

# NOISE MITIGATION PROGRAMME

## REPORT No 3

OCTOBER 2004

### 1.0 Introduction

The purpose of this report is to provide an update on progress with the Noise Mitigation Programme over the six month period from April to October 2004, as is required by Condition 10A(b) of the Airport Designation. This report should be read in conjunction with Noise Mitigation Programme Report No. 1, October 2003 ("Report No 1") and Noise Mitigation Programme Report No. 2, April 2004 ("Report No 2") which provide further detail on the entire Programme and progress that was made prior to the period covered by this report.

The Noise Mitigation Programme provides for offers of acoustic treatment which are made to owners of various Activities Sensitive to Aircraft Noise (ASANs) in noise impacted areas around Auckland International Airport (AIA), under Condition 10 of the Designation.

AIAL's general requirements under the Programme fall into the following areas:

1. Existing Buildings subject to noise from Aircraft Operations;
2. Existing Buildings subject to Engine Testing Noise; and
3. New Buildings at Educational Facilities.

This report assumes that the reader is familiar with the terminology used in the Airport Designation and for that reason definitions and terms from the designation and from the operative Manukau District Plan are used without further definition in this report.

### 2.0 Existing Buildings Subject to Noise from Aircraft Operations

The Airport Designation categorises three types of Existing Buildings:

- ? Educational Facilities
- ? Registered Pre-schools
- ? Others.

The "other" type is predominately made up of household units (referred to as dwellings in this report) but also includes child centres, hospitals, and rest homes etc.

AIAL is required to offer acoustic treatment to the owners of these Existing Buildings when the predicted noise level from aircraft operations reaches specified levels. In order to know when these offers should be made AIAL produces Annual Aircraft Noise Contours (AANCs).

The first Annual Aircraft Noise Contours (AANCs) were finalised in October 2003 ("2004 AANCs") and showed, as outlined in Report No. 1, that the contours are around 4-5 dBA behind the Future Aircraft Noise Contours (FANCs). The second AANC were finalised in October 2004 ("2005 AANCs") and are similar to the 2004 AANCs although slightly narrower near to the airport.

In producing the 2005 AANCs, it was noted that the reference point at the airport which was used as a base for plotting the 2004 AANCs was slightly further east than the reference point which the noise consultants used in producing the contours. This means that the 2004 AANCs reach further to the east than was actually projected by the consultants. Therefore a comparison of the two published sets of AANCs shows that the 2004 AANCs reach further to the east than the 2005 AANCs. This is not actually the case based on the data given by AIAL's noise consultants which is shown in Appendix 1 and compares the two sets of AANCs. However, AIAL will continue to use the 2004 AANCs in making the offers of acoustic treatment measures outlined below.

Under Condition 10(n) of the Airport Designation, offers of acoustic treatment measures relating to the 2004 AANCs are required to be made by April 2005 and offers relating to the 2005 AANCs are required to be made by April 2006. Because of the above plotting error it appears that no additional offers will be required for the 2005 AANCs though this is still to be checked thoroughly.

Progress towards making offers is outlined below.

## 2.1 Offers to Existing Dwellings

The process for making offers to existing dwelling owners was outlined in Report No. 2 (Section 2.1.1) along with contractual arrangements which were covered in 2.1.2. These items have not changed since the last report. Planning is currently underway for offers to be made by April 2005 relating to the 2004 AANCs.

### 2.1.1 Development Of Certified Standard Packages

Under Condition 10(q)(i) of the Airport Designation, AIAL is required to develop as many "standard packages" for acoustic treatment as is practicable. These are called Certified Standard Packages (CSPs). Initially the CSPs were to be developed by 21 January 2004 however, as outlined below, this date was extended to 21 July 2004. The CSPs were completed on 11 June 2004 and a copy was supplied to Manukau City Council on 21 June 2004.

As outlined in Reports No. 1 and 2 pilot trials were undertaken in five dwellings in the High Aircraft Noise Area (HANA) in the period from September-December 2003. However the post construction noise testing in the pilot study houses revealed results, in some instances, which were less than desired. Rather than undertake further testing and work over the Christmas holiday period, AIAL waited until late January before undertaking further testing and work in the pilot study houses.

In order to ensure strict compliance with the conditions of the Designation 231, AIAL lodged a notice of requirement on 18 December 2003 for an alteration to condition 10(q)(i) from "15 months" to 21 months". This was accepted by

Manukau City Council and meant that the standard packages needed to be developed by 21 July 2004.

From January to May 2004, further work was undertaken in the houses to get a complete understanding of noise pathways within the houses. One house in particular was chosen and extensive noise testing was carried out in order to understand the noise levels that had been measured in the past. As a result of this, further work was carried out in this house, and in several of the others houses, and some understanding was reached on the additional enhancements required to lower the internal noise level from Ldn 45 dBA to Ldn 40 dBA.

#### 2.1.2 Suitably Qualified Independent Persons

Under Conditions 10(q) and 10(qq) AIAL is required to nominate, for approval by Manukau City Council, "suitably qualified and independent persons" who will certify the CSPs at the development stage and who will also certify that any CSP or Individual Package has been installed properly.

On 20 April 2004 AIAL wrote to the Manukau City Council with nominations for this role. Manukau City Council reported these nominations to the Environmental Management Committee in May 2004. The nominations and the Committee confirmation are shown in Appendix Two: Minute Number EM/May/753/04.

### 2.2 Existing Educational Facilities

The 2004 AANCs show that Puhinui School will qualify for an acoustic treatment offer in April 2005. No other schools will be eligible for an offer at that time and no further offers will be required based on the 2005 AANCs.

The treatment of each school will be dealt with on a case-by-case basis as and when each school becomes eligible for an offer.

Specific designs (or individual packages) will likely be created for each school.

### 2.3 Existing Registered Preschools

There are two existing registered preschools which currently qualify for an acoustic treatment offer by April 2005. These are the Lollipops Educare Centre in Lambie Drive and the Te Kohanga Reo O Te Rangimaria on Puhinui Road.

As is the case for schools, the treatment of each preschool will be dealt with on a case-by-case basis as and when each preschool becomes eligible for an offer. Specific designs (or individual packages) will likely be created for each preschool.

## 3.0 Existing Buildings Subject to Engine Testing Noise

As required by Condition 13A of the designation, AIAL made offers of acoustic treatment measures to the owners of 13 Existing Buildings within the specified Ldn 57 Area by 21 April 2004. These offers were outlined in Report No.2 and require the owner to pay 25 percent toward the cost of the acoustic treatment measures being installed in their home.

To date no response has been received from these owners. If an offer is accepted the process outlined in Report No 2 will be followed.

#### 4.0 New Buildings at Educational Facilities

Under Conditions 10(k) & 10(m), AIAL is obligated to offer funding for acoustic treatment in new noise sensitive buildings at both existing and new public Educational Facilities in the MANA.

The requirement to make those offers is conditional on certain certification from the Ministry of Education (MoE), so in essence AIAL's role is a reactionary one after advice from the MoE.

In the Noise Mitigation Programme Report No. 1, October 2003, it was reported that advice had been received on new buildings at Redoubt North and Puhinui Schools.

With regard to Redoubt North School advice was received on 22 June 2004 of six additional classrooms. Costs for acoustic treatment were agreed in late August/early September.

Regarding Puhinui School, three new classrooms have been built. Costs were agreed in May 2004 with a plant room being provided to serve the three new classrooms as well as six existing classrooms.

No advice has been received regarding new buildings at other eligible schools.

Tegan Brown  
Environmental Planner



## Appendix Two: Minute Number EM/May/753/04).

*Auckland International Airport Limited Noise Mitigation Programme – Report No. 2*  
(SEE APPENDIX E)

Purpose of Report : Information  
Significance of Decision : Internal Procedure  
Reporting Unit : City Design and Planning  
Reporting Officer : Steve Wrenn, Policy Analyst  
Ward : Citywide

Comment [MCC1]:

Comment [MCC2]:

### MINUTE NO. EM/MAY/753/04 – COMMITTEE DECISION

1. ***That the Auckland International Airport Limited Noise Mitigation Programme (report number two) be received.***
2. ***That the Committee accepts the Auckland International Airport Limited nomination of Robert Banks and Martin Billington of Beca as suitably qualified independent persons for certifying the ventilation certificates as required by the conditions attached to Auckland International Airport Limited designation (Designation 231 in the Manukau District Plan).***
3. ***That the Committee accepts the Auckland International Airport Limited nomination of Chris Day, Xavier Oh and Laurel Watson of Marshall Day Acoustics of Beca as suitably qualified independent persons for certifying the acoustic certificates as required by the conditions attached to Auckland International Airport Limited designation (Designation 231 in the Manukau District Plan).***