the need to appoint a member/alternate to the ANCCG immediately post-elections. It should no longer rest solely with the Independent Chair to initiate and progress.
- **Induction Programme.** This needs to be revisited (include pilot participant) and designed with ANCCG input in 2025, ready for the post-election period and early 2026.
- **Dedicated Website Review and Updating.** Responsibility needs to be assigned for dedicated, regular cross-checking and improving information on AIAL's website related to aircraft noise matters and updating as out-of-date material and errors are identified. While ANCCG members and the Chair can assist, the prime responsibility should not sit with them. While not undertaking a systematic review, I have by chance identified the following examples: (1) Out-of-date Noise Exceedance Register (pdf) – see link on “Understanding Aircraft Noise” webpage. This is an old reporting document however it may be beneficial to revive it in a new form that enables reporting on specific exceptions or exceedances to the ANCCG (2) Locations of aircraft noise monitors – link on “Who is affected by aircraft noise” webpage does not work (3) Out-of-date information and diagrams about the Orange S23 track trial appear on the SMART Approaches webpage.
- **Noise Mitigation Packages.** A hiatus in progress occurred due to Covid but also as an unfortunate outcome of personnel changes and delays. It is pleasing to see new approaches have recently been adopted. Continuing proactive efforts need to occur to encourage installations in eligible homes, rather than languishing due to barriers and inaction by property managers, owners or lawyers. An initiative suggested by ANCCG members – videos of people who can talk about the process and impact of having had a NMP installed – could be beneficial. AIAL has this on hold due the substantive response to the latest offering approach, however with more installations likely to happen, the opportunity to identify people who may be prepared to assist should in my view not be lost.
- **In-person meetings and mana whenua involvement.** The opportunity to hold in-person meetings and engage with mana whenua of the area at Auckland Airport's Te Manukanuka o Hoturoa marae has eluded the ANCCG as a result of the Covid pandemic and adverse weather (Cyclone Gabrielle). It has also become apparent to me that while the marae is described by AIAL as its “cultural heart and a valued venue for community meetings” (link [here](#)), I am advised it does not have the technology and systems in place to readily support an ANCCG meeting. That is something AIAL might consider addressing. Use of the Kaitiaki Forum meetings with mana whenua Te Ākitai Waiohua Iwi Authority and Te Ahiwaru to address aircraft noise concerns commenced in May 2022, it would be timely to review whether or not this is working well, possibly in early 2025.
- **Archiving information and key documents.** It is important that all material provided to and forming part of the ANCCG activities (eg. key reports, presentations, documentation, correspondence) is archived and filed in a manner that withstands a change in AIAL supporting staff, enables ready searching of past material (to avoid repeat work) and a smooth transition. My observation is that turn-over in AIAL and other industry members has at times led to a loss of institutional knowledge and a reliance on the Chair's knowledge along with what is loaded on the website as complete records for the ANCCG activities which is nowhere near sufficient. It is an area where Auckland Council, due to its LGOIMA requirements, may have staff that could assist AIAL in relation to policies and processes for record management.

Opportunities

- **CASPER Noise Lab.** This web-based community engagement portal provides a user-friendly public interface that enables airports to share information and facts about aircraft movements, runway use, noise contours and measurements in a timely and understandable way. It uses interactive dashboards with maps and charts, so a user can select and reference information relevant for their location. General background is available on CASPER's website <https://casper.aero/products/noise-lab-new/> and links below show how it works in practice.

Copenhagen Airport - <https://cph.noiselab.casper.aero/>

Geneva Airport - <https://gva-test.noiselab.casper.aero/>

Edinburgh Airport - <https://noiselab.casper.aero/edi/>

Ministry of Defence Netherlands, three airbases are monitored - <https://noiselab.casper.aero/lwr>

WebTrak (<https://webtrak.emsbk.com/>) is an alternative noise monitoring tool used at Wellington Airport that includes its three noise monitoring locations (<https://webtrak.emsbk.com/wel2>), 10 of Australia's major airports (see Airservices Australia website link <https://www.airservicesaustralia.com/community/environment/aircraft-noise/webtrak/>), 4 Canadian airports, Finland, Iceland, Ireland, Portugal, Serbia, South Africa (2), Spain (13), Netherlands (1), UK (12) and USA (37).

I encourage ANCCG members to explore the above website links to view for themselves the potential benefits if members of the public were easily able to interrogate information available via CASPER's Noise Lab or WebTrak at Auckland Airport.

CASPER executives attending the 13 March 2023 ANCCG meeting provided, along with other matters, a general overview of Noise Lab. Since then, AIAL submitted a budget proposal for its introduction that was not approved for the FY25 year. In my view that is a disappointing result.

With improved automated digital systems, many airports are choosing to provide more transparent and timely information to their affected communities. AIAL seeks to be a "good neighbour" and a move to a user-friendly web portal that provides real-time flight and noise monitoring information from both permanent and temporary monitors would be a great initiative. In my view it would not only benefit the general public but also the ANCCG, AIAL's regulators (Auckland Council and CAA) and industry partners (Airways, BARNZ, Airlines). I would suggest the ANCCG continue to advocate for AIAL to adopt an effective community engagement portal and assist in strengthening the business case for that to occur.

- **Meteorological conditions, climate change and scenario modelling.** Meteorological conditions (temperature, pressure, humidity, headwind) influence the atmospheric absorption of noise over distance and the performance of aircraft. Climate change has the potential to influence the size and shape of noise contours in two main ways: (1) it may alter the incidence of a certain wind direction that would in turn change runway usage splits (2) changes to temperature and humidity may alter the propagation of sound, as sound travels faster in hotter/more humid conditions. (refer to pages 175-176 of "2021 Christchurch International Airport Expert Update Of The Operative Plan Noise Contours: For review by Environment Canterbury's Independent Expert Panel", website link [here](#)).

While changes in these factors generally occur over a long-period of time, given the change in runway split usage recently seen in Auckland where use of R05 departed significantly from historic averages, when calculating the Annual Aircraft Noise Contour, sensitivity modelling of noise impacts arising from wind direction changes and other meteorological conditions may be beneficial.

- **Existing Air Movements.** While Auckland Airport is not responsible for flights relating to other airports, and Auckland Council's "Complain about Noise" webpage (link [here](#)) refers people who wish to complain about noise from aircraft to the Civil Aviation Authority or for helicopter flight paths to use Council's online feedback form, it may be beneficial for both AIAL and Council to consider helping members of the public by providing details on relevant webpages about progressing complaints directly with particular aerodromes eg.
 - North Shore Aerodrome - 0800 494 647 info@nsac.co.nz
 - Ardmore Airport - 09 298 9544 reception@ardmoreairport.co.nz
 - Pikes Point Heliport - 09 636 0509
 - Mechanics Bay Heliport operated by Helicopter Me-09 303 4354 or info@helicopterme.co.nz
 - Air Force - 0800 1 FORCE (0800 136 723) or Whenuapai Air Base General enquiries: 09 417 7000
 - NZ Police (for Police Helicopter) Expression of Dissatisfaction | New Zealand Police - online forms
- **Increasing Aircraft Movements and Urban Air Mobility (UAM).** The aviation industry is under increasing pressure to reduce its carbon footprint while at the same time deliver more accessibility for transporting people and goods. Next-Gen aerodynamics and aviation infrastructure, alternate sustainable aviation fuels (SAF), hybrid and electric planes (expected to dominate short-haul flights under three hours), vertical take-off and landing, unmanned aircraft systems and a move to air mobility within cities are innovations underway. VoloCity an electric air taxi, fully battery-powered will fly at heights below 500m in Paris in time for the 2024 Olympics. ElectricAir, a NZ-based social enterprise, broke the world record for the farthest flight

over water by a battery electric plane in November 2021 when its Pipistrel crossed the Cook Strait (link [here](#)). Air NZ has ordered a cargo-only electric plane to fly between Wellington and Marlborough commencing service in 2026 (link [here](#)) and aims to begin replacing its Q300 domestic fleet with more sustainable aircraft from 2030.

The innovations in aviation are accelerating and Auckland will not be immune. How the changes impact aircraft noise and communities is something I believe Auckland Council, working with AIAL and the wider aviation sector, needs to be considering as it plans for the future of the city.

- **Other Airport Noise Groups – Information Sharing.** Throughout New Zealand airports have established committees to consider noise issues (eg Hamilton Community Advisory Group, Kāpiti Airport Community Liaison Group, Wellington Air Noise Management Committee, Nelson Environment Advisory Committee, Christchurch Noise Liaison Committee, Queenstown Airport Liaison Committee). In Australia there are a many Community Aviation Consultation Groups operating (see Airservices Australia website link [here](#), and link to the various airport websites from there).

There is a substantive amount of base information and reports that could be shared to develop enhanced best practice for the various airport noise community liaison groups including the ANCCG. An opportunity exists for a desktop exercise to be undertaken to review what might be beneficial for Auckland Airport communities and New Zealand airports generally to learn from each other and share with noise affected communities. That could be something the AIAL and Auckland Council (possibly via Council's RIMU-Research and Evaluation Unit) might consider collaborating on to develop a brief and engage a student to prepare. It may also be beneficial for the NZ aviation and noise industry to consider presenting a "Future of Aviation" educational seminar to members of all the community liaison groups. Exploring what may work with the Chairs of the various groups is likely to be a useful first step.

Farewell

I have finally reached the end of my reflections. I hope these prompt members to recall what has been achieved, assists the transition to a new Chair and inspires members to consider investigating what technological advances may arise for the future of aviation that can benefit communities by mitigating noise impacts.

Wishing you all the best for the future.

Catherine Harland
ANCCG Independent Chair