



**WHANGAREI**  
DISTRICT COUNCIL

# **Whangarei Airport Noise Management Plan**

*Recommended By*  
*Airport Noise Management Consultative Committee*

*Updated September 2009*



*Creating the ultimate living environment*



## Table of Contents

1.	Foreword .....	2
2.	Introduction .....	3
2.1	General Introduction .....	3
2.2	Background .....	4
2.3	Purpose .....	5
2.4	Scope .....	5
2.5	Plan Status .....	5
3.	Planning Status of Airport .....	6
3.1	Relevant Legislation .....	6
3.2	Proposed Whangarei District Plan .....	7
4	Roles and Responsibilities .....	8
4.1	Overview .....	8
4.2	Organisational Roles and Responsibilities .....	8
4.3	Individual Responsibilities .....	11
5.	Noise Management - Implementation .....	12
5.1	General Objectives and Principals .....	13
5.2	Best Practicable Option .....	13
5.3	Flight Operations .....	14
5.4	Operational Control .....	19
5.5	Management Procedures .....	23
6.	Monitoring .....	30
6.1	Noise Monitoring .....	30
6.2	Plan Monitoring .....	31
6.3	Audit Requirements .....	31
7.	Review Procedures .....	32
7.1	Review .....	32
8.	Reporting .....	32
	Appendix A - Definitions .....	33
	Appendix B - Forms .....	36
	Appendix C - Published Vectors and Charts .....	38
	Appendix D - Whangarei Airport Noise Management Maps .....	40
	Appendix E - Whangarei District Plan – Airport Noise Rules .....	41

## 1. Foreword

This Whangarei Airport Noise Management Plan has been developed in response to submissions received on the Proposed Whangarei District Plan Variation 2003/33 (Airport Noise). Submissions on the Proposed Variation ranged from engine testing and helicopter noise through to the location and way the Proposed Air Noise Boundaries were calculated. Many of the submissions related to matters that could not be addressed through the Whangarei District Plan as they were associated with airport management issues, rather than District Plan issues.

Following receipt of submissions, the Whangarei District Council, in conjunction with the Whangarei Airport Authority set up two mechanisms, in addition to the formal Resource Management Act (1991) process to address the concerns raised by the community. These mechanisms were:

The formation of the Airport Noise Management Consultative committee to create a transparent consultative environment

The development of an Airport Noise Management Plan to address community concerns that could not be addressed through the District Plan process

This Noise Management Plan represents the first major step by the Whangarei Airport Authority to developing a more consultative approach to the management of the effects of the Airport on the community. The Plan has been developed in close consultation with the Airport Noise Management Consultative committee, which has representatives from both Airport users and the community.

The Airport Noise Management Consultative committee, along with the Whangarei Airport Authority recognises that this document is a "living document" and will evolve over time. The development of the document will occur in close consultation with airport users, the community and the Airport Authority through the Airport Noise Management Consultative committee.

The Airport Noise Management Consultative committee has endorsed this document on the basis that it is a substantive step toward the long term management of noise issues at the Airport and that future noise management will be achieved through a consultative approach.

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## 2. Introduction

### 2.1 General Introduction

The Onerahi peninsula, which encompasses the Whangarei Airport and the surrounding residential area, was originally known as Grahamtown, however, was renamed Onerahi due to confusion with another locality of the same name. The site where the Airport is currently located was originally a large flat area containing Kauri and associated Manuka scrub. The historical presence of Kauri is evidenced by local children from Onerahi School fossicking for Kauri gum as a source of pocket money in the 1930's.<sup>1</sup>

The Onerahi peninsula has been a strategic transport link for Whangarei, going back to the 1890's when large volumes of Kauri and coal were being produced from Puhipuhi forest and Hikurangi respectfully.<sup>2</sup> In 1885, it was recognized that the shipping facilities at Kioreroa Wharf did not provide sufficient depth. In 1896 timber merchants were floating their logs down the Hatea River so that they could be loaded onto large ships waiting in deep water at Onerahi. Following several false starts, a railway (The Grahamtown Extension) line was constructed to Onerahi; this railway line followed what is now "Beach Road" and was linked to a 400 meter long wharf located where the Onerahi Yacht Club is now. This wharf was utilized for the export of Kauri logs and coal.

At the time, there was no rail link to Auckland and road access was marginal at best, with Dome Valley being completely impassable for much of the time. Onerahi was therefore a major strategic transport link for passengers and cargo (primarily Kauri and coal). Passengers would take a train out to Onerahi where they would board a passenger ship for the overnight journey to Auckland. Onerahi as a cargo and passenger port declined over time with the reduction in both Kauri and coal production and the linking of the Whangarei Rail with Auckland. It was around this time that a air transport was being developed.

The first passenger air trip to Whangarei was made in March 1920 by Seaplane, landing in Onerahi. Within seven years, an air service was provided to Whangarei by the Air Survey and Transport Company. This service utilized seaplanes, with the principle landing area being near to Onerahi. At about this time, the first aerial photograph of Onerahi was taken by Captain Bob Going. Although indistinct, the photograph shows the current location of the airport to be largely bare land (possibly with some low intensity farming activities occurring). The photograph also shows some residential development around the periphery of the existing airport, including those houses that were shifted as part of the original Airport development, and the possibility of at least one road extending across the field.

The first formal proposals to develop a permanent aerodrome in Whangarei were made in 1928, with a strong push for developing the site at Pohe Island. However, by 1933 Pohe Island was abandoned due to a range of difficulties, including flooding. At this time, six sites were considered, and in 1936 the Onerahi Site gained approval as the most satisfactory site.

Onerahi Airport was gazetted in 1937 and the airport was completed in May 1939. To make way for the Airport, some 20 - 30 houses were relocated to Handforth Street and other locations. By this time World War 2 was imminent and during the following five years the airport was used for war-time purposes. This had an immediate effect on the Onerahi School. War time hangers and air raid trenches were constructed on or adjacent to school grounds with class work hindered by testing and maintenance of aero engines. Following the war, the military activities wound down and the airport was used for unscheduled passenger services and aero-club activities.

In January 1947, a regular passenger service began using a 10 seat Electra aircraft and by January 1948 this service was operating twice daily. The Electra's were used until 1950 where

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<sup>1</sup> "A History of Onerahi District and School – 1893-1993; Onerahi Centennial Book Sub-committee; 1993

<sup>2</sup> General information for these paragraphs are derived from "Foote Prints Among The Kauri"; Bill Haigh

they were withdrawn from service and replaced with Loadstars and DC3's. However, the Whangarei Airport was too small for these larger aircraft so the small 6 seat Dominie aircraft were used. During peak times, the Dominie's were doing six return flights per day until 19 December 1963.

In 1951, permission was given to purchase 6 ½ acres of land at Sherwood Rise for the development of a new school. The relocation of the school, which at that time was still immediately adjacent to the Airport, was primarily due to over crowding and an inability for the site to be further expanded. The last class to move from the Airport Site of the school to Sherwood Rise was in 1961.

From December 1963 through to around May 1964, the Airport was upgraded with the construction of a sealed runway, taxiway, apron and other associated buildings and works. The extension of the runway utilized earth removed from the nearby Pah Hill. Once completed, the Douglas DC-3 Skyliner started to operate. This upgrade to larger aircraft roughly coincided with Whangarei reaching City status.

November 1969 saw the opening of a new terminal building which to a large extent completed the airport to its current layout.

The first official night-time landings followed the installation of airport lights, including leading lights in December 1990. A great deal of the work undertaken to install these lights was undertaken by volunteers (most probably aero-club members) with their contributions ranging from digging trenches through to the preparation of the lights for installation.

Over the years, the use of the Airport has changed in line with the economic conditions in the North. The Airport has had regular scheduled services and commuter flights, a significant Northern Districts Aero Club presence, as well as other commercial aircraft. At one point, some six top dressing planes operated out of the Airport, including a DC-3 that had been adapted for top dressing purposes. Recent years have seen an increase in helicopter use at the Airport. Although only a very few helicopters use the Airport as a permanent base, the number of these aircraft has increased significantly in the Northland Region, with those aircraft visiting the Airport for a number of reasons, including refueling and training purposes.

Over recent times, there has been increasing conflict between the Airport and the noise sensitive land uses that surround it. This has resulted from Airport developing and changing with a greater demand for scheduled services, more recreational flying and the development of helicopter usage, coupled with an increasing density of residential land uses around the Airport.

## **2.2 Background**

As a result of the 2001 Whangarei District Plan as amended by Council decisions being published, three references were lodged with the Environment Court with respect to airport related provisions in the Proposed Whangarei District Plan. All three references sought very different outcomes, and as such it was decided that the best practicable means of addressing the references, and identified shortcomings in the Proposed District Plan was to undertake a Plan Variation. This approach was supported by all parties, including the environment Court.

The Submissions received on the Proposed Airport Noise Variation 2003/33 principally related to airport noise, including engine testing, helicopter activity and the future growth of the airport in conjunction with the future development and effects on the amenity value of the surrounding residential area.

Noise generated by airport activities, operations, and it's management, along with the broader management of activities on the airport site are some of the main issues raised in submissions and further submissions received. The development of a Noise Management Plan to better manage noise emissions arising from activities and operations at the airport, along with the establishment of a noise management committee that represented Council, airport users and

the community was considered the most appropriate way to resolve the concerns raised. A Council Resolution on 17 June 2004 set this process in motion.

This Noise Management Plan is intended as a management document for the Whangarei Airport Authority and the day-to-day management of the Airport. The Plan will also provide a basis for the Whangarei Airport Noise Management Consultative committee and the Whangarei District Council for auditing how well the Airport manages noise emissions.

## **2.3 Purpose**

The purpose of the Whangarei Airport Noise Management Plan is to set out the management procedures and actions to be undertaken by the Whangarei Airport Authority (including day-to-day managers) to meet, and where practicable, exceed the requirements of the noise emission components of the Whangarei District Plan. This Plan is intended to provide a guide for use in both the day-to-day management and long term strategic planning decisions with respect to procedures, obligations and best practicable options relating to noise emissions.

## **2.4 Scope**

The scope of this Plan extends to managing noise emissions resulting from the operation, management and long term development of the Whangarei Airport.

Among other things this Noise Management Plan will address:

- Procedures for handling noise complaints
- Noise abatement procedures
- The methods to be employed to monitor the implementation of this Plan and the level of compliance with noise rules
- Timely provision of aircraft noise and flight path monitoring information

The Plan cannot address the control of aircraft following take-off or prior to landing, as these aspects are, by law, under the control of the Civil Aviation Authority. Neither does the Plan address non-noise issues such as fuel emissions, vibration or visual aspects of the airport or its operation.

Where there is inconsistency or conflict between this Plan and other relevant legislation or regulations, the requirements of the relevant Act or Regulations will have priority. In particular, the requirements of the Civil Aviation Authority, Civil Aviation Rules and Regulations will prevail over any aspect of this Plan.

It should be noted that where there is conflicting interest, the Civil Aviation Authority will be consulted in the first instance to seek a suitable solution.

## **2.5 Plan Status**

The Whangarei Airport Noise Management Plan is a non-statutory plan for the Whangarei Airport Authority.

The Plan is a public document which has been developed via a public process within the Whangarei Airport Noise Management Consultative committee, which is comprised of Council, industry and community representatives. The Plan has been recommended to the full Whangarei District Council by the Whangarei Airport Noise Management Consultative committee. The Plan has been adopted by both the Whangarei District Council and the Whangarei Airport Authority has adopted the Plan.

## 3. Planning Status of Airport

### 3.1 Relevant Legislation

#### Resource Management Act (RMA) 1991

The Whangarei District Plan, along with the associated airport provisions, is written under the Resource Management Act 1991 (RMA). The RMA promotes the sustainable management of natural and physical resources to meet the reasonably foreseeable needs of future generations whilst avoiding, remedying or mitigating significant adverse effects of activities on the environment. Section 326 of the RMA defines excessive noise as:

"In this Act, the term [http://www.legislation.govt.nz/libraries/contents/om\\_isapi.dll?clientID=81867&hitsperheading=on&info base=pal\\_statutes.nfo&jump=a1991-069%2fs.2-ss.1-df.excessive.noise&softpage=DOC - JUMPDEST a1991-069/s.2-ss.1-df.excessive.noise](http://www.legislation.govt.nz/libraries/contents/om_isapi.dll?clientID=81867&hitsperheading=on&info base=pal_statutes.nfo&jump=a1991-069%2fs.2-ss.1-df.excessive.noise&softpage=DOC - JUMPDEST a1991-069/s.2-ss.1-df.excessive.noise) **excessive noise**" means any noise that is under human control and of such a nature as to unreasonably interfere with the peace, comfort, and convenience of any [http://www.legislation.govt.nz/libraries/contents/om\\_isapi.dll?clientID=81867&hitsperheading=on&info base=pal\\_statutes.nfo&jump=a1991-069%2fs.2-ss.1-df.person&softpage=DOC - JUMPDEST a1991-069/s.2-ss.1-df.person](http://www.legislation.govt.nz/libraries/contents/om_isapi.dll?clientID=81867&hitsperheading=on&info base=pal_statutes.nfo&jump=a1991-069%2fs.2-ss.1-df.person&softpage=DOC - JUMPDEST a1991-069/s.2-ss.1-df.person) **person** (other than a person in or at the place from which the noise is being emitted), but does not include any noise emitted by any—

(a)

[http://www.legislation.govt.nz/libraries/contents/om\\_isapi.dll?clientID=81867&hitsperheading=on&info base=pal\\_statutes.nfo&jump=a1991-069%2fs.2-ss.1-df.aircraft&softpage=DOC - JUMPDEST a1991-069/s.2-ss.1-df.aircraft](http://www.legislation.govt.nz/libraries/contents/om_isapi.dll?clientID=81867&hitsperheading=on&info base=pal_statutes.nfo&jump=a1991-069%2fs.2-ss.1-df.aircraft&softpage=DOC - JUMPDEST a1991-069/s.2-ss.1-df.aircraft) **Aircraft** being operated during, or immediately before or after, flight"

Although it is subject to interpretation, the terms "immediately before or after flight" is taken to include taxiing to a take-off point (or from a landing point), instrument checks and other procedures required to be undertaken whilst engines are running as part of CAA procedures or "good practice" for flight safety.

This Plan gives effect to the provisions of the Whangarei District Plan, including the relevant Designations) and is consistent with the provisions of the Resource Management Act 1991. However, it should be noted that, although this Plan is consistent with the RMA, it is not a "Resource Management Act document" rather; it is a management document for the Whangarei Airport Authority.

#### Civil Aviation Act 1990

The Civil Aviation Act 1990 establishes rules of operation and divisions of responsibility within the New Zealand civil aviation system in order to promote aviation safety. In general, all aspects of flight, flight safety and airport operation are conducted under the Civil Aviation Act (1990), its regulations or the rules made under this Act.

#### Airport Authorities Act 1966

The Airport Authorities Act 1966 provides for the formation of the Whangarei Airport Authority. The Act sets out the responsibilities of the Airport Authority, along with the limitations of its powers.

#### Health Act 1956

The Health Act 1956 sets out the general powers and responsibilities of District Councils with respect to public and environmental health issues. The Health Act 1956 provides for the appointment of Environmental Health Officers. The Act also gives those officers certain powers to enforce public and environmental health rules and regulations.



Environmental Health Officers are also responsible for enforcing District Plan Rules with respect to noise nuisances. However, the enforcement procedures are generally undertaken through the provisions of the Resource Management Act and / or District Plan Rules.

### **3.2 Proposed Whangarei District Plan**

The principal planning document that relates to the Whangarei Airport is the Proposed Whangarei District Plan. This Plan has been developed in accordance with the Resource Management Act 1991. The Plan provides for an aerodrome through a Designation and further manages noise emissions from the Whangarei Airport through District Rules and other methods. In addition, the District Plan identifies the area around the Airport as "Living 1 Environment".

The Designation allows for all airport related activities to be undertaken, but the Airport Noise Rules ensure that all activities (whether airport related or not) at the airport are undertaken in a manner that restrict overall noise emissions beyond the boundary of the site.

#### **Aerodrome Designation**

This Section shall be amended in accordance with the decisions released relating to an application to change the Airport Designation. This application will be heard in conjunction with hearings on the Proposed Airport Variation 2003/33.

The Whangarei Airport is designated for "Aerodrome" purposes in the Proposed Whangarei District Plan. This Designation authorises airport related activities, including aircraft movements, procedures for the safe and efficient operation and movement of aircraft, as well as all other activities reasonably associated with an airport.

In effect, the Designation makes all airport related activities within the identified boundaries of the Designation, a Permitted Activity. The Permitted Activity status of airport related activities means that, providing the conditions (*1 and 2 below*) of the Permitted Activity are met, no Resource Consent is required under the Resource Management Act 1991.

The Aerodrome designation is subject to the following conditions:

1. In administering the conditions of this designation, the Whangarei Airport Authority shall adopt the best practicable options including but not limited to management procedures and operational controls to reduce the exposure of the community to noise from aircraft and airport activities; and
2. The Ldn 55 dBA noise contour (the "Outer Control Boundary") and the Ldn 65 dBA noise contour (the "Air noise Boundary") shall be located in accordance with the provisions of the Whangarei Airport Noise Study as these are located on the Resource Area Maps (*of the district Plan*)

The Designation sets out two fundamental principles of noise management at the Whangarei Airport, these being the adoption of Best Practicable Options and overall noise limits. This Plan forms the principle mechanism that the airport will utilise in adopting Best Practicable Options (*refer Section 5.2*). The Plan is also a key mechanism for ensuring that the airport operates within the defined noise limits, as well as setting out procedures that show that the noise limits have not been exceeded.

#### **Airport Environment**

The Airport Environment Section of the Whangarei District Plan establishes the extent of the Airport Environment (*Planning Map 46*) and Rules (*34.9 – 34.10*) for activities that do not comply with the Aerodrome Designation.

The effect of the Airport Environment Rules (*Noise – 34.9 and Noise 34.10*) is to set minimum standards for noise emissions from activities that are otherwise permitted under the Aerodrome designation (with the exception of aircraft movement). In addition, these rules act to control

the actual or potential impact of activities that are not airport related, or otherwise do not comply with the Aerodrome Designation (including the Conditions of the Designation), but are located within the Airport Environment. Where the noise standards cannot be met, the Activity is deemed to be a Restricted Discretionary Activity.

The full text of the Airport Environment Rules is contained within Appendix E.

### **Airport Noise Rule**

The Airport Noise Rule (*Rule 45.3*) sets out the noise emission standards for aircraft movements (including taxiing, take-off and landing). The Standards utilised are based on the Air-noise Boundaries identified on Planning Map 46. In addition, the Rule sets out the circumstances whereby the noise standards can be exceeded.

The full text of the Airport Environment Rules is contained within Appendix E.

### **Living 1 Environment**

The Living 1 Environment on the Onerahi Peninsula is adjacent to the Whangarei Airport, and the Proposed Outer Control Boundary ( $L_{dn}$  55dBA) overlaps the Living 1 Environment.

The Living 1 Environment is an area that is utilised primarily for residential purposes. The District Plan Policy and Rules reflect the predominant residential uses within the Living 1 Environment. The Policies and Rules therefore restrict certain activities that are incompatible with residential uses. In addition, the Rules set noise limitations on activities within that environment. Where the Living1 Environment is enclosed by the Airport Outer Control Boundary and or the Airport Noise Boundary, additional rules that reflect this situation have been proposed.

## **4 Roles and Responsibilities**

### **4.1 Overview**

This Sub-Section sets out the various roles and responsibilities that are relevant to this Plan. In terms of responsibilities for the regulation of noise generating activities, the Whangarei Airport is relatively unique. Traditionally, the Territorial Authority has regulatory authority for noise generating activities. However, in the case of Airports, once the aircraft (noise generating activity) leaves the ground, the regulatory responsibility for noise moves to the Civil Aviation Authority. In addition, there is a hierarchy of responsibilities for the overall management of the Whangarei Airport.

This Sub-Section sets out both the regulatory organisations responsible for noise issues and the day-to-day responsibilities for the implementation of this Plan.

### **4.2 Organisational Roles and Responsibilities**

There are four key organisations that have critical roles with respect to the overall management of the Whangarei Airport and addressing noise related issues. These organisations are:

- Civil Aviation Authority
- Whangarei District Council
- Whangarei Airport Authority
- Airport Noise Management Sub-Committee

## **Civil Aviation Authority**

The Civil Aviation Authority (CAA) is established by Section 72(a) of the Civil Aviation Act 1990 and through that Act, is the regulatory authority responsible for civil aviation safety and security. The Civil Aviation Act 1990 gives the CAA sole statutory responsibility for the regulation of navigable airspace in New Zealand.

In terms of noise, the Civil Aviation Authority is responsible for all aircraft that are in flight. In effect, as soon as an aircraft leaves the ground during take-off, regulatory responsibility for aircraft noise shifts from the Territorial Authority (Whangarei District Council) to the Civil Aviation Authority.

Section 29(b) of the Civil Aviation Act 1990 (Rules for Noise Abatement Purposes) states that "without limiting the power conferred by Section 28 of this Act, the Minister may make ordinary rules prescribing flight rules, flight paths, altitude restrictions, and operating procedures for the purposes of noise abatement in the vicinity of aerodromes". This Act also sets out the process for making such rules, including the need for public notification and consultation.

In practice, the CAA does not consider it appropriate to take on the role of co-ordinator of all aircraft noise abatement regulation at aerodromes, rather, it expects the Territorial Authority to petition the CAA (having first undertaken all public consultation) for the need to have a Rule. The CAA will then take over responsibility for taking that draft rule through the processes described in the Civil Aviation Act 1990.

The Civil Aviation Act 1990 does not allow the Minister to delegate authority to make rules, and sets out the limitations of action that can be taken by CAA with respect to breaching such rules.

In terms of this Noise Management Plan, the CAA has the following key responsibilities:

- All in-flight activities and procedures
- Flight Path Rules for noise abatement purposes
- All aspects of aircraft safety, whether in the air or on the ground

These responsibilities mean that this Noise Management Plan may not be inconsistent or contradictory to any existing Civil Aviation Authority Rule, Regulation or other requirement.

## **Whangarei District Council**

The Whangarei District Council is the Territorial Authority (in accordance with the Local Government Act 1974) with jurisdiction over the Whangarei Airport. The Whangarei District Council has a range of functions and responsibilities under a variety of Acts. Generally these responsibilities encompass the sustainable management of natural and physical resources and the promotion of social, economic, environmental, and cultural well-being of communities, both in the present and the future.

The Whangarei District Council has a responsibility toward not only the local community surrounding the Whangarei Airport, but also the community of the Whangarei District as a whole. This responsibility is not limited to the current community's needs or wishes, but by statute, must extend to the needs of future generations and communities.

In terms of this Noise Management Plan, the Whangarei District Council has specific functions and responsibilities under the Resource Management Act (1991) and the Health Act (1956). These responsibilities include, but are not limited to the control of the emission of noise and mitigation of the effects of noise, and the enforcement of noise standards and the control of noise nuisances.

In terms of noise generated by the airport, the Whangarei District Council may impose and enforce noise standards for airport activities, once an aircraft has landed, and prior to its take-off. Once an aircraft is airborne, the Civil Aviation Authority is the responsible authority.

In terms of this Noise Management Plan, the Whangarei District Council has the following key responsibilities:

- The establishment, implementation and review of objectives, policies and methods for the sustainable management of the Whangarei Airport (particularly relating to noise)
- The enforcement of any established noise standards
- Control of any new land-use, activities or development in, on, or in the vicinity of the Whangarei Airport that may have an effect on either the airport or the surrounding area

In undertaking its duties and responsibilities, the Whangarei District Council must recognise that it has a responsibility toward the local community at Onerahi, as well as the wider community of the district and future generations of both communities.

### **Whangarei Airport Authority**

Under Section 3 of the Airport Authorities Act 1966, the Whangarei District Council is deemed to be the Airport Authority with respect to the Whangarei Airport.

The Whangarei Airport Authority is responsible for the ongoing management of the Whangarei Airport, including but not limited to maintenance, improvement, and safe and efficient aircraft operations. Management includes airport approaches, buildings, and other accommodation, and equipment, land and general airport operations on the ground.

The Whangarei Airport Authority is required by statute to operate the Whangarei Airport as a commercial undertaking. That is, any and all maintenance and/or development must first and foremost be undertaken for the safe and efficient use of the airport, but must also be undertaken in a manner, rate or time that allows the airport to operate in a commercially viable manner.

The Whangarei Airport Authority's primary responsibility is toward the airport itself.

In terms of this Noise Management Plan, the Whangarei Airport Authority has the following key responsibilities:

- Ensuring the safe and efficient management and operation of the airport
- Ensuring the ongoing commercial viability of the airport
- Implementing this Noise Management Plan
- Managing the airport in a way that is consistent with its designation as an Airport under the Whangarei District Plan and in a manner that complies with relevant rules and/or consent conditions arising from the Whangarei District Plan or Resource Consents issued to the Whangarei Airport Authority.

The Whangarei Airport Authority is the airport managing authority, whilst the Whangarei District Council is the regulatory authority with respect to the airport. Both of these organisations are in effect, the same. In the interests of transparency of regulatory decisions, both of these functions of Council maintain a degree of separation, much in the same way as the Works and Services part of Council maintains a degree of separation from the policy and regulatory arm of the Council.

### **Airport Noise Management Sub-Committee**

The Airport Noise Management Consultative committee is a Committee of the Whangarei District Council and as such operates under Council Standing Orders and the Local Government Act 2002. The scope of the -Committee is set out by the Whangarei Airport: Noise Management Consultative-Committee Terms of Reference, as adopted by the Whangarei District Council on 6 October 2004, and further received by the Consultative Committee.

The purpose of the Committee is to consider, and where appropriate make recommendations to the Whangarei District Council on aircraft noise issues and concerns that arise from the operation and activities at the Whangarei Airport.

Specific responsibilities of the Airport Noise Management Consultative Committee with respect to this Plan include:

- Identifying community concerns relating to aircraft noise
- Formulating and recommend methods and procedures to minimise noise impact on the community that surrounds the Whangarei Airport (including the development of this Plan)
- Acting as an advisory committee with respect to noise complaints toward the Whangarei Airport Authority and report these recommendations to Council
- Monitoring the results of noise level monitoring and compliance with noise abatement procedures and the Noise Management Plan

The Noise Management Consultative Committee is, in itself a method of implementation with respect to noise management at the Whangarei Airport.

### **4.3 Individual Responsibilities**

The organisations outlined above primarily have policy, regulatory or review responsibilities. There are three key individuals (or group of individuals) that have critical roles with respect to the day-to-day management of the Whangarei Airport and the actual implementation of this Plan. These individuals are:

- Whangarei District Council Property Manager
- Airport Manager
- Individual Airport Users

#### **Whangarei District Council Property Manager**

The Whangarei District Council Property Manager is directly responsible for the management of all properties owned and/or operated by the Whangarei District Council. In relation to the Whangarei Airport, the Property Manager is responsible for letting and managing contracts and leases for a wide range of goods and services. These contracts range from the day-to-day airport management contract through to major maintenance and improvement services.

In addition to capital works budgeting, the Whangarei District Council Property Manager is responsible for monitoring the contractual relationship with the Airport Manager and ensuring that all matters that are required to be completed, complied with or otherwise addressed by the Airport Manager has actually been carried out appropriately. In effect, the Property Manager is responsible for ensuring that the Airport Manager has fulfilled all responsibilities with respect to the implementation of the Noise Management Plan.

The Property Manager is responsible for receiving a monthly report from the Airport and reporting activities to the Whangarei Airport Authority and / or the Whangarei District Council.

#### **Airport Manager**

The Airport Manager is contracted by the Whangarei District Council Property Manager to undertake the day-to-day management of the Whangarei Airport. It is the Airport Manager's responsibility, among other duties, to draft, compile and publish airport operational rules (ie: Local Notices To Aviators) and ensure that the Airport is operated, as a first priority, in accordance with relevant Civil Aviation Rules and regulations, with a specific emphasis on maintaining operational safety and security.

The Airport Manager is responsible for ensuring that the operation of the airport complies with all rules, regulations and consent conditions. This also includes the implementation of any management documents approved by either the District Council Property Manager or the

Whangarei Airport Authority. The Airport Manager therefore has primary responsibility for the implementation of the Whangarei Airport Noise Management Plan.

The Airport Manager also has a responsibility to keep appropriate records and provide a monthly report to the Property Manager. All, or a part of this monthly report may be audited by an independent party.

### **Individual Airport Users**

Individual airport users include, but are not limited to pilots and commercial aircraft operators, aero-clubs (including their members), maintenance contractors, airport service providers and any other individuals, organisations or companies that utilise the Whangarei Airport whether permanently, temporarily or on ad-hoc basis.

Individual airport users have a responsibility to ensure that they are fully aware of relevant requirements of the Noise Management Plan in terms of the activities that they are undertaking at the airport. Where a particular activity is not specifically identified the individual airport user has a responsibility for undertaking the activity utilising the Best Practicable Option for avoiding or minimising significant noise emissions beyond the boundary of the airport.

Subject to specific flight rules and safety considerations, all individual users of the Whangarei Airport should respect and show consideration to the residential community that surrounds the Airport and be aware that noise from their activities can impact on those residents.

## **5. Noise Management - Implementation**

The Whangarei District Plan sets out the noise emissions for which the Whangarei Airport must comply. The Implementation section of this Plan sets out the specific measures and methods that the Whangarei Airport Authority will implement in order to ensure the long term compliance with the District Plan. This Section of the Plan has been divided into the following sub-sections:

- General Objectives and Principals
- Best Practicable Option
- Flight Operations
- Operational Control
- Management Procedures
- Other matters

The implementation section of this Noise Management Plan contains a variety of methods and options that range from very prescriptive procedures, such as the "Noise Complaints Procedure" through to more general methods such as "liaison with CAA". In some cases, the Plan sets out a specific outcome, for example, monitoring of aircraft movements, but the specific way in which the Airport Authority achieves this is a matter for the Airport Authority to decide given available options and resources.

In developing implementation options and methods, the commercial objectives of the Whangarei Airport Authority, (as required by legislation) which is *to operate the Airport as a commercial business in a cost-effective and efficient manner at no cost to the Whangarei District Council or the Crown and to maintain and enhance the airport's assets* must be recognised. Where there is an outcome based method of implementation (for example Aircraft Movement Recording) the Airport Authority will develop a detailed methodology to achieve that outcome that takes into consideration issues such as commercial viability, CAA requirements and other operational matters. These commercial concerns need to be balanced with the needs or concerns of the neighbouring community.

## 5.1 General Objectives and Principals

The four Objectives outlined below recognize the four key factors associated with the management of noise at the Whangarei Airport. Those key factors are:

- Compliance with the provisions of the Whangarei District Plan
  - Existing residential and noise sensitive activities around the Airport
  - Operational and flight safety
  - Efficient use of the Airport
1. To ensure short, medium and long term compliance with the requirements of the Whangarei District Plan with respect to noise, and in particular with the conditions of the Whangarei Airport Designation.
  2. To have a noise monitoring regime in place that ensures that the airport's compliance with the District Plan can be adequately monitored and controlled
  3. To manage, and where practicable, minimise the adverse effects of aircraft noise arising from the development and use of Whangarei Airport on residential and other activities sensitive to aircraft noise.
  4. To ensure any noise solutions or methods implemented do not compromise operational flight safety standards or conflict with the requirements of the Civil Aviation Authority in respect of those operations or the airspace within which flying activities are conducted.
  5. To have consideration for the efficient use and development of land and operational facilities at Whangarei Airport

In addition to the above Objectives, the management of noise at the Whangarei Airport shall be undertaken in a manner that is consistent with the following guiding principles:

1. The Airport is operated by the Whangarei Airport Authority in partnership with the Ministry of Transport with a legislative requirement that the Airport be operated in a commercially viable manner.

Where there is a conflict between this Plan and the Civil Aviation Act or Civil Aviation Rules, that Act and the Rules will take precedence over this Noise Management Plan.

2. Safety, both on the ground and in flight is absolutely paramount.
3. Section 326 of the Resource Management Act 1991 specifically excludes noise emitted by aircraft immediately prior to, during and immediately following flight and it is generally accepted that this also includes taxiing to and from the runway. It is therefore inappropriate to manage individual aircraft; rather, it is the overall noise emissions from the Airport as a whole that should be managed.
4. Recognition that although the Whangarei Airport has existing use rights under Section 10 of the Resource Management Act 1991, it is also located in an area where residential land-uses have developed over time. Maintaining an open dialogue with residents through the Noise Management Sub-committee (with respect to noise emissions) is therefore a part of the responsible management of the Airport.

## 5.2 Best Practicable Option

The Whangarei District Plan enshrines the principal of "Best Practicable Option" with respect to the exposure of the community to noise from the Airport. It is therefore appropriate that this Plan defines "Best Practicable Option" and identifies what it means in practical terms in relation to this Plan and overall compliance.

The Noise Management Plan seeks to assist the Whangarei Airport Authority to achieve its requirements under the designation to implement the 'best practicable option' in the way it

operates. The RMA defines 'Best Practicable Option' in relation to a discharge of a contaminant or an emission of noise, as meaning:

*"The best method for preventing or minimizing the adverse effects on the environment having regard, among other things, to -*

- (a) The nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and*
- (b) The financial implications, and the effects on the environment, of that option when compared with other options; and*
- (c) The current state of technical knowledge and the likelihood that the option can be successfully applied".*

Essentially the RMA advises that the best practicable option is the optimum combination of all methods to limit noise to the greatest extent achievable. In terms of noise management at Whangarei Airport, this will mean implementing the measures and methods of this Plan appropriately in both the day-to-day management of, and long-term strategic planning for, the Airport.

A 'best practicable option' approach will be fundamental in upholding the purpose and integrity of the Noise Management Plan, which will in all cases with the guidance of the Noise Management Committee seek to adopt the most appropriate or 'optimum combination' of methods that are available to address and limit the extent of aircraft associated noise on the community.

In practice, the Noise Management Plan outlines the "Best Practicable Option" for the matters that the Plan covers or addresses. This means that if the Whangarei Airport is operating in a manner that is consistent or in compliance with this Plan, then it can generally be accepted that it is complying with the Best Practicable Option requirement. It is therefore anticipated that the Airport Authority will, over time, seek to expand this Noise Management Plan in conjunction with the Airport Noise Management Consultative Sub-committee to encompass new "Best Practicable Options" with respect to noise.

## **5.3 Flight Operations**

### **Introduction**

Flight Operations are those activities that are directly related to flight, which includes initial engine run-up, pre-flight activities (including engine / instrument checks), taxiing, take-off, landing and in-flight (refer definitions in Appendix A).

Section 326 of the Resource Management Act 1991 (and amendments) specifically excludes consideration of noise from aircraft whilst in-flight, including engine run-up, pre-flight checks, take-off and landing. In addition, any aircraft that has left the ground (and arguably during take-off procedures) is beyond the authority of the District Council and the provisions of a District Plan and the direct control of the Whangarei Airport Authority.

Despite the fact that Flight Operations are effectively beyond the scope of the District Planning process, the Whangarei Airport Authority recognises that noise emanating from Flight Operations is a contributing factor to the overall noise emissions from the Airport. As such, it is appropriate that "Flight Operations" are separated from other activities at the Airport, and the associated noise emissions managed within legal limitations.

### **Consultation and Petitioning of Civil Aviation Authority**

All flight operation activities must comply with Civil Aviation Authority Regulations and safety standards. These regulations and standards include:

- Pre-flight instrument checks and engine run-up



- Engine testing following maintenance
- In-flight rules
- Approach paths and flight vectors

In particular, under the Civil Aviation Act 1990, the Minister of Civil Aviation may make rules for the purpose of noise abatement at aerodromes. These rules can prescribe flight rules, flight paths, altitude restrictions, and operating procedures for the purposes of noise abatement in the vicinity of aerodromes.

#### *Flight Rules*

The process that the Airport Authority will follow with respect to petitioning the Civil Aviation Authority for the introduction of in-flight rules for noise abatement purposes has been set out by the Civil Aviation Authority:

- The Whangarei Airport Authority will ascertain that there is an aircraft noise problem within their jurisdiction that can only be dealt with by airspace control.
- Once a problem is established, the Whangarei Airport Authority will undertake the necessary public consultation to establish the case for making a rule.
- It must be shown that the proposed noise abatement procedure is in the public interest, taking account any additional costs incurred by aircraft operators and any projected benefits resulting from the proposal.
- The full case is then put to the Civil Aviation Authority in the form of a petition to make a rule, following the process detailed in Part 11 of the Civil Aviation rules.
- The Civil Aviation Authority will assess the petition and if it considers it appropriate, will prepare, an ordinary rule involving further consultation.
- The rule is then presented to the Minister to make.

The alteration of Rules for Noise abatement Purposes is a substantive legal undertaking and as such will only be embarked upon if all other options have been exhausted, and there is a real identified need to alter flight paths.

#### *Other Matters*

The Whangarei Airport Authority will maintain an ongoing dialogue with the Civil Aviation Authority with respect to issues that are noise related, including:

- Consulting the Civil Aviation Authority prior to the implementation or development of management or operational procedures
- Ensuring updated charts of the Whangarei Airport, including notes on noise issues, are updated
- Where necessary, reporting of pilots or aircraft that are persistently creating a significant noise nuisance

### **General Flight Operations – In Flight Noise Abatement Procedures**

The Civil Aviation Authority is responsible for issuing noise abatement rules for airports. Procedures for updating or amending these Rules are outlined in 6.3.2 (above).

Civil Aviation Rule (CAA) Part 93 "Special Aerodrome Traffic Rules and Noise Abatement Procedures" (9 January 2004) prescribes aerodrome noise abatement procedures for the Whangarei Airport. Sub-part H "Other Aerodromes" sets out the aerodrome traffic circuit, where each pilot in command of an aircraft shall conduct a right hand aerodrome traffic circuit when approaching for a landing at or after take-off from a runway at the Whangarei Aerodrome, unless:

1. Otherwise authorised by ATC; or
2. A turn in the opposite direction for an IFR procedure has been prescribed under Part 97 Civil Aviation Rule 93, and specifically Appendix D of this Rule, sets out Noise Departure Profiles for aircraft. Two procedures are prescribed which are detailed in (A) and (B) below:

*(A) Noise Abatement Departure Profile – Procedure C*

Each pilot in command of an aircraft shall –

1. from take-off to an altitude of not less than 800 feet above aerodrome elevation:
  - i. Use take-off power; and
  - ii. Use take-off flap; and
  - iii. Climb at V<sub>2</sub> plus 10 to 20 knots; and
2. at or above 800 feet above aerodrome elevation:
  - i. Reduce thrust by manual throttle reduction or by automatic means; and
  - ii. For aeroplanes not equipped with an operating automatic thrust restoration system, achieve and maintain not less than the thrust level necessary after thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, the take-off flight path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of engine failure; and
  - iii. For aeroplanes not equipped with an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, a take-off path engine inoperative climb gradient of zero percent, provided that the automatic thrust restoration system will, at least, restore sufficient thrust to maintain the take-off path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of an engine failure; and
  - iv. During the thrust reduction, co-ordinate the pitchover rate and thrust reduction to provide a decrease in pitch consistent with allowing indicated airspeed to decay no more than 5 knots below the all engine target climb speed and, in no case, to less than V<sub>2</sub> for the aeroplane configuration; and
  - v. Maintain the speed and thrust requirements specified in (i) through (iv) to the higher of 3000 feet above the aerodrome elevation, or until the aeroplane has been fully transitioned to the en-route climb configuration, then transition to normal en-route climb procedures.

*(B) Noise Abatement Departure Profile – Procedure D*

Each pilot in command of an aircraft shall –

1. from take-off to an altitude of not less than 800 feet above aerodrome elevation:
  - i. Use take-off power; and
  - ii. Use take-off flap; and
  - iii. Climb at V<sub>2</sub> plus 10 to 20 knots; and
2. at or above 800 feet above aerodrome elevation:
  - i. Initiate flaps and / or slats retraction; and
  - ii. Reduce thrust by manual throttle reduction or by automatic means; and
  - iii. For aeroplanes not equipped with an operating automatic thrust restoration system, achieve and maintain not less than the thrust level necessary after

thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, the take-off flight path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of engine failure; and

- iv. For aeroplanes not equipped with an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps-slats configuration of the aeroplane, a take-off path engine inoperative climb gradient of zero percent, provided that the automatic thrust restoration system will, at least, restore sufficient thrust to maintain the take-off path engine-inoperative climb gradients specified in FAR 25.111(c)(3) in the event of an engine failure; and
- v. During the thrust reduction, co-ordinate the pitchover rate and thrust reduction to provide a decrease in pitch consistent with allowing indicated airspeed to decay no more than 5 knots below the all engine target climb speed and, in no case, to less than  $V_2$  for the aeroplane configuration; and
- vi. Maintain the speed and thrust requirements specified in (i) through (iv) to the higher of 3000 feet above the aerodrome elevation, or until the aeroplane has been fully transitioned to the en-route climb configuration, then transition to normal en-route climb procedures.

### **Vertical Take-off and Landing**

Vertical take-off and landing principally applies to rotary winged aircraft (helicopters), however, there are other fixed winged aircraft that are capable of vertical take off and landing. The ability to hover gives these aircraft greater flexibility in terms of take-off and landing vectors.

### **Helicopter Flight Vectors**

The Whangarei Airport Authority will require helicopters, as far as practicable, to utilise runway vectors for both departing and approaching the Airport. This will be achieved by:

Publication of approach notes for rotary winged aircraft on Airways Corporation AIP Charts

Education of pilots through the publication of information and other materials for pilots using the Airport (*refer 5.4 below*)

Take appropriate follow up action where procedures are not followed

Where appropriate, petitioning the Civil Aviation Authority for the introduction of in-flight rules relating to helicopter approach and departure vectors

It should be noted that helicopters will only be required to utilize main runway vectors where there is little or no conflict with fixed wing aircraft and while it remains safe to do so in terms of air traffic volumes. Where significant conflict occurs, or a flight safety issue arises, alternative departure and approach vectors for rotary winged aircraft will be established. These alternative vectors will take account of the need to minimize the noise impact on the local community and the requirement to comply with the noise restrictions contained within the Whangarei District Plan.

### **Take-off Hovering and Taxiing Hovering**

Rotary winged aircraft do not normally taxi out to a take-off position or taxi to shift positions on the Airport. Rather, they are designed to lift off and travel at low altitude to the new position. In addition, normal safe practice prior to take-off is lift off to a low altitude hovering position, run any final checks, hover for a time to check for other aircraft to ensure that it is safe to take off. This pre-take-off hover is essential for flight safety, particularly in the absence of formal air traffic control at the Airport. This type of hovering is an essential aspect of the safe and efficient operation of the Airport and of a short duration. The Airport Authority does not propose formal controls on this activity, other than to educate pilots with respect to

the potential noise impacts of their general activities on the surrounding community (*refer 5.4 below*).

### **Hovering for Engine Testing and Rotor Balancing**

This is an essential activity that is undertaken following routine maintenance and inspections. Rotor balancing involves a short duration hover whilst the helicopter is linked to testing equipment and a strobe. The helicopter hovers briefly to establish rotor balance and undertake appropriate instrument tests. These brief hovers may be repeated over a period of time with adjustments been made between hovers. This type of hover is of short duration and is generally undertaken immediately outside the hanger area (due to the equipment that is required).

Although the hanger buildings are located near the boundary of the Airport, they act as an acoustic barrier for the near boundary. This type of hovering activity will be allowed to take place in the following areas:

- On the airport side, immediately outside a hanger or airport facility building
- Within the designated hovering zone on the Airport Noise Map contained in Appendix D.

Rotor balancing is normally a scheduled activity that can be planned in advance, therefore wherever practicable, hovering for rotor balancing and engine testing will be undertaken between the hours of 0700 and 1830.

Where there is a legitimate and reasonable need to hover for engine testing and rotor balancing purposes outside these hours, the time of the event, duration and reason for doing it outside the hours of 0700 – 1830 will be recorded with the Airport Manager.

Hovering for the purpose of rotor balancing and or engine testing between the hours of 2200 and 0700 will only be undertaken in exceptional circumstances or emergencies. Hovering for engine testing or rotor balancing during this time will count toward the 18 unscheduled night time engine testing events permitted under the Whangarei District Plan Airport Designation (except as outlined below). The time of the event, duration and reason for doing it between the hours of 2200 and 0700 shall be recorded by the Airport Manager and reported to the Airport Noise Management Sub-committee. Permission is required from the Airport Manager prior to commencement to ensure that the activity does not result in a breach of the 18 unscheduled tests allowed for within the Whangarei District Plan.

It is recognized that Helicopters play an important and unique role in search and rescue activities and Civil Defence emergencies. Where a Helicopter is being tested or undergoing emergency rotor balancing to make the aircraft operational for urgent or immediate participation in an emergency (as defined within the Whangarei District Plan Airport Designation) then the event will be recorded but will not be considered as counting toward the 8 unscheduled night time engine testing events.

### **Other Hovering**

This includes hovering for training purposes, pilot certification, testing and auto-rotation training. Hovering for purposes such as training can often involve extended periods of hovering in a single position. Often the degree of noise impact on residents is associated with the duration of a relatively fixed noise frequency and the unique nature of the noise made by a hovering helicopter.

Helicopter pilots are required to be able to operate at and around an Airport as part of the pilot training curriculum. In order to pass a license examination it is likely that a pilot will be required to operate in an airport environment with the examiner. It is therefore a reasonable requirement of full and proper training that the pilot undertake a portion of their training within the airport environment.

The Whangarei Airport Authority will manage hovering to minimize as far as reasonably practicable, the noise impact on the community by:

- Restricting prolonged hovering to a zone of the airport that has the least impact on the neighbouring community as identified on the Airport Noise Map contained in Appendix D
- Restricting the time spent hovering in any one session to no more than a consecutive period of 60 minutes
- Working with helicopter operators and instructors to ensure that there is a reasonable break of not less than 60 minutes between prolonged hovering sessions
- Restricting prolonged hovering in the hover zone to one helicopter at a time, unless there is a specific requirement where more than one helicopter must hover in unison then. Where there is a specific requirement for multiple hovering in the Hover Zone, the Airport Manager must be satisfied of its necessity and provide written permission for this to happen. Note, such an activity will only be agreed in exceptional circumstances.
- Where demand for helicopter hovering warrants it, and there is more than one pilot instruction company or organisation, the Airport Authority will work with helicopter operators to introduce a roster system for prolonged hovering sessions to ensure fair use and a minimum period of 60 minutes between hovering sessions
- The Airport Authority will encourage pilots, instructors and certifiers to vary training or certification sessions as far as practicable to avoid extensive prolonged hovering through education (refer 5.4 ) and ongoing liaison (refer 5.3 )

### **Military Flight Activities**

Military flight activities would normally be counted toward the overall noise emission limits, where these flights are normal take-off and landings. However, the military has rights to utilise the Airport. Any prolonged or unusual use of the Airport by the military for military purposes will be dealt with on a case by case basis. It should be noted that where the military utilise facilities such as an Airport, they have liaison officers to deal with public or local issues.

### **Air Shows / Open days or Other Unusual Activities**

Air Shows and open days are public events that can reasonably be expected to occur at an Airport from time to time. These activities generally bring a significant benefit to the wider community. Where these activities are proposed, the Airport Authority will deal with the issues that arise on a case by case basis and will consult with local residents, as well as the wider community. It should be noted that such activities do not occur on a regular basis.

## **5.4 Operational Control**

### **Introduction**

Operational Control at Whangarei Airport is specifically defined as those activities that take place on the ground that are not directly associated with flight operations (*refer 5.3*). These activities include:

- Engine testing (other than initial engine run-up)
- Fueling (where this may result in noise emissions)
- Taxiing (not associated with flight operations)
- Aircraft maintenance
- Dead aircraft maintenance
- Ground vehicle traffic
- General Airport and runway maintenance

- Airport related construction noise

These operational control activities are subject to the relevant rules contained within the District Plan, and Proposed Variation for the Airport Environment, particularly Rules 34.9, and 34.10. In addition, the Noise Management Plan, after consultation with Airport users/operators/contractors, will provide additional methods for mitigating any adverse noise effects as a result of these activities on the surrounding community.

### Engine Testing

The Proposed Whangarei District Plan sets out performance criteria for aircraft engine testing at the Whangarei Airport. The Whangarei Airport Authority will, as far as practicable ensure that aircraft engine testing complies with the following performance standards:

- Between the hours of 0700 and 2300, noise resulting from engine testing as measured at or within the boundary of the Living Environment shall not exceed 55dBA  $L_{eq}$  (16 hours)
- Between the hours of 2300 and 0700, noise resulting from engine testing as measured at or within the boundary of the Living Environment shall not exceed 45dBA  $L_{eq}$  (8 hours)
- Between the hours of 2300 and 0700, the maximum noise resulting from engine testing as measured at or within the boundary of the Living Environment shall not exceed 60dBA  $L_{max}$

It is also recognized that in some situations it may be necessary to conduct essential unscheduled maintenance and engine testing. No more than 18 such tests shall be conducted within any calendar year. Where this occurs, the noise limits set out in (a) above shall apply.

With respect to compliance with the above performance standards, sound levels shall be measured in accordance with NZS 6802:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.

A single engine testing event may include a series of engine run-ups to full or part power over a period of time, with minor adjustments and checks made between each run-up. An engine testing event is therefore defined as "*testing one or more engine(s) of a single aircraft which may involve multiple run-ups to part or full power with reasonable time periods between run-ups to allow minor adjustments or checks to be made*".

Where it is likely that engine testing will exceed the performance standards set out above, the Whangarei Airport Authority will apply for the appropriate Resource Consent in accordance with the Whangarei District Plan.

Where an engine test occurs between the hours of 2300 and 0700 or there is unscheduled engine testing (identified above), the time of the event, duration and reason for undertaking the test shall be recorded by the Airport Manager and reported to the Airport Noise Management Sub-committee.

Whilst engine testing is an essential activity at the Whangarei Airport, particularly in relation to ensuring that scheduled commuter flights remain operational, the Whangarei Airport Authority recognizes that the activity has a potential noise impact on the community, particularly where testing is undertaken at night. To assist in its management, the Whangarei Airport Authority will ensure that contractors and maintenance providers are aware of the potential impact, and where possible take reasonably practicable steps to minimize the impact. These steps may include:

- Wherever practicable, scheduling tests during daylight hours
- Minimising the duration of tests as far as practicable
- Undertaking tests in parts of the Airport that minimizes the noise impact on residents, for example where there is existing acoustic barriers (eg: hangars) or on sections of the airport that are remote from adjacent houses

- In the absence of acoustic barriers, varying the location of engine testing to reduce the cumulative effect on individual residences.

### **Re-Fueling**

Refueling in itself is not an activity that generates a significant noise, however, the movement of aircraft to and from refueling sites and leaving engines running whilst refueling does have a noise impact. Turbine engines are run during refueling as the act of stopping and starting engines for short periods significantly increases the engine cycles and reduces engine life and therefore significantly increases maintenance requirements (and therefore engine testing).

Refueling is an essential airport activity. The potential location and design of refueling points is restricted by clear operational requirements and safety issues. In identifying new locations for refueling points, the above requirements will be assessed within the context of:

- Potential noise impacts on the community
- Operational requirements
- Safety

As part of the pilot education proposals (*refer 5.4*), provision will be made to encourage pilots to turn engines off during refueling by advising them of the effects of their activities. It must be noted that in some instances, turning engines off and then restarting can result in greater noise emissions or safety issues.

The current fixed refueling point is being relocated to a position where, among other things, its use will have a reduced impact on the community in terms of noise. Should the location of this re-fueling point continue to cause significant noise impacts on the community, further investigations will be undertaken relating to the possibility of noise attenuation around the refueling site.

### **Taxiing for Non-Flight Purposes**

Taxiing, other than for take-off and landing is generally restricted to the movement of aircraft to other parts of the Apron or to and from maintenance bays. Smaller planes may utilize engines for this activity, although generally movements are very small and the smaller planes are pushed into place. Larger aircraft such as Air New Zealand and Eagle Air passenger planes are located in specific bays within reach of refueling points. The only time these aircraft are moved is for maintenance activities. In most cases these larger planes are towed by a small tractor in preference to utilising engines.

Utilising engines for non-flight taxiing increases both engine hours and engine cycles, which in turn increases maintenance and down time. It is therefore normal airport practice to tow aircraft into place. Where aircraft are towed, the noise generated is no different in intensity to that of a normal car.

To manage noise from non-flight taxiing, the Whangarei Airport Authority will encourage pilots and maintenance contractors wherever reasonably practicable, to move aircraft without starting and utilising aircraft engines.

### **Aircraft Maintenance (other than engine testing)**

Aircraft maintenance is primarily undertaken either in or immediately adjacent to hangers that are designed for that activity. Noise generated by this activity is generally no more than that emitted by normal power tools.

Maintenance of aircraft should be undertaken either inside any existing or future hanger, or adjacent to an airport building on the Airport side so that the building acts as an acoustic barrier

Where maintenance occurs between the hours of 2200 and 0700, and the nature of the maintenance has the potential to create significant noise measured at or within the Living Environment, such maintenance will be undertaken, as far as practicable inside the hanger facilities. Where this is not possible, the maintenance contractor will take reasonable steps to ensure that the noise created does not result in a nuisance in the living Environment. These steps could include:

- Positioning the aircraft being maintained as close as possible to the hanger to ensure that the building acts as an acoustic barrier
- Ensuring that non-essential noise generating equipment is turned off when not in use
- Ensuring that where equipment is fitted with mufflers or other acoustic shielding, those components are maintained in good working order

### **Ground Vehicle Traffic**

Ground vehicles are utilised for a variety of purposes at the Whangarei Airport, including for towing of vehicles and moving materials. Noise generated by ground vehicles at the airport is considered insignificant, due to the minimal numbers and use of ground vehicles, the distance from residential dwellings and the fact that the Airport is surrounded by residential areas where there are no controls on noise generated by ground vehicles.

Where mufflers or other noise suppression equipment is designed into ground vehicles, those systems will be maintained in good and sound working order.

### **Airport Runway Maintenance and Airport Construction**

Airport runway and airport construction covers a range of activities, including ongoing maintenance and improvements of both the main sealed runway and the cross wind runway, construction of airport related buildings such as hangers, terminal buildings or any other structure that is reasonably related to airport activities.

With respect to runway maintenance, there is a considerable (in most cases in excess of 100 meters) separation distance from the runway and the boundary of the Airport site. In addition, it is necessary from an operational point of view, to schedule maintenance as far as practicable around scheduled flights.

With respect to other Airport construction, for example hangers, the Airport Authority may not have direct control over contracts let for this type of work as the work may be undertaken on behalf of a third party or Airport tenant. As the Landlord, however, the Airport Authority will seek to ensure that "Good Practice" elements that relate to noise are included in any contracts to undertake the work.

With respect to maintenance or construction works undertaken by the Airport Authority, any contract let will contain "Good Practice for Noise Mitigation" elements within any contract. The exact nature of such provisions will be consistent with:

- The nature of the work to be undertaken
- The location of the work in relation to residential or other noise sensitive neighbours
- The length and duration of the work
- Proposed times that the work will be undertaken to fit within operational or safety requirements of the Airport
- Anticipated levels of noise generated by the activity

Good practice for noise mitigation will generally be consistent with the provisions that are normally associated with similar building (or for runway work – road maintenance) work carried out throughout the Whangarei District. Specific provisions may include, but will not necessarily be limited to:



- Time of day that work will be undertaken
- Duration of works
- Ensuring that machinery is, wherever practicable, switched off when not in use
- Ensuring, wherever practicable that noise generated from construction work is consistent with NZS 6803:1999 – Acoustics for Construction Work, where noise levels are measured in accordance with NZS 6803:1999 at the boundary between the Living 1 Environment and the Airport Environment
- Where noise generated from construction work is outside limits set in NZS 6803:1999, the project manager will be required to liaise with effected parties

## **5.5 Management Procedures**

### **Bi-annual Aircraft Noise Contours**

The Whangarei District Plan establishes an Air Noise Boundary (inner) and an Outer Control Boundary. The location of these boundaries is identified on Planning Map 46R in the Whangarei District Plan. These boundaries have been established for longer term District Planning purposes and reflect the projected noise boundaries at the Whangarei Airport in 2027, assuming a specific lineal growth in aircraft movements. These noise boundaries are based on the Ldn65 and Ldn55 noise levels respectively and the Airport is required to manage its operations in a way that ensures that these overall limits are not breached.

In order to provide residents and landowners with accurate information relating to current noise emissions and boundaries, the Whangarei Airport authority will prepare, using an appropriately qualified and experienced acoustic consultant, noise contours (Ldn55 and Ldn65) by January 31 in every even year (for example 2006, 2008, 2010...).

#### *Method of Calculation*

The method utilized to establish the Bi-annual Aircraft Noise Contours shall be consistent with the recommendations of New Zealand Standard (NZS) 6805 (or any amendment to that standard) or other such recognized standard that replaced NZS 6805. Specifically, unless NZS 6805 expressly recommends a different methodology, an Integrated Noise Model that utilises calculation procedures using an energy averaging technique to calculate noise exposure in terms of  $L_{dn}$ .

In order to ensure that the noise contours are appropriate for the Whangarei Airport at Onerahi, the data shall be adjusted appropriately to take account of topography. Input data will be derived from the Whangarei Airport Noise Monitoring Database that records flight movements for the purposes of the "Count and Calculate" noise monitoring method detailed in Section 7.1 (below).

#### *Public Availability*

Once prepared the Bi-annual Aircraft Noise Contours, will be reported to the Airport Noise Management Sub-committee for their endorsement. They will then be publicly available.

A public notice shall be placed in one or more newspapers that circulate in the Onerahi area. The public notice shall advise the following:

- A description of what the Bi-annual Aircraft Noise Contours are
- that they have been prepared for informational purposes only
- Where the public can view them.

A copy of the Bi-annual Aircraft Noise Contours shall be available at the main terminal at the Whangarei Airport Managers Office, Council Offices and public libraries.

### *Limitations of Use*

The Bi-annual Aircraft Noise Contours shall remain the property of the Whangarei Airport Authority, and may only be used or made public under the following conditions:

The Bi-annual Aircraft Noise Contours will be made available for information purposes only; to enable the public to compare current noise levels with those that are forecast in the Whangarei District Plan.

The Bi-annual Aircraft Noise Contours shall not be utilized for regulatory purposes, or to limit the operation of the Whangarei Airport beyond the conditions of the Designation within the Whangarei District Plan.

The Bi-annual Aircraft Noise Contours may only be used within a LIMS or PIMS Report if it is used in conjunction with the Airport Noise Boundary and the Outer Control Boundary, as identified on Planning Map 46R (or amendments) and an explanation is included as to the difference between the two maps.

### **Education of Airport Users, Pilots and Airport Operators**

Education of airport users, pilots and airport operators is fundamental to achieving a long term change in pilot culture toward a greater awareness of the community, in which they are operating. . An education package will be developed by the Whangarei Airport Authority, flight training organisations, scheduled flight operators, helicopter operators and flight instructors. Close consultation with these organisations will increase the "buy in" from airport users and therefore increase the long term success of the program.

The overall concept of the education program will be to promote a harmonious relationship between aviation activities and the environmental (noise) interests of the airports neighbours. The long term outcome of the program will be to limit the impact of flying and associated activities on the community and neighbours living in the vicinity of the Whangarei Airport and the Whangarei Aviation Area.

The education program will be initiated within 12 months of the Airport Noise Management Plan becoming operative. The program itself will be a "live program" designed to be developed and to adapt to changing circumstances over time.

The education program will be designed to target four broad groups of airport users:

- Regular commercial and non-commercial pilots – those pilots that would generally consider the Whangarei Airport as "home base"
- Pilot trainees – those pilots undertaking training for pilot certification purposes
- Visiting pilots
- Non-flying companies (maintenance contractors etc) that operate or provide a service at the Airport
- The general public

The overall focus of the education program will be on courteous and considerate flying, and in particular:

- Showing consideration to residential land uses around the Whangarei Airport
- Identifying and adopting procedures that can reduce the noise impact on the surrounding community
- Being considerate to all other users and the neighbourhood by exhibiting a professional attitude and a high level of airmanship
- Avoiding, un-necessary flying during "anti-social" hours such as very early in the morning or late at night
- Varying training schedules to avoid continuous hover training within the airfield area
- Promoting "best practice"

The education package for regular users of the Whangarei Airport will include:

- A package that outlines the responsibilities of pilots using the Whangarei Airport in relation to noise
- Specific procedural requirements, which include helicopter hovering zones, flight vectors and in-flight noise abatement procedures
- Obligation to report of movements and helicopter hovering times

In addition, the Whangarei Airport Authority will, in consultation with regular users of the Whangarei Airport, investigate the development of a "Fly Friendly" certification program similar to that in place at other airports such as Ardmore. This program would include a comprehensive flying ethics training module that focuses on noise abatement as well as other specific issues that better flying can benefit. The object of the program would be to provide local companies (and individual pilots) with certification that they operate in accordance with Whangarei Airport Noise and Ethical flying standards.

The education package for pilot trainees will be similar in nature to that of the package for regular users. However, the Whangarei Airport Authority, in consultation with local instructors would seek to have it included within the curriculum of local pilot training. This component of their training would be in addition to CAA requirements and as such not part of the formal CAA curriculum. If locally trained pilots received this component of their curriculum, they would be awarded similar "fly friendly" certification envisaged for local companies.

Visiting pilots will be provided with a leaflet upon arrival and payment of relevant fees. The leaflet will outline flight vectors for helicopters, hovering zones and other noise abatement procedures in place at the Whangarei Airport.

Regular contractors and non-flying companies that operate at or from the Airport will be provided information relating to procedural requirements and "best practice" that relate specifically to them. This information will be updated on a regular basis.

The general public will be provided with a leaflet (available at the airport or on request) outlining the Noise Complaint Procedure, as well as the actions the Airport Authority is doing to manage noise. Residents within the "Outer Control Boundary" as identified in the Whangarei District Plan will be mailed this leaflet, and further details on noise management procedures.

### **Airport Noise Management Consultative Committee Representation**

The Whangarei Airport, as part of the management of the Airport will ensure that it maintains a representative on the Whangarei District Council's Airport Noise Management Sub-committee. In maintaining representation on this Consultative committee, the Whangarei Airport Authority undertake to:

- Actively participate at the committee in a manner that is consistent with the Consultative-committee's Standing Orders and the requirements of the Local Government Act 2002.
- Encourage, as far as reasonably practicable, other Airport users and members of the community to maintain representation on the Consultative committee.
- Represent the position, requirements or point of view of the Whangarei Airport Authority in good faith.
- Participate by listening to the concerns and issues raised by the consultative-committee and work in good faith toward practical solutions wherever possible, whilst expressing those matters that are important to the Airport Authority
- Respect decisions made by the Consultative committee.

### **Investigating Noise Reduction Procedures**

Noise management procedures are expected to evolve over the life time of this Plan and that of the Airport. In order to ensure that the Whangarei Airport Authority manages noise emissions

in a manner that is consistent with similar airports throughout New Zealand, it will be necessary for the airport Authority to undertake regular reviews of noise management practices and literature.

#### *Objective*

To ensure that the Whangarei Airport Authority and the Airport Noise Management Sub-committee is aware of, and able to implement where practicable any improved noise management practices.

#### *Actions and Responsibilities*

The Whangarei Airport Authority shall be responsible for undertaking regular reviews of relevant industry literature and practices to ensure that it is adopting the best practicable option in terms of noise minimization from aircraft activities.

Where other similar airports throughout New Zealand adopt improved noise management procedures, the Airport Authority shall review those new procedures or practices to determine whether or not they can be implemented at the Whangarei Airport and whether they are likely to result in improved noise emissions. The Airport Authority will regularly report on the development of new procedures to the Airport Noise Sub-committee.

### **Noise Complaint Procedure**

The Noise Complaint Procedure outlines, in a flow diagram format, the process that will be followed with respect to complaints received at the Whangarei Airport. The Airport Authority will ensure proper and adequate training is provided to those people that are directly involved in the procedure to ensure that it works.

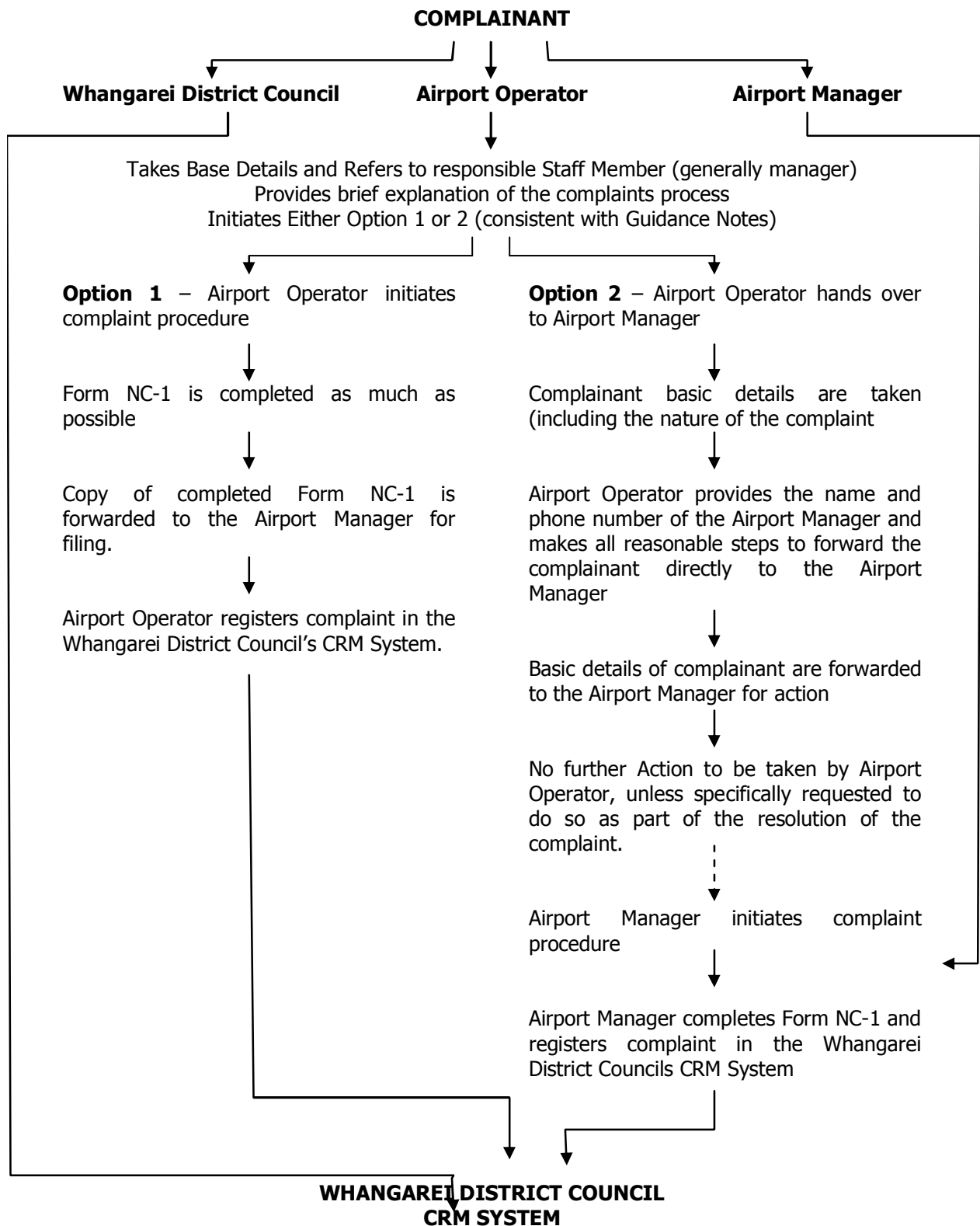
The procedure provides for an audit trail to show that a complaint has been received, whom it was received by, and that it was logged and investigated. Once any investigation is completed, the procedure requires the Airport Manager to inform the complainant of what was undertaken to investigate the complaint, the results of that investigation and any action taken.

Where the complainant is not satisfied that their complaint was treated appropriately, or the action taken was inappropriate, there is the possibility of the complainant then raising the issue further through the Airport Noise Management Committee.

If in the opinion of the Airport Manager:

- The individual pilot, is or has undertaken un-safe flying
- The pilot has broken CAA rules and regulations,
- The pilot persistently breaches the requirements or spirit of the Noise Management Plan or is otherwise causing an ongoing nuisance

The Airport Manager may further escalate the matter by reporting the incident to the CAA. In the case of breaching the requirements of spirit of the Noise Management Plan, such action will only be considered after other reasonable steps have been taken to achieve a change of behaviour. In all cases, it is the sole discretion of the Airport Manager as to whether a pilot is reported to the CAA in accordance with provisions in this Management Plan.



**WHANGAREI DISTRICT COUNCIL  
HEAT SYSTEM**



Complaint and associated details logged within the HEAT System and given a unique reference number

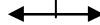


Complaint and associated details are recorded in "Whangarei Airport Register of Noise Complaints"

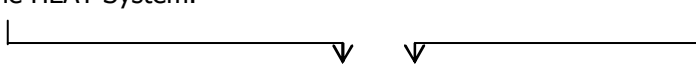


The Complaint shall be forwarded to the Whangarei Airport Manager (or representative) as soon as reasonably practicable for further investigation and resolution

The unique HEAT System reference number will be recorded on Form NC-1 to provide verification that the complaint has been successfully logged with the HEAT System.



Where no NC-1 form exists (complaint was lodged directly with HEAT) then an NC-1 form will be completed stating that HEAT was first contact.



An acknowledgement letter shall be sent to the complainant by the Airport Manager (or their representative) within 3 working days of receipt of the initial complaint. This letter will include the HEAT reference number, a brief outline of anticipated investigation and/or action to be taken and an estimate of the time to complete any investigation. The date and reference number (or file) of the acknowledgement letter will be recorded on the NC-1 Form.



**WHANGAREI AIRPORT AUTHORITY  
NOISE COMPLAINT  
INVESTIGATION**



The investigation of the Noise Complaint shall be conducted in a manner and on a scale that is appropriate to the nature of the complaint and or incident. This investigation will, but is not limited to establishing:

- The identification / confirmation of the flight and or incident in question
- The prevailing weather conditions at the time of the incident and whether these conditions may have influenced the incident
- Determination as to whether or not the flight, or noise generating incident was operating in accordance with Civil Aviation Rule flight Procedures and or in accordance with the provisions of the Whangarei Airport Noise Management Plan
- Any extenuating circumstances
- Any further matters that are relevant



An outline of the investigation undertaken shall be recorded on Form NC-1, which shall include details of anyone spoken to in the course of the investigation.



**ACTIONS, RESOLUTION AND REPORTING**

## ACTIONS, RESOLUTION AND REPORTING

↓

The Airport Authority will identify any actions required to address the complaint and provide an appropriate level of resolution.

↓

Recommended Actions shall be recorded, by the investigating person on Form NC-1

↓

A letter shall be sent to the complainant, by the Airport Manager, outlining when the initial complaint was received, the HEAT reference number, and an outline of the investigation undertaken, the results of that investigation and any Action to be taken.

↓

Complainant accepts investigation and actions taken. Airport Manager signs Form NC-1 off as "resolved".

↓

Complainant does not accept investigation and actions taken – Airport Authority refers them directly to the Airport Noise Management Sub-committee. Form NC-1 is signed "referred onward".

↓

The Airport Manager provides a report to the Airport Noise Management Sub-committee detailing the number of complaints received, the nature of the complaints, results of any investigation and actions taken. The report should also highlight any unresolved complaints and details about such complaints.

↓

Airport noise complaint documentation shall be made available on an annual basis (or at any other such time determined by the Airport Noise Management Sub-committee) for audit purposes.

### Dispute Resolution

The Whangarei Airport Authority and its management are committed to a process whereby differences between the Airport Authority or its management and other parties can be resolved through consultation and consensus. The principle vehicle for the resolution of such differences is the Airport Noise Management Sub-committee.

The Sub-committee operates under the Local Government Act 2002 and associated Standing Orders. The members of the Sub-committee include an independent chairperson appointed by the Whangarei District Council (following a public request for nominations), airport user representatives (including the Whangarei airport Authority), and representatives from the local community and a Whangarei District Councilor from the local Ward. The management and operation of the Airport Noise Sub-committee is independent of the Whangarei Airport Authority.

Where consensus or resolution cannot be reached, the Whangarei Airport Authority endorses the use of the Airport Noise Management Sub-committee to resolve such issues. Where a decision must be reached, the following procedure will be followed:

1. If the dispute arises outside the operation of the Sub-committee, details of the dispute shall be made available to the Chairperson, via a Sub-committee member (or other appropriate Whangarei District Council Representative) in sufficient time for it to be included as an Agenda Item for the next meeting. In exceptional circumstances, the issue may be raised as "Urgent Business". Closing dates
2. The Independent Chairperson of the Sub-committee will determine any point of differences existing within the Sub-committee by acting as a mediator.
3. To facilitate mediation, the Whangarei Airport Authority will provide (at its cost) the Chairperson with the information and advice that the Chairperson considers is reasonably necessary, including if required a legal opinion, to resolving the points of difference. The information sought by the Chairperson shall also be made available to the members of the Noise Management Sub-committee.
4. If the Chairperson deems that a consensus cannot be reached within the Noise Management Sub-committee, the Whangarei District Council will consider and recommendation on the issue in dispute that the Chairperson may make, and will formally advise the chairperson within 10 working days of its decision, and the reasons for its decision.

It should be noted that the Noise Management Sub-committee only has the power to recommend solutions to Council, and it is the role of the Council to ratify, endorse or reject any recommendation made by the Sub-committee. The above procedure is a general procedure that may be modified on a case by case basis by the Sub-committee.

### **Physical Works**

The Whangarei Airport Authority, will as aircraft movements and noise emissions increase, investigate the use of appropriate physical noise attenuation options, including landscaping, tree planting or the use of noise absorption materials. The adoption of such options would take into consideration a balance between the expected benefits and the costs of implementation.

## **6. Monitoring**

### **6.1 Noise Monitoring**

In order to understand whether the Airport Authority is meeting the noise standards of the Proposed District Plan it is necessary undertake noise monitoring. Accordingly, the purpose of noise monitoring is to ensure that the airport is operating within the noise limits represented by the Air Noise Boundary (ANB) and the Outer Control Boundary (OCB).

The most reliable and consistent method for monitoring compliance with the noise standards for Whangarei Airport is commonly known as the "Count and Calculate" method. This method is based on a monthly tabulation of all aircraft movements, including aircraft arrivals / departures, helicopter hovering, and engine testing events occurring at the airport. Using a spreadsheet calculation this data can be passed to an Integrated Noise Model noise contour calculation to determine if the operational Ldn 65 and 55dBA noise contours lay within the respective noise boundaries (the ANB and OCB).

The Airport Authority shall be responsible for the following:

1. Ensuring the recording of all noise events at the airport. The noise events recorded will be those events set out on the "Count and Calculate" spreadsheet provided by a qualified and independent acoustician, for the purposes of producing noise contours, using an "Integrated Noise Model" as utilised to produce the Noise Contours on Planning Map 46 of the Whangarei District Plan. Noise events include but may not be limited to:
  - All fixed wing aircraft movements (landing, and take-off , touch-and-go)



- Helicopter landing and take-off
  - Prolonged helicopter hovering and extended helicopter movements (including duration of hover)
  - Records are to include Aircraft type and the time of take-off or landing
  - Engine testing (including approximate duration, location of tests and time of day/night)
  - Other noise events, such as refuelling with engines running, as identified by Marshall Day Acoustics Ltd
2. Ensuring that the record of noise events is maintained in a readily available and readable format.
  3. An annual report of the outcomes of the count and calculate calculations to both the Noise Management Committee and the Council.

The annual report on the outcome of the count and calculate calculations shall include detail on the following matters:

1. The number and type of noise events at the Whangarei Airport for the reporting period; and
2. Assessment by a suitably qualified acoustic engineer to confirm the location of the noise contour from the airport operations in relation to the District Plan ANB and OCB, including a comparison of the previous reporting period's results.

## **6.2 Plan Monitoring**

The monitoring of the implementation of this Plan is required to ensure that the environmental outcomes it seeks are being achieved, and the obligations its places on the Airport Authority, the Council and Airport Operators are being adhered to. In addition, Plan monitoring will help to provide the general public and interest groups with confidence that the Airport Authority is actually implementing the Plan.

The implementation of this Plan will be monitored on an ongoing and as required basis. A report on this monitoring will be provided to both the Noise Management Committee and the Council on a two yearly basis. The report will include detail on the actions taken to implement its obligations, including:

1. The number of noise complaints and the actions taken to investigate and resolve these. This will include analysis of recurring complaints of similar nature and the actions taken to investigate and resolve such and is in addition to the regular reporting of complaints to the Airport Noise Management Sub-committee outlined in Section 5.4 (above); and
2. Any noise minimisation procedures undertaken by the Airport Authority
3. Education and liaison with pilots and pilot trainees, including, if applicable the number of people or organisations certified as having completed a "friendly flying" type course at the Whangarei Airport.

## **6.3 Audit Requirements**

This Plan and the obligations its imposes, including the recording of all noise events at Whangarei Airport and the calculation of the actual noise contour from airport operations shall be independently audited on a three yearly basis.

The results of the independent audit shall be reported to the Airport Noise Management Sub-committee and the Council.

## **7. Review Procedures**

### **7.1 Review**

This Plan is a “living document” and as such it is expected to undergo ongoing review and development in response to changing issues. A major review of the document will be undertaken every two years at a time that is consistent with the publication of Bi-annual noise contours. This major review will be undertaken in close consultation with the Airport Noise Management Sub-committee, who will provide a recommendation to the Whangarei District Council regarding the adoption of the updated Plan.

Ongoing minor reviews, improvements and amendments are expected to occur between major reviews. These amendments will be put before the Airport Noise Management Sub-committee for discussion as and when they may arise.

## **8. Reporting**

The following reporting lines will be followed with respect to noise related issues:

- The Whangarei Airport authority, in addition to its normal reporting requirements will report noise related matters to the Airport Noise Management Sub-committee
- The Airport Noise Management Sub-committee will make recommendations to the Whangarei District Council

Matters to be reported on are highlighted throughout this document. For clarity, the key matters to be reported to the Airport Noise Management Sub-committee are:

- Noise complaints received
- Monitoring results
- Plan implementation progress
- Bi-annual noise contours
- Any other agreed “Key Performance Indicators”

## **Appendix A - Definitions**

***Whangarei Airport Noise Management Plan  
Airport Noise Management Sub-Committee  
30 March 2005***

## Definitions

### **Aerodrome Purposes**

Means both "Airport" and "Airfield Activities"

*Airport* is any defined area of land or water intended or designed to be used either wholly or partly for the landing, departure, movement, or servicing of aircraft, including any buildings, installations, and equipment on or adjacent to any such area used in connection with the airport or its administration.

*Airfield Activities* means the activities undertaken (including the facilities and services provided) to enable the landing and take-off of aircraft; and includes the provision of one or more of the following:

- Airfields, runways, and parking aprons for aircraft
- Facilities and services for air traffic and parking apron control
- Airfield and associated lighting
- Services and activities that maintain and repair airfields, runways, taxiways, and parking aprons for aircraft
- Rescue, fire, safety, and environmental hazard control services
- Airfield supervisory and security services
- Facilities and services for the maintenance, refuelling and testing of aircraft
- Any other activity or service that is reasonably associated with an airport

### **Aircraft flying in the**

#### **Vicinity of an Aerodrome**

Any aircraft that is in, entering, or leaving and aerodrome traffic circuit.

**Airport Authority** A Local Authority or person or association that is authorised under Section 3 of *the* Airport Authorities Act 1966 to establish, maintain, operate, or manage an airport. In the case of the Whangarei Airport, the Airport Authority is the Whangarei District Council.

**Best Practicable Option** In relation to an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to:

- a) The nature of the emission and the sensitivity of the receiving environment to adverse effects
- b) The financial implications, and the effects on the environment, of that option when compared with other options; and
- c) The current state of technical knowledge and the likelihood that the option can be successfully applied.

### **Engine Testing**

Testing one or more engine(s) of a single aircraft which may involve multiple run-ups to part or full power with reasonable time periods between run-ups to allow minor adjustments or checks to be made

<b>Noise Nuisance</b>	Where noise or vibration occurs in, or is emitted from any building, premises or land to a degree that it is likely to be injurious to health ( <i>from Health Act 1956</i> )
<b>Safety Hovering</b>	Hovering of an aircraft for a short duration to undertake safety, <b>instrument</b> or engine checks, including ensuring that flight paths are clear and it is safe to join the departure vector or airport circuit.
<b>Sustainable Management</b>	<p>Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety while:</p> <ul style="list-style-type: none"> <li>a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and</li> <li>b) Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and</li> <li>c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.</li> </ul>
<b>Prolonged Hovering</b>	Hovering of an aircraft for a continual period greater than ten minutes within the boundaries of the Whangarei Airport at low altitude, where the purpose of hovering is not associated with pre-flight safety checks, confirming or waiting for clear flight paths.

## **Appendix B - Forms**

***Whangarei Airport Noise Management Plan  
Airport Noise Management Sub-Committee  
30 March 2005***

<b>Whangarei Airport Noise Complaints – Form NC-1</b>					
Complaint Reference No.		HEAT Reference No.			
Received By		Position			
Date Forwarded to Airport Manager		Date Registered with HEAT		Time	
Complainant Name					
Address					
Telephone			Other Contact		
<b>Complaint Details</b>					
Date		Time		Duration	
<u>Aircraft Description</u>					
<u>Identifying Marks</u>					
<u>Description of Event</u>					
Other Information					
Weather Conditions (Circle)	Clear	Overcast	Foggy	Drizzle	Light Rain
	Heavy Rain	Wind:	Light	Mod	Strong Gale
<b>Investigation</b>					
Investigated By			Position		
Flight / Incident Identified		Yes	No	Operator	
<u>Investigation Outline</u> (incl. people spoken to)					
<u>Findings</u>					
<u>Action Taken</u>					
Complainant Advised of Investigation and Actions:				Date	
Signed					
Complaint resolved		Yes	No	Complainant Referred to Airport Noise Sub-committee	
Date					

## **Appendix C - Published Vectors and Charts**

***Whangarei Airport Noise Management Plan  
Airport Noise Management Sub-Committee***

***30 March 2005***



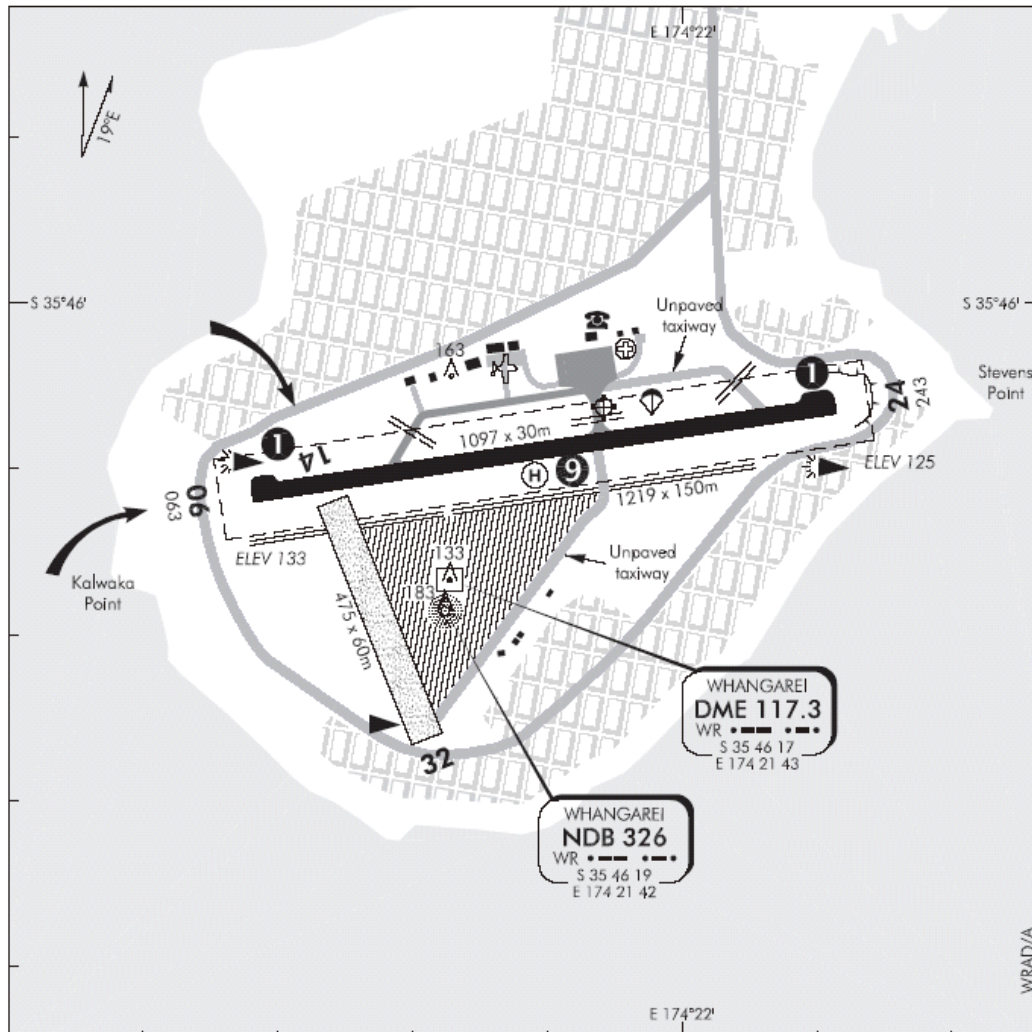
ELEV 133

NZWR

NON-CERTIFICATED

**WHANGAREI****AERODROME**

FLIGHT INFORMATION: CHRISTCHURCH INFORMATION 124.9 AWIB: 119.8 UNATTENDED: 118.6



1. No holding in turning bays.
2. All aircraft operations are confined to defined runway and taxiway areas.
3. U-turns on paved runway by aircraft above 5700kg MCTOW are not permitted except in turning bays at runway ends.
4. Holding positions are marked by flush yellow concrete markers.
5. Grass taxiway is delineated by orange cone markers.
6. Runway lead-in light system (RLLS). Refer to page NZWR AD 2-46.1 (Vol. 3 IFR only).
7. Parking stands in front of terminal reserved for scheduled operators.
8. **CAUTION:** Bird hazard. Gulls shelter on aerodrome overnight. Gulls on runway and grass vectors throughout winter, particularly during and following rain.
9. Simultaneous operations from TLOF and runway not permitted.
10. Built-up areas around airport are noise sensitive. All approaches (including helicopters) to be in line with runway vectors.

S 35 46 06 E 174 21 54

**Effective: 17 MAR 05**

© Civil Aviation Authority

**WHANGAREI  
AERODROME**

# **Appendix D - Whangarei Airport Noise Management Maps**

***Whangarei Airport Noise Management Plan***

***Airport Noise Management Sub-Committee***

***30 March 2005***

NOTE: Whangarei Airport Noise Management Maps will be those maps in the Whangarei District Plan, once decisions have been taken with respect to Variation 2003/33 (Airport Noise)

# **Appendix E - Whangarei District Plan – Airport Noise Rules**

***Whangarei Airport Noise Management Plan***

***Airport Noise Management Sub-Committee***

***30 March 2005***

NOTE: Whangarei District Plan – Airport Noise Rules will be those Rules in the Whangarei District Plan, once decisions have been taken with respect to Variation 2003/33 (Airport Noise)