

Before an Independent Hearings Panel  
appointed by Christchurch City Council

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*under:* the Resource Management Act 1991

*in the matter of:* the hearing of submissions on Plan Change 14 (Housing  
and Business Choice) to the Christchurch District Plan

*and:* **Christchurch International Airport Limited**  
Submitter 852

Summary of Evidence of Sebastian Hawken (aviation)

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Dated: 23 April 2024

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## **SUMMARY OF EVIDENCE OF SEBASTIAN HAWKEN**

### **INTRODUCTION**

- 1 My name is Sebastian Tate Hawken and I am New Zealand/Pacific Manager for Airbiz Aviation Strategies Ltd. I have undertaken over 200 projects and studies for airports worldwide, including a number of projects in relation to Christchurch International Airport.
- 2 I prepared a brief of evidence addressing the relief sought by Christchurch International Airport Limited (*CIAL*) on the proposed Plan Change 14 (Housing and Business Choice) to the Christchurch District Plan (*PC14*).<sup>1</sup>

### **SUMMARY**

- 3 Christchurch Airport is a key enabler of air connectivity for passengers and freight into and out of the South Island.
- 4 Airports, such as Christchurch Airport, are also critical links in disaster response and recovery. There are a number of examples in my evidence that demonstrate the important role that Christchurch has played in recent disasters.
- 5 It is therefore vital that planning authorities maintain appropriate land use controls around Christchurch Airport so as to not compromise its vital role.

#### **Land-use planning as a key safeguarding tool**

- 6 The aviation industry as a whole recognises the potential for aircraft operations to negatively impact people as a result of aircraft noise. From an airport safeguarding perspective, the most effective mitigation available is through sound land use planning to direct the more sensitive land uses (such as residential) away from areas exposed to higher levels of aircraft noise.
- 7 NZS6805:1992 Airport Noise Management and Land Use Planning provides that, within the Outer Control Boundary (OCB) (which is the 50dB Ldn contour in Canterbury), new noise sensitive uses should be prohibited unless a district plan permits such uses and subject to insulation requirements.
- 8 Where possible future development of noise sensitive activities, such as residential, should be directed away from the OCB. Furthermore, future intensification of noise sensitive activities within the OCB should also be avoided. This will minimise noise annoyance to

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<sup>1</sup> Dated 20 September 2023.

people on the ground and potential “reverse sensitivity” effects on the airport.

- 9 Christchurch Airport, through sound land use planning implemented by local authorities to date, is currently in a position where urban encroachment within areas affected by aircraft noise, and those projected to fall in such areas in the future, are relatively limited. Any loosening or gap in airport safeguarding would likely result in more noise sensitive activities, such as larger residential populations, living in areas affected by noise from aircraft operations and with that comes the potential pressure for restrictions on airport operations through reverse sensitivity effects.
- 10 While there is a clear need for territorial authorities to find areas for further development of noise sensitive activities such as new residential, schools, hospitals etc., the clear objective as set out by the International Civil Aviation Organisation (ICAO)<sup>2</sup> is “Limiting or reducing the number of people affected by significant aircraft noise”. In my opinion, locating development outside of those areas subject to higher levels of aircraft noise is an effective means of achieving this.

#### **Consequences of insufficient land-use planning controls**

- 11 Urban encroachment or intensification into airport safeguarding areas such as the OCB is a “lose-lose” situation for the airport and community it serves and is likely irreversible. It is extremely disruptive, procedurally complex and very expensive (if not impossible) to recover land for safeguarding purposes once it has been developed for urban purposes.
- 12 In the event that reverse sensitivity issues put sufficient pressure on planning authorities and/or CIAL to enact Noise Abatement Procedures and/or Operating Restrictions, a range of consequences can result which can restrict airport operating efficiency, such as preferential runway regimes, flight tracks and night-time curfews.
- 13 My primary evidence outlines the range of operating restrictions that can result if reverse sensitivity effects place sufficient pressure on planning authorities or CIAL. The risk of such an outcome is evident from the experiences at other airports, both within New Zealand and overseas.

#### **Noise Contour Remodelling**

- 14 The Air Noise Contours for Christchurch Airport have recently been remodelled (remodelled contours). These remodelled contours and the associated technical modelling methodology and assumptions

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<sup>2</sup> <https://www.icao.int/environmental-protection/pages/noise.aspx#:~:text=The%20Balanced%20Approach%20consists%20of,elements%2C%20described%20in%20Figure%201.>

have been endorsed by an independent peer review panel of experts appointed by the Canterbury Regional Council and set out in the ECan report '*Christchurch Airport Remodelled Contour Independent Expert Panel Report*'.

- 15 The final remodelled contours are the best current detailed technical information showing where aircraft noise effects are likely to be felt in the future and consequently where land use planning should apply the standards set out in the New Zealand Standard NZS6805 as explained earlier. From an airport safeguarding and community perspective, it is important that PC14 does not enable further intensification of noise sensitive activities within the remodelled 50dB Ldn contour.

**Conclusion**

- 16 In my view, ensuring that the planning framework (including through PC14) does not allow intensification of noise sensitive uses within the OCB, achieves the complementary goals of:
- 16.1 protecting residents from the negative noise impacts of aircraft operations by directing urban growth and intensification into areas not affected by higher levels of aircraft noise; and
  - 16.2 protecting Christchurch Airport as a community transport and economic asset from noise complaints and pressures to restrict aircraft operations.

Dated: 23 April 2024

Sebastian Hawken