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NOISE MANAGEMENT PLAN

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1.0 Introduction

This Noise Management Plan (NMP) has been developed by the Hamilton International Airport (HIA) and is designed to be expanded as noise mitigation measures are identified and implemented.

The NMP was developed in 2009 in response to consultative feedback on the proposed runway extension from the local community. This feedback identified the increasing movements of General Aviation (small aircraft under 3 tonnes), and particularly circuit training, as an airport noise issue.

The NMP describes the policies, standards and procedures used to manage noise generated by airport activities.

An important component of the NMP will be the formation of the Airport Community Liaison Group (Liaison Group). The Liaison Group is being formed to provide a means for the airport, community and operators to understand the issues, identify possible mitigation measures and make recommendations to HIA.

1.1 Overall Concept

Hamilton Airport is becoming one of the busiest airports in New Zealand. This is resulting in an increase in noise impact on the local community, which means that some practices that were historically acceptable are now creating a noise issue for local residents. At the same time, airports are inherently noisy environments and the ability of the airport to grow and create noise in the surrounding community is protected within the publicly available Waipa and Waikato district council plans.

This proposed Noise Management Plan will seek to ensure that the best outcome is reached for both the community and operators. To maintain community support, aircraft operators need to be considerate of their noise impact on the local community.

1.2 Objectives

The NMP is designed to achieve the following:

- Form the basis for the airports management and mitigation of all aircraft noise at and around the airport
- Facilitate community feedback to and from operators and the airport on noise issues through an Airport Community Liaison Group
- Document procedures and responsibilities for noise management and record outcomes from these procedures
- Increase the community knowledge of airport operations through the distribution of information regarding airport operator activity.
- Set out and adopt a complaints procedure
- Set out a dispute resolution process
- Record agreed noise abatement measures

- Assist in ensuring compliance with District Plan noise rules.

This document will be updated as new procedures and measures are recommended by the Liaison Group and accepted by HIA.

2.0 Airport Community Liaison Group

The following section outlines the role and functions of the Airport Community Liaison Group (Liaison Group).

2.1 Purpose

The Liaison Group is designed to provide a forum for the relevant parties to work co-operatively, share information and seek solutions. In particular, it will provide the following:

- Provide an opportunity to bring affected parties together to discuss issues
- Provide a central point of contact for the community
- Provide an opportunity for the exchange of information
- To provide feedback and if appropriate advice to WRAL regarding noise abatement procedures, noise complaint resolution and other noise related advice
- To provide a forum for WRAL to propose noise abatement procedures and seek resolution between affected parties
- Send out an annual newsletter updating the airport community of achievements from the Liaison Group

2.2 Membership of the Liaison Group

This group would consist of the following parties:

- An independent Chairperson
- Two or more community representatives from the local community
- One representative from HIA
- A representative from the Waipa District Council and the Waikato District Council
- A representative from Airways Corporation
- Two representatives from aircraft or airline operators, who undertake significant numbers of aircraft landings at HIA

A representative from the Waikato District Council may also be asked to attend where complaints are arising in the Waikato District Council territory.

2.3 Roles in the Liaison Group

The following roles are envisaged for the members of the Liaison Group:

- HIA will undertake the following:
 - Provide updates of gross aircraft movements by aircraft types

- Provide a list of complaints and responses
- Provide technical reports, when available
- Undertake any necessary administration and keep minutes for the meetings
- The purpose of the independent chairperson will be to ensure that all views are heard fairly and that the necessary recommendations are made to HIA. The independent chairperson will be jointly appointed by HIA and the Waipa District Council.
- Airways Corporation will provide information on control tower operations, and where able, supply the appropriate aircraft data.
- Community representatives, where able, will provide feedback that they have received on changes to noise levels, complaints and the effectiveness of any measures undertaken.
- Council representatives will provide feedback that they have received, and provide advice in relation to the district plan rules and associated compliance, as well as representing the wider community.
- The HIA aircraft operator representatives will provide information on current and planned operations and issues in relation to implementing noise abatement procedures.

2.4 Quorum

A quorum exists when the following representatives are present:

- The Chairman, or his representative, who may be one of the 4 listed below.
- A community representative
- An HIA senior manager
- A representative from either Waipa District Council or Waikato District Council
- A representative from an aircraft operator

2.5 Meeting Frequency

The Liaison Group will have a meeting every four months or sooner if deemed necessary by HIA. All meetings will be called and organised by HIA.

3.0 Noise Mitigation

WRAL will encourage aircraft operators to adopt the best practicable options to reduce their noise impact on the surrounding community.

Noise abatement procedures may be considered for managing specific noise issues. Any noise abatement procedures will be developed through consultation through the Liaison Group. Noise abatement procedures will not undermine aviation safety, or the commercial viability of the airport or operators. It should be noted that the noise management plan will not be able to override District Plan rules.

3.1 Operator Considerations

Aircraft operators carrying out flight training operations will be requested to observe the following:

3.1.1 General

- Not use occupied commercial premises or houses as regular reference points for training purposes, circuits or other manoeuvres.
- Simulated engine failures after takeoff and glide approaches should be away from occupied commercial premises and houses.
- Where possible, include a variation of circuit direction as traffic, weather conditions, and Air Traffic Control allow.

3.1.2 Night Training operations

- If operationally possible, night-time circuit training should be away from built-up residential areas. A built up residential area is defined in the District Plan rules as those areas zoned residential.
- Where possible, night circuits should not be carried out between the hours of 10:00pm NZST (winter), 10:30pm NZDT (summer), and 7:00am.
- Flying training circuits after 10:00 pm NZST, and 10:30 pm NZ Daylight Saving, by aircraft 5700kg and below MCTOW, shall only be permitted under "Special Circumstances", and shall be confined to HIA local operators only. Prior notification should be given to WRAL as soon as the need is known, or within 24 hours of the event occurring. Such notification shall include:
 - Date;
 - Times;
 - Type of aircraft; and
 - Reason for the flight.

- Special Circumstance flights would be those required to remedy disrupted flying training programmes, due to: (but not limited by) weather, aircraft unserviceability, and runway availability.
- HIA shall be kept informed of all “Special Circumstance” flights.
- Where possible, include a variation of circuit direction as traffic, weather conditions, and Air Traffic Control allow.
- Except for special circumstances, no asymmetric circling approaches after 10:00 pm NZST, or 10:30 pm NZDT. Except for special circumstances, all approaches after this time must be straight in approaches to land.

3.1.3 Engine Testing:

- Noise from maintenance and engine testing of aircraft shall comply with the Waipa District Council Plan requirements of Rule 7A.4.11.

WRAL will undertake to advise off-airdrome operators of this plan.

4.0 Complaint Procedures and Dispute Resolution

The following is a standard procedure for recording and responding to all noise complaints and a mechanism for dispute resolution.

4.1 Complaint Procedure

All complaints regarding airport noise or aircraft in the vicinity of Hamilton Airport must be in writing and be directed to the Manager, Commercial and Growth at HIA. Details of all such complaints received will be actioned using the appendices 1 and 2 of this plan. This will require the Waikato District Council and Waipa District Council, Airways New Zealand, aircraft operators and private aircraft owners to provide details of any noise related complaints they have received.

It should be noted that all complaints and the details of complaints supplied to the local councils are automatically deemed to be given in confidence. Any complaints passed on would be without names or with names if permission is given or the complainant referred to HIA.

4.1.1 Complaint Log

The Complaint Log will comprise the complaint register, and the noise complaint forms together with their appropriate original written complaint

HIA will respond to all complaints to acknowledge the complaint has been received.

Operators are to be informed within one working day of a noise complaint relating or possibly relating to one of their aircraft.

4.1.2 Complaint Investigations

HIA will investigate all complaints within a timely manner. The Chairman will be responsible for ensuring that correct investigation procedures are followed, and all complainants are treated fairly. The outcome of each investigation will be recorded along with any action taken on appendix 2 of this plan.

The complainant will be informed of the result of their complaint within 24 hours, provided that their name and contact details are given. The investigation and report back to the complainant will be within 10 working days.

A summary of the complaints and investigations will be supplied to the Liaison Group at the group's next meeting.

4.2 Dispute Resolution

HIA will look to the Liaison Group to seek a resolution on any disputes between the parties. Where one of the parties is not represented in the group HIA will seek to resolve the dispute

between the parties outside of the Liaison Group. Such resolution may involve the Liaison Group Chairman.

Where a dispute exists within the Liaison Group that cannot be settled by the Group then the following procedure is to be used:

1. The chairperson within the Liaison Group should seek to resolve the issue through mediation;
2. If a mediated settlement cannot be reached, then the Chairman is to make a recommendation to HIA on how the dispute maybe resolved. HIA will consider the recommendation and report back to the Chairman on the proposed course of action.
3. In the event that the proposed course of action in paragraph 2 above cannot be implemented, HIA reserves the right to seek a solution or not as it sees fit. However, the final decision, actions and reasoning shall be reported back to the Liaison Group.

5.0 Noise Rules

5.1 Waipa District Plan

Hamilton International Airport is within the Waipa District. The airport is designated in the Waipa District Plan (Designation DN71) for 'Airport Purposes, operations, maintenance and expansion of Hamilton Airport'. This designation authorises the ongoing operation of the airport, together with designations DN150 and DN151.

The Waipa District Plan, together with the Waikato District Plan and Hamilton City District Plan include noise boundaries, as recommended in NZ Standard 6805:1992 "Airport Noise Management and Land Use Planning". The noise boundaries comprise an 'Air Noise Boundary' based on a predicted noise contour of 65dBA Ldn and an 'Outer Control Boundary' based on a predicted contour of 55dBA Ldn. In Waipa and Hamilton the contours are based on noise modelling undertaken in 1992 while in Waikato District they are based on 2003 modelling.

The land within the noise boundaries in Waipa District is generally zoned Rural. Rule 2.4.24.4 of the Waipa District Plan requires that the airport shall be operated so that the noise produced by aircraft operations shall not exceed the levels specified at the Air Noise Boundary and the Outer Control Boundary. 'Aircraft Operations' includes aircraft flights, aircraft taking off and landing, aircraft over-flights, and aircraft taxiing, but excludes aircraft engine testing in the Eagle Air engine running bay, on the Terminal apron, or on the main sealed runway. The daily Ldn is to be measured in accordance with NZS 6805:1992 and logarithmically averaged over a three month period.

5.2 Waikato District Plan

The Outer Control Noise Boundary extends into the Waikato District and is included in the District Plan with associated rules. The land is mainly zoned Country Living.

Land that is within the Outer Control Boundary is subject to different subdivision rules than elsewhere in the Country Living Zone with the average site area being 1.1ha, compared to the usual minimum of 5,000m². In addition all new certificates of title created by subdivision within the Outer Control Boundary area must have Consent Notices registered on the title recording that the land is within the Outer Control Boundary and is subject to aircraft noise, and requiring acoustic insulation of new houses or additions and extensions to houses.

5.3 Hamilton City Council

The Outer Control Boundary extends into a small area of Hamilton City area, near Peacocks Road. This land is zoned Future Urban and the District Plan rules require acoustic treatment of new homes built within the Outer Control Boundary.

5.4 Proposed Amendments

As part of WRAL's proposed runway extension project it is intended to amend and update the noise rules, including the location of the Air Noise Boundary and the Outer Control Boundary. This will include removing the Outer Control Boundary from the Hamilton City area. This section of the NMP will be updated when these amendments become operative.

6.0 Compliance Monitoring Program

6.1 Purpose

HIA will undertake regular monitoring and reporting of compliance with aircraft noise related requirements of the District Plans.

The purpose of the Compliance Monitoring Program (CMP) will be to regularly review and validate the assumptions on which the Air Noise Boundary (ANB) and Outer Control Boundary (OCB), as shown in the District Plans, were determined (i.e. aircraft type mix and quantum of movements). The program of observation, recording, reporting and review set out in this NMP is an appropriate means for Hamilton Airport to determine continuing compliance with the District Plan ANB and OCB contours.

6.2 Observations and Recording

HIA will be responsible for arranging the observation, collection and recording of aircraft movement data on a continuous basis, and for undertaking the subsequent analysis on which the compliance monitoring will be based.

It is recommended that the aircraft movement data is recorded, for both day-time and night-time movements, by:

- Operation Group (Scheduled jet movements, scheduled turboprop, GA and helicopter)
- Aircraft type (B737, ATR72, C172, R22 etc.) if possible
- Arrivals by runway
- Departures by runway
- Circuits.

The total number of recorded movements of each Operations Group and the total airport aircraft movements (all Groups) will be compared against the Threshold Criteria as described below.

HIA will prepare an Airport Noise Compliance Report for each scheduled meeting of the Liaison Group, comprising:

- Commentary on operations, tracks and traffic data including movement numbers and aircraft types and any current trends and seasonal variations, as follows:
 - Reference to the period of aircraft movement observations
 - Actual movement data for the four-month period of observations, in the categories described above
 - Rolling 12-month aggregate of aircraft movements for the categories described above
- An outline of existing and proposed noise mitigation measures.

6.3 Threshold Criteria

The Threshold Criteria at which HIA shall take further noise management actions over and above this CMP are:

- Where the estimated annualised movements for the current period for total airport aircraft movements (All Groups) have exceeded the threshold percentage of 70% of the total projected future aircraft type mix and quantum of movements, upon which the ANB and OCB have been modelled
- Where the estimated annualised movements for the current period for any Operations Group have exceeded the threshold percentage of 70% of the projected future aircraft type mix and quantum of movements for that Group, upon which the ANB and OCB have been modelled
- Where the number of movements at night exceeds 5% of total movements
- Where there has been, or is soon expected to be a major change in operational patterns, such as:
 - Increasing use of a particular runway from that in the District Plan runway usage assumptions
 - Regular operations by a new aircraft type with a noise signature significantly different from those in the District Plan mix
 - Periodic usage by a new aircraft type with a noise signature that might create adverse “single event” noise impacts
 - Any other event or trend in activity that is likely to result, in the near to mid term future, in aircraft operations from which noise impacts may be approaching or exceeding the ANB and/or OCB

Discretion lies with HIA to decide whether to run the Integrated Noise Model1 (INM) model at any time to generate a current view of estimated noise exposure to be compared with the District Plans ANB and OCB. It is recommended that the running of model should be performed approximately every 3 years (last done 20/10/2009). The model used being the same INM version 7.0a that was used to calculate the ANB and OCB.

6.4 Monitoring Once Threshold is Met

Once the above Threshold Criteria is surpassed (e.g. total aircraft movements surpass is greater than 70% of the future total projected or number of movements at night exceeds 5% of total movements) then:

Noise contours will be prepared annually for the busiest period. If the contours show that at any location, noise is within 1dB of the limit then temporary in-field monitoring is carried out to verify compliance.

6.5 Appropriate Personnel

HIA will ensure that calculation of threshold criteria, monitoring and noise measurements undertaken above are by a suitably qualified and experienced person.

7.0 Contact for Noise Complaints

Complaints, questions or feedback regarding the Noise Management Program should be directed to:

Community Liaison Group
Hamilton International Airport
Phone: (07) 848-9027
Email: wral@hamiltonairport.co.nz
Mail Address: Airport Road, RD 2
Hamilton 3282

Appendix 2: Noise Complaint Form

COMPLAINANT		Complaint No: _____
Name: _____	Company: _____	
Address: _____ _____	Phones:	
	Hm: _____	
	Bus: _____	
	Mob: _____	
Date: _____	Time: _____	
Nature of Complaint: _____ _____ _____		
Date of Occurrence: _____	Time: _____	
Where: _____		
Aircraft type _____	(if known) registration, colour, distinguishing characteristics	
Details: _____		
INVESTIGATION		
Date: _____	Investigator: _____	
Actions and Findings: _____		
Response to Complainant: _____		
Recommendation (if any): _____ _____ _____		
Signed (by the person investigating to track accountability)		