Airport Noise Liaison Committee Report

> *1 January – 31 December 2024*

> > CHRISTCH AIRPO

1

Revision Schedule		
<b>Revision No</b>	Date	Prepared by
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# **TABLE OF CONTENTS**

1	List	of Defir	nitions, Acronyms & Authors	2
	1.1	Definit	ions	2
	1.2	Acrony	/ms	3
	1.3	Author	rs	3
2	Stat	utory R	equirements	4
3	Com	nmittee	Composition	4
4	ANL	C Consi	derations and Recommendations	5
	4.1	Comm	unity Representation, Engagement, and Information Sharing	5
	4.2	Airport	t Noise Management Framework Review	6
		4.2.1	Noise Monitoring Terminals and WebTrak Platform	6
	4.3	Acoust	tic Treatment Programme	6
	4.4	Airport	t Safeguarding Planning	6
	4.5 Draft Canterbury Regional Policy Statement			
	4.6	Report	ing	7
		4.6.1	2023 Noise Monitoring Report	7
		4.6.2	2024 Noise Monitoring Report	7
5	Nois	bise Complaints Summary		
6	Com	nplaints Process and Review 10		
7	Арр	ppendix A: Christchurch District Plan Rule 6.1.6.2.7.3 11		

# **1** LIST OF DEFINITIONS, ACRONYMS & AUTHORS

## **1.1 DEFINITIONS**

Also referred to as 'Operational Noise'		
a) the landing and take-off of aircraft; and		
b) aircraft flying along any flight path associated with a landing or take-off.		
For the purposes of Christchurch District Plan Rule 6.1.6 'Activity specific noise rules', it		
excludes:		
a) aircraft operating in an emergency for medical or national/civil defence reasons;		
b) air shows;		
c) military operations;		
d) Antarctic operations;		
e) helicopter operations;		
f) aircraft using the airport as an alternative to a scheduled airport elsewhere;		
g) aircraft taxiing; and		
h) aircraft engine testing		
The 65 dB Ldn noise contour included in the Christchurch District Plan that cannot be		
exceeded. The determination of compliance or otherwise with this control is demonstrated		
by the preparation of the AANC for the preceding year's aircraft operations and reported		
annually.		
The unit of sound level. Expressed as a logarithmic ratio of sound pressure relative to a		
reference pressure.		
The day night noise level which is calculated from the 24-hour $L_{Aeq}$ with a 10dB penalty		
applied to the night-time (2200-0700 hours) LAeq.		
In-situ noise measurements of actual noise levels using either semi-permanent noise		
monitoring terminals or hand-held equipment (sound level meters).		
Monitoring of noise levels (generally with respect to assessing compliance with the		
Christchurch District Plan), using both noise measurements and calculated noise levels.		
The testing of engines on aircraft.		

## **1.2 ACRONYMS**

AANC	Annual Aircraft Noise Contour		
ANCC	Air Noise Compliance Contour		
ANLC	Airport Noise Liaison Committee		
APMW	Airport Pavement Maintenance Works		
АТР	Acoustic Treatment Programme		
CRPS	Canterbury Regional Policy Statement		
ССС	Christchurch City Council		
CIAL	Christchurch International Airport Limited		
CDP	Christchurch District Plan		
MDA	Marshall Day Acoustics		
NMP	Noise Management Plan		
NMR	Noise Monitoring Report		
NMT	Noise Monitoring Terminals		

### **1.3 AUTHORS**

Jessica Royal	Environment Advisor, Christchurch International Airport
Leila Chrystall	Environment Consultant, Christchurch International Airport

# **2 STATUTORY REQUIREMENTS**

In accordance with Rule 6.1.6.2.7.3 d of the Christchurch District Plan (CDP), Christchurch International Airport (CIAL) is required to prepare an Airport Noise Liaison Committee Report by 6 March each year to the Christchurch City Council (CCC). This report must contain the following information:

- The composition of the committee
- Summaries of the Committee's consideration of matters specified below:
  - Any community concerns regarding noise from aircraft operations and engine testing.
  - Liaison with, and provision of relevant information to the community.
  - The preparation, review and updating if required of the Airport Noise Management Plan (NMP).
  - The preparation, review and updating if required of the Acoustic Treatment Programme (ATP).
  - Complaints received over the previous year in respect of noise from aircraft operations and on-aircraft engine testing, and any actions taken in response to those complaints; and
  - Reviewing, and updating if required, the procedures associated with noise complaints received over the previous year.

The full rule is given in Appendix A.

# **3 COMMITTEE COMPOSITION**

In accordance with Rule 6.1.6.2.7.3 of the CDP, CIAL established the Airport Noise Liaison Committee (ANLC) in March 2017. The committee is required to meet not less than twice annually.

In 2024, the committee met on the 2<sup>nd</sup> of May (meeting #19) and 7<sup>th</sup> of November (meeting #20).

A summary of all previous meetings is uploaded to CIAL's website following each meeting and can be viewed here: <u>https://www.christchurchairport.co.nz/globalassets/about-us/sustainability/noise/anlc-summary-of-previous-meetings-nov-2024.pdf</u>

In 2024, the ANLC included the following members:

Name	Role	
Laurie McCallum	Chair	
Nicola McCormick	Waimāero Fendalton-Waimairi-Harewood Community Board Representative, Waimairi Ward	
Linda Chen	Waimāero Fendalton-Waimairi-Harewood Community Board Representative, Harewood Ward	
Kirsten Rayne	Senior Environmental Health Officer, Christchurch City Council	
Agnes van der Erf	Environmental Health Officer, Christchurch City Council	
Patrick Whelan	Board of Airline Representatives New Zealand	
Shelley Millington	Board of Airline Representatives New Zealand	
Rob Kinney	Isaac Conservation and Wildlife Trust	
Felicity Blackmore	Christchurch International Airport	
Jessica Royal	Christchurch International Airport	

The committee welcomed the involvement of two Waipuna Halswell-Hornby-Riccarton Community Board members and representatives from Airways. They serve in a representative capacity but are not officially appointed by the Christchurch City Council.

Name	Role
Mark Peters	Waipuna Halswell-Hornby-Riccarton Community Board Representative, Hornby Ward
Debbie Mora	Waipuna Halswell-Hornby-Riccarton Community Board Representative, Halswell Ward
Geoff Hounsell	Airways
Greg Perris	Airways
James Evans	Airways

# **4** ANLC CONSIDERATIONS AND RECOMMENDATIONS

In accordance with Rule 6.1.6.2.7.3 c(ii), (iii) and (iv), the ANLC may consider and make recommendations to CIAL on:

- Liaison with, and provision of relevant information to the community.
- The preparation, review and updating if required of the Airport Noise Management Plan (NMP) as required by Rule 6.1.6.2.7.1, and
- The preparation, review and updating if required of the Acoustic Treatment Programme and its implementation as required by Rule 6.1.6.2.7.2

In accordance with Rule 6.1.6.2.5 a(iii) (D) and section 6.1.2 of the Airport Noise Management Plan (NMP), the location of the Noise Monitoring Terminals (NMT) as required to verify noise measurements as part of the Annual Noise Monitoring Report is be decided in consultation with the ANLC.

CIAL keeps the ANLC informed of all airport noise-related matters, as per the NMP, providing progress reports and updates during ANLC meetings.

# 4.1 COMMUNITY REPRESENTATION, ENGAGEMENT, AND INFORMATION SHARING

Representatives from both the Waimāero Fendalton-Waimairi-Harewood and Waipuna Halswell-Hornby-Riccarton Community Board participate in the ANLC meetings. Participation in ANLC meetings and involvement with CIAL provides an avenue for the Community Board members to be advise on noise related matters and share this information with their communities.

In 2024, CIAL remains committed to collaborating with community board members and participants to share information about airport operations and noise-related matters with the community. The main channels are via the Community board members social media pages and through the Community Governance Team's community notices.

Information shared in 2024 included general introduction to CIAL as a Key Transport, Energy and Employment Hub (KTEEN), updated Noise Contours, CIAL's Decarbonisation journey, results of the 2023 Noise Monitoring Report, CIAL's involvement in Warbirds over Wanaka, an update on the Kowhai Park Solar Farm, and an explanation of how CIAL monitor aircraft noise including modelling the 2023 Annual Aircraft Noise Contour (AANC) and following AANC Calibration Report.

## 4.2 AIRPORT NOISE MANAGEMENT FRAMEWORK REVIEW

In 2024, CIAL continues to use the recommendations from the Noise Monitoring Programme Review completed by Airbiz in 2023 to prioritize actions within the Airport Noise Management Framework. Namely in 2024 this included enhancing community engagement (see 4.1), improvements to the compliance reporting process and content (see 4.5) and the procurement of a noise monitoring system as follows.

#### 4.2.1 NOISE MONITORING TERMINALS AND WEBTRAK PLATFORM

CIAL has completed the install of four permanent Noise Monitoring Terminals (NMT) in November 2024. These are located near the end of the main (02/20) and cross runways (11/29) to monitor noise in realtime. The data from these terminals, and flight track information will feed into the WebTrak software that will provide transparent information and near real time access to the community about aircraft movements and aircraft noise and offer a feedback tool where the public can lodge feedback specific to an aircraft movement. The implementation of this noise management software aligns with practices at other airports in New Zealand and globally. The WebTrak platform is currently under development and will be made available to the public in 2025.

## 4.3 ACOUSTIC TREATMENT PROGRAMME

In accordance with the CDP, the Acoustic Treatment Program (ATP), was prepared by the airport operator in consultation with the ANLC.

In accordance with Rule 6.1.6.2.7.2 b Christchurch Airport is required to make offers for acoustic treatment or advice within 24 months of 6 March 2017 and each year after that date within 12 months following the Noise Monitoring Report, for any additional residential units that meet the requirements at that time.

Christchurch Airport re-issued the offer for acoustic treatment or advice to eligible properties in early 2024. One resident came back to investigate mechanical ventilation but has decided not to pursue it further at this stage. CIAL is continuing to work with another property owner, where an acoustic treatment report has been completed and a proposal for works is currently under their review.

To date, two property owners have accepted an offer of acoustic treatment under the programme and the works have been completed for those properties.

## 4.4 AIRPORT SAFEGUARDING PLANNING

CIAL are participating in all the active plan review processes. CIAL is advocating to intergenerational community protection and international airport operations through maintaining the 50 dB Ldn air noise contour as the trigger for management of land uses.

## 4.5 DRAFT CANTERBURY REGIONAL POLICY STATEMENT

On 17 June 2024, Environment Canterbury provided the ANLC Chair with the Draft Canterbury Regional Policy Statement (CRPS) for review and feedback, recognizing their role as a key stakeholder in their role as the ANLC chair. The intention of the feedback to help inform and refine the document before the more formal submissions and hearings phase of the review.

The ANLC chair and the ANLC coordinated and provided feedback on the draft CRPS in July 2024. The primary outcome of the ANLC seeks from the replacement CRPS is ensuring that the community continue to be protected from aircraft noise through the avoidance of new noise sensitive activities the 50dB  $L_{dn}$  air noise contour.

## 4.6 **REPORTING**

#### 4.6.1 2023 NOISE MONITORING REPORT

CIAL informed the ANLC of the results of the 2023 Noise Monitoring Report (NMR) submitted to the City Council in March 2024. As per Rule 6.1.6.2.6 (v) (B) of the Christchurch District Plan, this report included the verification of Engine Testing calculations as is required every two years. The report can be found here: <u>https://www.christchurchairport.co.nz/globalassets/about-us/sustainability/noise/2023-noise-monitoring-report.pdf</u>

The 2023 NMR showed localised areas of Runway 29 where the 2023 annual aircraft noise contour (AANC) was within one to two decibels of the 65 dB Ldn Air Noise Compliance Contour (ANCC), which required further investigation as per 6.1.1 of the NMP.

#### (1)Investigation and Calibration

The investigation found that the Modelling software used to model the 2023 AANC was overpredicting noise for two types of jet compared with measured noise levels. To correct the overprediction, CIAL's noise consultant, Marshall Day Acoustics (MDA), calibrated the noise model using noise measurement data recorded in 2023 and recalculated the 2023 AANC. The outcome is the margin between the recalculated 2023 AANC and the ANCC is four decibels at the end of Runway 29. In all other locations the 2023 AANC is at least four decibels below the 65 dB L<sub>dn</sub> ANCC. The AANC Calibration report can be found on CIAL's website here: <a href="https://www.christchurchairport.co.nz/globalassets/about-us/sustainability/noise/2023-noise-monitoring-report---aanc-calibration.pdf">https://www.christchurchairport.co.nz/globalassets/about-us/sustainability/noise/2023-noise-monitoring-report---aanc-calibration.pdf</a>

#### (2)Peer review

CIAL engaged WSP, an Aviation Acoustics consultant, to complete a technical peer review of the 2023 NMR. WSP investigated the likely cause of the pinch point and reached the same likely causes as MDA. WSP also provided some other useful suggestions and feedback on the report which will help to inform future NMR's.

#### (3)Brochure

CIAL asked the ANLC for feedback regarding improvements to the 2022 Noise Monitoring report brochure ahead of the 2023 brochure with the aim of future increasing accessibility to the community. The ANLC acknowledged the brochure is useful for explaining aircraft noise at Christchurch Airport to future complainants and support the approach to continue to produce the brochure to accompany the NMR each year. Following the AANC Calibration report the 2023 Noise Monitoring report brochure is being prepared and 2025 brochure is to be completed following the 2024 NMR in March 2025.

#### 4.6.2 2024 NOISE MONITORING REPORT

As per Rule 6.1.6.2.5 a(iii) (D) and Section 6.1.2 of the NMP, the placement of Noise Monitoring Terminals (NMT) for verifying noise measurements used in calculating the AANC, as part of the Annual Noise Monitoring Report, must be determined in consultation with the ANLC. The AANC verification is required at least once every three years, with the last verification conducted in 2022; therefore, it was not required in 2024.

# 5 NOISE COMPLAINTS SUMMARY

In accordance with Rule 6.1.6.2.7.3 c(v) of the Christchurch District Plan the noise complaints summary below details complaints received in 2024 in respect to noise from aircraft operations and on-aircraft engine testing; and any actions taken in response to these complaints.

All names and addresses have been omitted for privacy purposes. Complaints have been grouped by the type of operation and aircraft. The actions taken for each complaint are included in the table.

In summary, 19 complaints were received from 16 individuals during the period 1 January to 31 December 2024.

There were two unresolved complaints that carried over into 2024.

- One about helicopter movements near the complainant's home, first raised in 2022, is no longer active as the complainant has moved.
- One about aircraft noise departing from the southern runway, first raised in 2021, remains open at the end of 2024.

CIAL continues to address community concerns by promptly responding to noise complaints, investigating, and analysing the cause of the noise, communicating with relevant agencies, and managing complaints with guidance from the ANLC.

Type of Operation	Type of	No of	Actions Taken
Low Flying Aircraft (APMW)	Jet & turboprop	complaints 11	In March 2024, nine complaints were made about low-flying jets, and two additional complaints about unknown low-flying aircraft. These complaints coincided with CIAL's annual Airfield Pavement Maintenance Works (APMW), which required the main runway to be closed from 9pm to 5:30am. As a result, aircraft had to land and take off on the cross runway at night and early morning. CIAL responded to all 11 complainants, explaining the APMW schedule, the reasons for the works, and providing a link to their website for more information. One complainant did not want follow-up contact, but CIAL acknowledged their complaint and invited them to reach out if needed. The complainant later replied, and CIAL provided additional information. Two complaints mentioned not receiving any communication about the APMW works. CIAL acknowledged this and stated that a more thorough communication plan would be created for future APMW programs if cross runway use is required.
Low Flying Aircraft	Jet	2	The first complaint was about an A320 Neo jet flying over the complainants home late at night. The complainant did not wish to be contacted but a contact email was provided. CIAL sent an email offering to answer any questions, but no response was received. The second complaint was about jet noise near the complainant's street. They said the planes seemed louder than usual for about 30 minutes at night. Six flights occurred within an hour, within 1km of their location, and there was a high-powered engine test at the same time, though it likely didn't contribute to the noise. The complainant thanked CIAL for the response.
	Helicopter All aircraft	1 4	<ul> <li>This complaint was about helicopter noise at night, caused by a Westpac Rescue Helicopter heading to Christchurch Airport. No further communication was received.</li> <li>One person made four complaints over five days about aircraft flying too low and often over their home at night. Initially, they did not want to be contacted, but CIAL sent a courtesy email offering further discussion. The person responded with questions.</li> <li>Their main concern was about aircraft noise in their Christchurch suburb since moving from Auckland, and they wanted to know about future noise control. CIAL replied with a detailed email explaining how noise is managed, airport operations, future growth, flight paths, airspace management, noise contour information and the contours proximity to their area. No further response was received.</li> </ul>
Engine Testing	Non- specific	1	A resident near Christchurch Airport asked if there was an engine testing facility and requested information about it. CIAL explained how the facility operates and how to view recent tests carried out over the last seven days on CIAL's website. CIAL also offered to investigate specific noise events if the resident provided times, but no response was received.

At least 1 week prior to the ANLC meeting, a summary of noise complaints and follow up actions are provided to the members. Committee members are encouraged to bring up any questions or concerns regarding the nature of the complaint or CIAL's approach to addressing it at their discretion.

# **6 COMPLAINTS PROCESS AND REVIEW**

In accordance with Rule 6.1.6.2.7.3 c (vi) of the CDP the ANLC may consider and make recommendations to CIAL on the current noise complaints process and procedures.

Section 7 of the Noise Management Plan details the noise compliant process and complaints register. To date, the ANLC is satisfied the Airport is following the complaints procedure as outlined in the NMP.

Outside of the NMP review process, the ANLC supports the approach of arranging a meeting with complainants whenever possible if resolution has not been achieved through phone or email communication. The ANLC encourage CIAL to continually to work towards building positive relationships with residents to facilitate the resolution of noise complaints whenever possible. When necessary, the ANLC supports involving the CIAL legal team in ongoing complaints.

The ANLC continually provides feedback and recommendations to CIAL to enhance and improve the noise complaints process.

# 7 APPENDIX A: CHRISTCHURCH DISTRICT PLAN RULE 6.1.6.2.7.3

#### 6.1.6.2.7.3 Airport Noise Liaison Committee

- a. Within 6 months of 6 March 2017, an Airport Noise Liaison Committee (the Committee) shall be established and operated by the <u>airport operator</u>.
- b. The <u>airport operator</u> shall:
  - *i. invite the following parties to appoint members of the Committee:* 
    - A. two representatives appointed by the <u>airport operator</u>;
      - *B.* at least two members of Christchurch City Community Boards (as representatives of the community) appointed by the <u>Council</u>;
      - C. one Environmental Health Officer appointed by <u>Council (non-voting);</u>
      - *D.* two representatives appointed by the Board of Airline Representatives of New Zealand; and
      - E. one representative appointed by the Isaac Conservation and Wildlife Trust.
  - *ii.* provide facilities and administrative support for the Committee in order that it can meet not less than twice annually.
- c. The Committee may consider and make recommendations to the <u>airport operator</u> on:
  - *i.* Any community concerns regarding noise from <u>aircraft operations</u> and <u>engine testing</u>;
  - *ii.* Liaison with, and provision of relevant information to the community;
  - *iii.* the preparation, review and updating if required of the Airport Noise Management Plan as required by <u>Rule 6.1.6.2.7.1</u>;
  - *iv.* the preparation, review and updating if required of the Acoustic Treatment Programme and its implementation as required by <u>Rule 6.1.6.2.7.2</u>;
  - *v.* complaints received over the previous year in respect of noise from <u>aircraft</u> <u>operations</u> and on-aircraft <u>engine testing</u>, and any actions taken in response to those complaints; and
  - vi. Reviewing, and updating if required, the procedures associated with noise complaints received over the previous year.
- *d.* The <u>airport operator</u> shall provide by 6 March 2018, and annually thereafter, a report to the <u>Council</u> regarding the following:
  - i. the composition of the Committee; and
  - *ii.* summaries of the Committee's consideration of the matters specified in <u>Rule</u> <u>6.1.6.2.7.3</u> c.

Link to: Christchurch District Plan Rule 6.1.6.2.7.3.



