

ORIGINAL

Decision No. A 023 / 2005

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of seven appeals under section 174 of the Act

**BETWEEN** **ARDMORE AIRFIELD TENANTS  
AND USERS COMMITTEE**

(RMA 793/03)

**UNIVERSITY OF AUCKLAND**

(RMA 802/03)

**J & K ANTUNOVICH**

(RMA 813/03)

**PAPAKURA DISTRICT COUNCIL**

(RMA 814/03)

**ARDMORE RESIDENTS ACTION  
GROUP INC**

(RMA 816/03)

**J & S SOUTHCOMBE**

(RMA 817/03)

**MANUKAU CITY COUNCIL**

(RMA 818/03)

Appellants

**AND**

**ARDMORE AIRPORT LTD**

Respondent



AND

IN THE MATTER of eight references under clause 14(1) of  
the First Schedule to the Act

BETWEEN

NEW ZEALAND WARBIRDS  
ASSOCIATION

(RMA 643/03)

ARDMORE AIRPORT LTD

(RMA 644/03)

ARDMORE AIRFIELD TENANTS  
AND USERS COMMITTEE

(RMA 646/03)

JET IMPORTS LTD

(RMA 647/03)

UNIVERSITY OF AUCKLAND

(RMA 654/03)

J & S SOUTHCOMBE and J & D  
EDWARDS

(RMA 655/03)

ARDMORE RESIDENTS ACTION  
GROUP

(RMA 656/03)

MANUKAU CITY COUNCIL

(RMA 657/03)

Referrers



**AND**

**PAPAKURA DISTRICT COUNCIL**

**Respondent**

**BEFORE THE ENVIRONMENT COURT**

Environment Judge R G Whiting (presiding)  
Environment Commissioner H A McConachy  
Environment Commissioner K Prime

**HEARING** at Auckland on 10, 15 and 16 November 2004

**APPEARANCES**

Ms H Atkins and Ms M Stirling for Papakura District Council  
Mr T Gould and Ms R Jordan for Ardmore Airport Ltd  
Mr A Green and Mr J Young for Manukau City Council  
Mr A Allan and Ms J Goodyer for Admore Residents Action Group and Others  
Mr I Cowper for Ardmore Airfield Tenants and Users Committee; New Zealand Warbirds Association; and Jet Imports Ltd

**INTERIM DECISION**

**Introduction**

[1] The Ardmore Aerodrome was built during World War II, and commenced operating as an airfield in 1945. It has operated since then, now being the country's largest airfield for general aviation, training and a range of aircraft related activities.

[2] The airfield was privatised in 1995 and is now owned and operated by Ardmore Airfield Limited. That company is a requiring authority, and has issued a Notice of Requirement for the continuing operations of the airfield.

[3] The Papakura District Council is the local authority in whose territory the airfield is situated. It has introduced controls through Plan Change 6 to its district plan, which provide limitations on the operations that are conducted from the airfield.

[4] These proceedings relate to appeals from both the decision on the Notice of Requirement and the decision on the Plan Change.



[5] The provisions of the Notice of Requirement and Plan Change 6 are complementary, and these appeals accordingly address both matters at the same time. These appeals examine the legal and planning framework that is proposed for the airfield.

### **The proceedings**

[6] These proceedings relate to the establishment of noise contours and provisions relating to the control of noise at Ardmore Aerodrome. The proceedings are:

- (i) 8 references against Plan Change 6 to the Operative Papakura District Plan, introducing district plan noise controls for Ardmore Aerodrome; and
- (ii) 7 appeals against a Notice of Requirement issued by Ardmore Airport Limited as requiring authority for Ardmore Aerodrome, altering aspects of its existing designation to better provide for the management of noise at the aerodrome.

### **The parties and their positions**

[7] The parties to these proceedings can be divided into four camps:

- (i) the Council;
- (ii) Ardmore Airport Limited;
- (iii) those who reflect the interests of residences and properties surrounding the airport; and who are concerned about the effects on their amenity; and
- (iv) those who reflect the interests of the users of the airport; and who are concerned that the potential uses of the airport are not unnecessarily constrained.



[8] We were told that discussions have been occurring between the parties over some months preceding the hearing. As a result of those discussions, many of the parties, including the Council and Ardmore Airport Limited, agreed on a joint position that represents a compromise in relation to both Plan Change 6 and the Notice of Requirement.

[9] This agreed position was advised to the Court in the form of a draft consent order and a supporting joint memorandum of counsel dated 4 November 2004<sup>1</sup>. A copy of the joint memorandum and draft consent order is attached as Appendix 1 and Appendix 2 respectively.

[10] Three appellants, all of whom are in the camp that reflect the interests of the users of the airport, have not agreed to the draft consent order. They are:

- (i) The Ardmore Tenants and Users Committee, an unincorporated body, comprising the various tenants of the airfield, and representing those who use the airfield. There are approximately 80 bodies who have businesses at the airfield, or who operate from the airfield. This committee provides the organised voice for those bodies;
- (ii) The New Zealand War Birds Association, an organisation that was formed to ensure the preservation, and operating condition, of the aviation heritage of New Zealand. They own no aircraft themselves, but organise the aviation events at which their members can display and fly their planes; and
- (iii) Jet Imports Limited, the owner of two hunter jets that have been based at Ardmore since 1995. These aircrafts are the only "fast jets" in the country, and are the major attraction at air shows throughout New Zealand. They are also used for training purposes with the Navy's Frigate.

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<sup>1</sup> Those parties are Ardmore Airport Limited, Papakura District Council, Manukau City Council, Ardmore Residents Action Group, University of Auckland, J & S Southcombe, J & D Edwards and J & K Antonovich, as well as a number of section 274 parties.

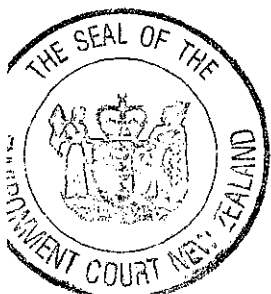


## The hearing

[11] The hearing took place in Auckland during the month of November 2004. On the first day of the hearing we heard submissions from counsel for all of the parties.

[12] We then read the briefs of evidence tendered by the parties. By agreement we read the written evidence of the following:

- (i) four statements of evidence tendered on behalf of the consenting parties namely:
  - (a) the evidence of Gregory John Osborne, a resource management consultant;
  - (b) the evidence of Ronald Eugene Reeves, an internationally recognised acoustical consultant;
  - (c) the evidence of David Stuart Park, an aviation consultant; and
  - (d) the evidence of Richard Garry Gates, the chief executive officer of Ardrmore Airport Limited.
- (ii) seven statements of evidence tendered on behalf of the appellants opposed to the draft consent order namely:
  - (a) Allan Robert McCreadie, an engineer with his own business Armadillo Engineering, based at Ardrmore Airport;
  - (b) Brian William Putt, a town planning consultant;
  - (c) Peter Houghton, the general manager of New Zealand War Birds Association;
  - (d) David William Phillips, director of Jet Imports Limited;
  - (e) David William Brown, the chief executive officer and owner Christian Aviation;
  - (f) E Garth Hogan, the owner and managing director of Pioneer Aero Restorations Limited based at Ardrmore Airport;



- (g) F Craig Lindsay Hunter, the general manager for Ardmore Flying School Limited;
  - (h) Don Cracken, the general manager/operations of Flight Line Aviation Limited; and
  - (i) John McShane, environment and planning manager for Auckland International Airport Limited.
- (iii) statements of evidence of three witnesses exchanged by Ardmore Airport Limited prior to the hearing but not adduced as evidence before the Court by Ardmore Airport Limited, namely:
- (a) Michael John Foster, a resource management and planning consultant;
  - (b) Nicholas Jon Roberts, a consultant planner; and
  - (c) Christopher William Day, an acoustical consultant.

There was no cross-examination.

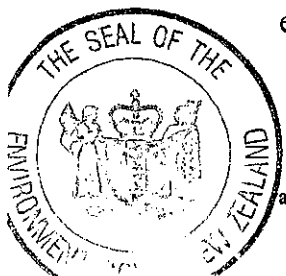
[13] We then undertook an extensive site visit to the airport. This included a detailed examination of the airport facilities and its surrounding countryside and a circuit flight around the airport.

[14] We then reconvened in Court to hear closing submissions from Ms Atkins for the Council and Mr Allan for the parties he represented.

[15] Finally, written submissions were later received addressing the appropriate use, if warranted, of section 293 of the Act.

### **Background**

[16] Ardmore Airport is located approximately 1.5km north east of the Metropolitan Urban Limits, defining the edge of Papakura township, and within convenient driving distance of Manukau and Auckland Cities. Despite its proximity to such a large population base, the airport is situated within a predominantly rural environment.



[17] It is the busiest airport in New Zealand in terms of aircraft movements. It has extensive flight training operations. There are more than 300 aircraft permanently based at the airport. Aircraft and helicopter services and associated industries have been established on the airport grounds.

[18] Within the rural area surrounding the airport, the activities include horse breeding and training, horticulture and the rearing of various types of livestock. There are a number of "hobby farms" and lifestyle blocks within the area where subdivision has and continues to occur. There is a small research facility, operated by the Physics Department of the University of Auckland, located to the south, a conference centre and a number of residential properties.

[19] The juxtaposition of the airport with the surrounding rural land, which has been incrementally developed over the past decades into smaller holdings, is a recipe for conflict. Conflict between the growth and development of the airport on the one hand, and the use and enjoyment of surrounding properties on the other.

#### Current noise controls

[20] At the present time, Ardmore Airport is not required to comply with any airport specific noise controls. The noise provisions of the plan do not apply to noise generated by the airport activities. This includes general activities, such as the maintenance of aircraft, and specific aircraft related activities such as engine testing.

[21] Notwithstanding the absence of planning noise controls, there are a number of noise controls currently in place at Ardmore. These have been developed over the years in response to noise concerns raised by residents and the Papakura District Council.

[22] These controls apply to both fixed wing aircraft and helicopters and cover flight paths, operating altitudes and operating hours. They are contained in various publications including:

- (i) the Civil Aviation Authority Aeronautical Information for Pilots;
- (ii) the Civil Aviation Good Aviation Practice publication titled "Operations, In, Out and Around Auckland";
- (iii) the Ardmore Airport Operations Manual;





- (iv) the Fly Friendly Programme (a programme voluntarily adopted by Ardmore Airport Limited to create an awareness and culture among aircraft operators at Ardmore of noise abatement requirements); and
- (v) the Ardmore Airport Noise Management Plan.

[23] Some examples of the noise controls contained in these publications include:

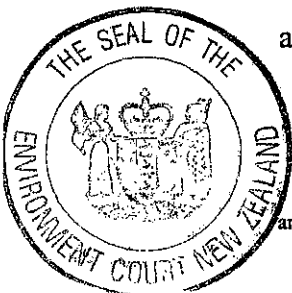
- (i) helicopter descent segments and minimum altitudes;
- (ii) approved helicopter/training locations;
- (iii) requirements for helicopters to use the fixed wing aircraft circuit pattern at night;
- (iv) permitted hours of operation for circuit training and ex-military jet operations;
- (v) minimum altitude requirements for forced landing practice;
- (vi) general requirements for pilots to operate the aircraft to minimum noise.

[24] However, there are no planning noise controls applying to the operation of Ardmore Airport at the present time. It is accepted that the facility is able to continue to operate under the existing designation.

[25] Ardmore Airport is currently the only major airport in New Zealand without air noise controls to protect its future operation and provide certainty for the community. Consequently, all parties recognise that there is a need for change. There is a need for more planning certainty, to avoid conflict between the continued growth and development of the airport and the use and enjoyment of surrounding properties.

New Zealand Standard NZS 6805:1992

[26] In 1991 the Standards Association of New Zealand published New Zealand Standard NZS 6805:1992 "Airport Noise Management and Land Use Planning" with a view to providing a consistent approach to noise planning around New Zealand



airports. The Standard uses the “noise boundary” concept as a mechanism for local authorities to:

- (i) “establish compatible land use planning” around an airport; and
- (ii) “set noise limits for the management of aircraft noise at airports”.

[27] The noise boundary concept involves fixing an Outer Control Boundary and a smaller, much closer Air Noise Boundary around the airport. The Standard recommends, that inside the Air Noise Boundary, new noise sensitive uses (including residential) should be prohibited. Between the Air Noise Boundary and the Outer Control Boundary, new noise sensitive uses should also be prohibited unless provided with sound insulation. The Air Noise Boundary is also nominated as a location for future noise monitoring of compliance.

[28] The Standard is based on the Day/Night Sound Level (Ldn) which uses the cumulative “noise” that is produced by all flights during a typical day, with a 10 dB penalty applied to night flights. Ldn is used extensively overseas for airport noise assessment and it has been found to correlate well with community responses to aircraft noise.

[29] To establish location of the noise boundaries NZS 6805 states a projection should be made of future aircraft operations to determine the future Ldn contours for the airport. It is recommended “that a minimum of a 10-year period be used as the basis of the projected contours” using the integrated noise model.

[30] The integrated noise model calculates Ldn contours from operational information. The location of the Air Noise Boundary is then based upon the projected Ldn 65 dBA contour, and the location of the Outer Control Boundary is based on the projected Ldn 55 dBA contour. The Standard also recommends that, where appropriate, night time single event noise levels should be considered in the location of the Air Noise Boundary.

[31] The Standard provides for a two pronged approach - land use planning on the one hand, and airport noise management on the other. The implementation of the two parts of the Standard can be achieved in several ways. According to Mr Day, the acoustical expert who gave evidence for the Council, the Standard has been implemented by most airports in New Zealand having prescribed land use controls



(within the contours) in the district plan, and noise management rules within the airport's designation.

### Planning history

#### *The operative plan*

[32] Ardmore Aerodrome has its own zone under the Papakura District Plan. The surrounding land is zoned Rural Papakura and Rural Takanini/Drury. Permitted activities within both these zones are generally limited to farming, forestry, and horse training/breeding activities and ancillary housing. The aerodrome is located near to the Papakura district boundary with Manukau City. The land within the Manukau City boundary in this vicinity is zoned Rural 1, and again, permitted activities are generally limited to farming activities, forestry activities and ancillary housing.

[33] The Ardmore Aerodrome zone is contained within the industrial part of the urban section of the district plan. Within the zone any part of the site is permitted to be used for "aviation activities" which are defined to include "*runways, taxiways and navigational equipment, passenger terminals, maintenance workshops, aircraft testing facilities...*" as well as any ancillary activities.

[34] The rural zoning surrounding the Ardmore Aerodrome zone currently does not limit reverse sensitivity development.

### Designation

[35] Existing planning provisions that apply to the airport are contained in two existing designations<sup>2</sup> and the Ardmore Aerodrome zone underlying the designation. The designations:

- (i) designate land for aerodrome "and aerodrome purposes". The former incorporates the four runways, the hangars, the dwellings on village way and land between the runway and Airfield Road. The latter is predominantly vacant land to the south which contains some buildings used for administrative purposes;

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<sup>2</sup> Referenced in the operative plan as No. 222 and No. 223.



- (ii) set out the locations of runways, bases and a series of specific airport-related height controls, termed "surface controls" which overlay the standard zone height controls around the airport;
- (iii) restrict the use of land, 9000 metres distance from each sealed runway, by requiring the consent of the airport authority for any new structure over 4 metres in height;
- (iv) deal specifically with helicopter operations, identifying specific final approach and takeoff paths, approach and departure paths and the like.

### **The proposed planning package**

[36] It has been agreed by the consenting parties following extensive consultation, that the method of implementation should be a three-tiered approach involving:

- (i) an alteration to the existing designation. This involves:
  - the replacement of outdated designation provisions; and
  - a requirement to comply with specific noise management provisions included within the district plan.
- (ii) Plan Change 6 to the Papakura Operative District Plan replacing outdated requirements and introducing specific noise management restrictions on airport operations within the ambit of the Resource Management Act; and
- (iii) the implementation of a Noise Management Plan, primarily to deal with those matters which fall outside the district council's jurisdiction. The Noise Management Plan itself contains some necessary flexibility with regard to control over aircraft in flight, to enable timely future safety and operational changes.

[37] The present proposal provides for the noise contours, together with additional controls agreed by the airport, to become part of the Papakura District Plan. The important features relevant to these proceedings are:



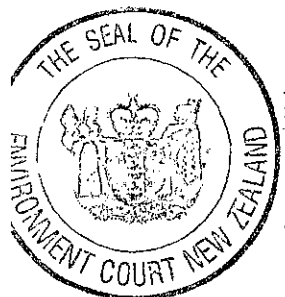
- (i) the noise contours (the Air Noise Boundary and Outer control Boundary) are based upon a design capacity of 275,000 aircraft movements per annum<sup>3</sup>;
- (ii) inclusion of a maximum single noise event (SEL) to ensure no noisier aircraft may be located at Ardmore;
- (iii) restrictions on the hours of certain flight operations (circuit training);
- (iv) restrictions on the number of movements of ex-military jets;
- (v) restrictions on general noise emissions produced at the airport (such as maintenance of aircraft, excluding engine testing);
- (vi) restrictions on engine testing;
- (vii) controls on air shows;
- (viii) the introduction of a Noise Management Plan;
- (ix) acoustic treatment of houses within the Air Noise Boundary (65 dBA Ldn); and
- (x) monitoring.

[38] Of particular concern to these proceedings are:

- (i) above, namely that the noise contours have been assessed upon 275,000 aircraft movements per annum.
- Also of concern are the matters referred to in (ii) to (vi) above. The appellants opposing the draft consent order, maintain that these are matters of airfield management, which the airport authority should deal with in its operation of the airfield. If they need to appear in a regulatory form, they should be part of the designation.

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<sup>3</sup>One aircraft movement constitutes either a take off or a landing.



- The final matter of concern is the absence of land use controls within the identified noise boundaries as recommended by the Standard.

### **The issues**

[39] The issues that remain may conveniently be addressed under three main headings:

- (i) the design capacity on which the noise boundaries are calculated and the consequent effect on the calculation of the air noise boundaries;
- (ii) The type of controls which relate to the operation of the airfield, and whether those that are appropriate should be contained in Plan Change 6 or the Designation;
- (iii) the need for land use controls within the identified noise boundaries.

[40] Before discussing the issues it is useful to consider the statutory criteria and the relevant statutory instruments.

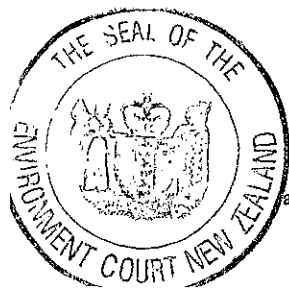
### **The statutory criteria**

[41] The proceedings before the Court are seven appeals under section 174 of the Act, and ten references under clause 14 of the First Schedule to the Act. The criteria to be considered on appeals under those sections are stated separately. Although many of them are common to both, and they have been presented as a composite package, we remind ourselves that decisions have to be made on each class of appeal or reference.

### **Designation considerations**

[42] The Environment Court's powers in determining appeals from a requirement for a designation are prescribed by section 174. The Court may:

- (i) confirm the requirement;
- (ii) cancel the requirement; or



- (iii) modify the requirement, or impose such conditions, as the Court thinks fit.

[43] Subsection (4) of section 174, directs that in determining an appeal, the Court is to have regard to the matters set out in section 17 of the Act. Subsection (1) gives directions to territorial authorities considering a requirement.

1. Subject to Part II, when considering a requirement made under section 168, a territorial authority shall have regard to the matters set out in the notice given under section 168 (together with any further information supplied under section 169) and all submissions, and shall also have particular regard to-
  - (a) whether the designation is reasonably necessary for achieving the objectives of the public work, or project or work for which the designation is sought;
  - (b) whether adequate consideration has been given to alternative sites, routes, or methods of achieving the public work, or project or work;
  - (c) whether the nature of the public work or project or work means that it would be unreasonable to expect the requiring authority to use an alternative site, route, or method;
  - (d) all relevant provisions of any national policy statement, New Zealand coastal policy statement, regional policy statement, proposed regional policy statement, regional plan, proposed regional plan, district plan, or proposed district plan.

### **Plan change considerations**

[44] The starting point for considering the plan change is section 74. That section requires a Council, as a territorial authority, to prepare its district plan in accordance with:

- (i) its functions under section 31;
- (ii) the provisions of Part II;
- (iii) its duty under section 32; and
- (iv) any regulation.

[45] Section 31 prescribes the Council's functions in relation to giving effect to the Resource Management Act in a district plan. The three key functions relevant to these references are in subsections (a), (b) and (d) as follows:



- (a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district;
- (b) The control of any actual or potential effects of the use, development, or protection of land, ...
- (d) The control of the emission of noise and the mitigation of the effects of noise.

[46] These functions relate to the management and control of effects. This is to be distinguished from the prescriptive allocation of resources for land use per se, referred to in *Burn v Marlborough District Council*<sup>4</sup> as “the wise use philosophy” of the Town and Country Planning Act 1977.

[47] Section 32 contains directions that apply to the Council in relation to making decisions on accepting or rejecting any submission on a proposed plan.

[48] Sections 75 and 76 are also important. Section 75 requires a district plan to state (among other things):

- (a) the significant resource management issues for the district;
- (b) the objectives sought to be achieved by the plan;
- (c) the policies for those issues and objectives, and an explanation of the policies; and
- (d) the methods (including rules if any) to implement the policies.

[49] Section 76 enables the Council to include rules in a district plan, for the purpose of carrying out its functions under the Act, and to achieve the objectives and policies of the plan. In making a rule the Council:

...shall have regard to the actual or potential effect on the environment of activities including, in particular, any adverse effect,...

[50] The following passage from the Environment Court decision *Wakatipu Environmental Society v Queenstown Lakes District Council*<sup>5</sup> is applicable to a district plan in general:

<sup>4</sup> [1998] NZRMA 305 at 331.

<sup>5</sup> [2000] NZRMA 59, 80; paragraph [52].





A district plan must provide for the management of the use, development and protection of land and associated natural and physical resources. It must identify and then state (inter alia) the significant resource management issues, objectives, policies and proposed implementation methods for the district. In providing for those matters, the territorial authority (and on any reference to the Environment Court) the Court shall prepare its district plan in accordance with:

- its functions under section 31;
- the provisions of Part II;
- section 32;
- any regulation; and
- must have regard to various statutory instruments.

The above passage is equally applicable to a plan change.

[51] The following passage from the Planning Tribunal's decision *Nugent v Auckland City Council*<sup>6</sup> summarises the requirements derived from section 32(1):

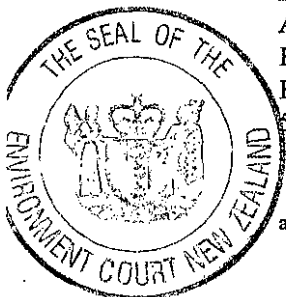
...a rule in a proposed district plan has to be necessary in achieving the purpose of the Act, being the sustainable management of natural and physical resources (as those terms are defined); it has to assist the territorial authority to carry out its function of control of actual or potential effects of the use, development or protection of land in order to achieve the purpose of the Act; it has to be the most appropriate means of exercising that function; and it has to have a purpose of achieving the objectives and policies of the plan.

### The role of Part II

[52] The introductory Part of section 171(1) is prefaced by the words "*subject to Part II*". Placed there, at the start of the provision identifying matters to which regard is to be had, its effect is to defeat the direction to have regard to the matters listed, where to do so would conflict with anything in Part II. This means, that the directions in Part II, which include sections 5, 6, 7 and 8, have to be considered as well as those in section 171 and indeed override them in the event of conflict<sup>7</sup>.

<sup>6</sup> [1996] NZRMA 481.

<sup>7</sup> See *Ministry of Conservation v Kapiti Coast District Council* Planning Tribunal Decision A024/1994; *Paihia District Citizens Association v Northland Regional Council* Planning Tribunal Decision A77/1995; *Russell Protection Society v Far North District Council* Environment Court Decision A125/1998; *Bungalow Holdings v North Shore City Council* Environment Court Decision A025/2001; *Beadle and ors v The Minister of Corrections and the Northland Regional Council* Environment Court Decision A074/2002; *Beda Family Trust and ors v Transit New Zealand Limited* Environment Court Decision A139/2004; *McGuire v Hastings District Council* [2001] 12 NZRMA, 657.



[53] Furthermore, section 74 requires that a district plan change shall be prepared in accordance with the provisions of Part II. The provisions of Part II accordingly underlay both the notice of requirement and Plan Change 6.

[54] Section 5, is of course, fundamental to the Act. We therefore quote it in full:

**5. Purpose-**

1. The purpose of this Act is to promote the sustainable management of natural and physical resources.
2. In this Act, "sustainable management" means 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-
  - (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations;
  - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
  - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

[55] To fully understand section 5 in the context of the Act it is necessary to look at the definitions of "*natural and physical resources*", "*structure*", and "*environment*". Natural and physical resources are defined in section 2 as:

Includes land, water, air, soil, minerals and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures.

"*Structure*" is defined in section 2 as:

Means any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft.

"*Environment*" is defined in section 2 as including:

- (a) ecosystems and their constituent parts, including people and communities;
- (b) all natural and physical resources;
- (c) amenity values;



- (d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) – (c) of this definition or which are affected by those matters.

“*Amenity values*” is defined in section 2 as:

Means those natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

[56] Our approach is to weigh the matters in section 5(2) in order to reach a broad judgment as to whether a policy or rule would promote the sustainable management of natural and physical resources. The values in section 5 have been variously referred to as “*indicators*”, “*guidelines*”, “*directions*”, or “*touchstones*” for promoting the goal of sustainable management<sup>8</sup>.

[57] The matters in section 5(2)(a), (b) and (c), are all to be accorded full and equal significance. Accordingly, they are to be applied having regard to the circumstances of each case<sup>9</sup>. Applying section 5 involves a broad overall judgment of whether a proposal, or in this instance, the provisions of the proposed plan change and the notice of requirement, would promote the single purpose of the Act. This allows for the balancing of conflicting considerations in terms of their respective significance or proportion in the final outcome<sup>10</sup>.

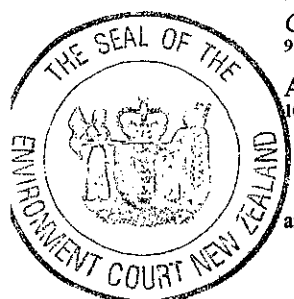
[58] Other Part II matters of relevance are:

- (i) the efficient use and development of natural and physical resources – section 7(b);
- (ii) the maintenance and enhancement of amenity values – section 7(c);
- (iii) the maintenance and enhancement of the quality of the environment – section 7(f); and

<sup>8</sup> See *Faulker v Gisborne District Council* [1995] 3 NZLR 622, 632; *North Shore City Council v Auckland Regional Council* [1997] NZRMA 59, 94; also noted as *Green and McCahill Properties Limited v Auckland Regional Council* (1996) NZ 158 (ENV C); *Caltex New Zealand Limited v Auckland City Council* (1996) ELRNZ 297, 304; *Baker Boys Limited v Christchurch City Council* Environment Court Decision C60/1998; and *Kiwi Property Management Limited and ors v Hamilton City Council* Environment Court Decision A045/2003.

<sup>9</sup> See *Winstone Aggregates Limited v Papakura District Council*, Environment Court Decision A049/2002, and the cases there referred to in paragraphs [19] to [23].

<sup>10</sup> See *Trio Holdings v Marlborough District Council* [1997] NZRMA 97.



- (iv) any finite characteristics of natural and physical resources – section 7(g).

### The relevant statutory instruments

#### **The Auckland Regional Policy Statement**

[59] The Act requires specific consideration to be given to the Auckland Regional Policy Statement by:

- (i) requiring a territorial authority to have particular regard to all relevant provisions of a regional policy statement and proposed regional plan – section 171(1)(d);
- (ii) requiring that Councils “*have regard to...any proposed regional policy statement*” – section 74(2) of the RMA – when preparing or reviewing their plans; and
- (iii) that district plans must not be “*inconsistent with the regional policy statement*” – section 75(2)(c).

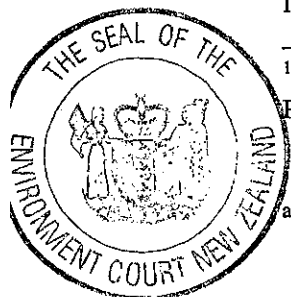
[60] The regional policy statement was analysed by the planning witnesses in some detail. We do not propose to quote at length from the regional policy statement. There was no disagreement by the parties as to its relevant content or its relevant purpose.

[61] In summary, the regional policy statement provides specific recognition of the continued operation of Ardmore Airport as one of the listed regional issues. It identifies that regionally significant infrastructure is essential for the communities’ social and economic wellbeing and identifies the need to expand, replace or upgrade existing infrastructure to increase its capacity<sup>11</sup>.

[62] Significantly, as Mr Roberts points out, the regional policy statement makes an important distinction between existing infrastructure with urban environments and rural environments. Within urban environments, the obligation is on the infrastructure provider to avoid, remedy and mitigate adverse environmental effects.

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<sup>11</sup> See in particular: Issue 2.3.2 and commentary; Issue 2.3.4 and commentary; Objective 2.5.1.6 and Policy 5.2.2.6.



In “rural areas” (as specifically defined in the regional policy statement), the obligation is on the local authority and surrounding landowners to avoid significant reverse sensitivity effects which may compromise the safe and efficient operation of existing regional infrastructure resources<sup>12</sup>.

[63] Within this context, potential significant adverse effects on “amenity values”, and “rural character”, as defined in the Act and in the Regional Policy Statement, require consideration.

### **Operative Papakura District Plan**

[64] Mr Roberts pointed out that the district plan was originally notified in July 1993 just less than 2 years after the introduction of the Resource Management Act and 1 year before notification of the Regional Policy Statement. Therefore, he said it has:

...been prepared in a regional policy “vacuum” (in the sense that it does not contain the same clear overall direction that the ARPS does). This was an inevitable outcome of the timing requirements of the RMA.

[65] Notwithstanding Mr Roberts’ comments, we note that both the rural and urban sections of the plan contain several objectives and policies that align it with the regional policy statement with respect to existing infrastructure. For example the rural section of the district plan contains specific objectives and policies relating to the off-site effects of the airport. For example objective 6.8.1 states:

- (a) To provide for the co-ordinated comprehensive development of *Ardmore Aerodrome* as a base for commercial and recreational operations including:
- Aero club’s activities and competitions;
  - Aerial top dressing;
  - Charter and private flights;
  - Emergency services;
  - *Flying schools*;
  - Gliders;
  - Helicopters;

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<sup>12</sup> See in particular: Policy 2.6.1.3 and supporting commentary; Policy 2.6.4; and Policy 2.6.7.



- Industries associated with aviation, including assembly, repair and maintenance of aircraft;
  - Scheduled flights.
- (b) To achieve the compatible use and/or development of the land surrounding the aerodrome and relative harmony with the airport operations.

[66] The stated reasons for this objective reads:

Ardmore Aerodrome is a major air transport facility in the Auckland region which has local, regional and national significance. It also has a commercial facility, and contributes to the economic base of the region. It is also an educational and recreational facility. Its future operation must be protected from inappropriate activities in its vicinity.

[67] Then follows supporting policies, reasons and anticipated results. Of interest under the heading anticipated results the plan says:

Ardmore Aerodrome will continue to be a significant land use in the district and a significant contributor to the economic base of the district. Uses and activities in the vicinity of the aerodrome will be affected by it and will have some limitations placed on them because of the aerodrome.

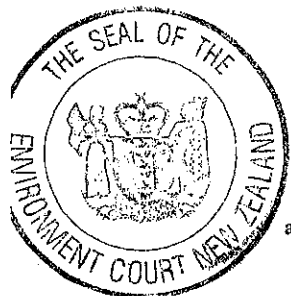
[68] Like the rural area provisions of the regional policy statement, the rural section of the operative plan contains specific provisions requiring the avoidance of significant reverse sensitivity effects which may compromise the safe and efficient operation of existing regional infrastructure resources. In this respect, the district plan anticipates that there will be some limitations placed on development and activities around the airport to provide for a safe and efficient operation.

[69] Special provision is made for the Ardmore Aerodrome in section 3, the urban Papakura section of the plan. The relevant provisions are contained in Part 6.14 Ardmore Aerodrome zone with the zone overview reading as follows:

The establishment of the special zone for the Ardmore Aerodrome results from the need both to enable and protect all aviation activities conducted within the NZS 6805 1992 noise footprints and CAA Rules.

[70] Clause 6.14.5 lists the zone outcomes which expand on the need to enable and protect existing aviation activities:

The outcome...will be the operation of a unique activity node which makes a significant contribution to the present wellbeing and future development of the district. Aviation activities will be conducted in such a way that the potential of the facility is not limited by unnecessary controls. At the same time Ardmore will function in recognition of NZS6805 – 1992 aircraft noise



footprints and appropriate levels of local amenity and environmental quality. The strategy is aimed at the continuation of those special aviation related activities which have become established within the zone in such a way that the activities are properly managed to secure amenity values both within and beyond the zone.

[71] The supporting objectives provide for uses related to the aviation function of the Ardmore Aerodrome and to protect environmental quality and the amenities of sensitive, adjoining rural areas. Similarly, the policies strike a balance between protecting the development of the airport and imposing controls which protect the environmental quality of the surrounding land.

[72] As part of the explanation in Part 6.14.7 the plan says:

Ardmore Aerodrome is a significant general aviation facility and comprises a valuable economic and social asset to the district. For this reason, its continued functioning as a regional and national facility should not be unnecessarily constrained.

Of necessity, such facilities are located in rural areas with the result that the activities related to an aerodrome often cause annoyance or disturbance to adjoining, non-aviation activities. The environmental effects of aviation are often in conflict with the expectations of rural amenity.

The objectives and policies for the Ardmore Aerodrome zone is to enable the future functioning of the aerodrome and recognition of the amenity characteristics of the locality.

[73] As pointed out by Mr Roberts the operative plan reflects the fact that the district plan was prepared prior to the release of the regional policy statement. It does not reflect the emphasis provided in the regional policy statement, particularly 2.6.4 Policy: Rural Areas, regarding the avoidance of significant reverse sensitivity effects which may compromise the safe and efficient operation of existing regional infrastructure. This inconsistency is redressed, at least in part, by Plan Change 6.

[74] Against the background and statutory and planning regime we now discuss the identified issues.

**Issue 1 – The design capacity on which the noise boundaries are calculated and the consequent effect on the calculation of the air noise boundaries**

[75] According to the evidence, the maximum capacity of runway 03/21, which is the main runway currently in use, is 350,000 aircraft movements per year, with operational modifications such as air traffic control. Improvements to infrastructure,



such as the establishment of a parallel 03/21 runway could achieve a capacity of 380,000 movements. Hence it is understandable that initially Ardmore Airport Limited sought air noise contours based on 353,000 aircraft movements.

[76] The consenting parties have agreed that the noise contours should be based on 275,000 aircraft movements per year. The consenting parties include the requiring authority and owner of the airport, Ardmore Airport Limited.

[77] We were told by the Airport owner's counsel, Mr Gould, that Ardmore Airport Limited agreed to this lower base figure in exchange for a Memorandum of Understanding with the Papakura District Council, in an attempt to reach agreement with all the parties. He pointed out that the airport company recognises that the tenants and users would like to see the airport planning based on a higher growth scenario, however it also recognises the amenity needs of the surrounding residents. To that extent, the airport company accepted contours based on a low growth scenario in an attempt to find some "common ground" between the competing interests.

[78] The tenants and users maintain that the noise contours should be based on 350,000 aircraft movements per year. A figure they say, fairly represents the capacity of the aerodrome, relying on its current one way configuration and support facilities.

[79] Mr Cowper, counsel for the tenants and users, submitted that it is not a wise use of resources to plan for anything less than the capacity of the airfield, as the consequential changes of land use around the airfield will themselves become permanent, thus limiting further growth.

[80] Basically the tenants and users' concern, is that the controls adopted by the consenting parties will:

- (i) unreasonably restrict the operation of the airport;
- (ii) limit the growth of activities;
- (iii) will result in the under use of a valuable infrastructure resource; and
- (iv) could jeopardise its financial survival.





[81] That the requiring authority has agreed to the lower ceiling of 275,000 aircraft movements is significant. Its position was explained by its Chief Executive Officer, Mr Gates:

AAL agrees that the airport is a significant national and regional strategic asset and should be recognised as such. AAL also recognises that it has had to accept contours based on a low growth forecast (1.9%) in an attempt to reach a compromise position that is generally acceptable to the broad spectrum of differing interests and expectations. As I noted above, this process has not been an easy one for the airport, and it is inevitable that there will be people in both camps who will not be happy with the proposed restrictions, either because they are too restricted, or not restricted enough. However, AAL has attempted to strike a reasonable balance between the competing interests of the surrounding community and airport users, and although AAL wishes to develop the airport as an asset and an important resource, it also recognises its responsibilities as a good corporate citizen and the need to be a good neighbour<sup>13</sup>.

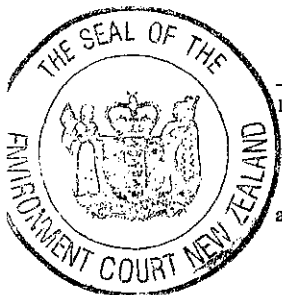
[82] We are conscious that the consenting parties have reached a consensus after extensive negotiations, and that the consensus reached, reflects a degree of compromise by all of the parties. Normally, this Court would be loathe to reject such a compromised consensus. In this case, there are a significant number of businesses affected who reject the compromise. It is therefore necessary for us to examine the evidence and be satisfied that the accord reached reflects the single purpose of the Act.

[83] We found the evidence of Mr Foster to be helpful. Mr Foster is a resource management planning consultant. He was engaged by Ardmore Airport Limited. His brief was exchanged in accord with the pre-hearing timetable. The exchange took place prior to the agreement reached by the consenting parties. His brief was not presented to the Court in support of the consenting parties' position. However, the tenants and users rely on the written statement of Mr Foster which we read by consent.

[84] Mr Foster, is an experienced planning consultant with extensive experience. Over the last 20 years he has, according to his evidence, taken a particular interest in aviation planning. He has provided specialist aviation planning advice to a number of airport companies over that time. It is worth quoting parts of his evidence in full. He had this to say:

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<sup>13</sup> Gates, brief of evidence, paragraphs 72 and 73.



...I consider that the overall level of growth allowed for and the operational restrictions proposed are very restrictive and failed to adequately recognise the strategic importance of Ardmore, as New Zealand's dominant general aviation facility, from both a national and regional perspective<sup>14</sup>.

And:

The appropriate airport planning view, in my opinion, is that sustainable management of an existing airport as a developed resource involves recognition that activity at airports must be permitted to grow, while ensuring that the environmental effects of such growth are managed and mitigated in a fair and equitable manner as determined between the airport operator and the surrounding community<sup>15</sup>.

And:

The setting of noise boundaries protects the airport from residential encroachment and also ensures that the neighbouring residences are not exposed to unreasonable noise from the airport. However, the setting of noise boundaries around the airport effectively sets a ceiling on the total operations of the airport. It is therefore very important to allow for reasonable growth at the airport so that future operational constraints, such as curfews, do not occur<sup>16</sup>.

And:

As I understand it, Ardmore has reluctantly agreed to accept a lower growth rate of 275,000 aircraft movements over the life of the district plan. The figure of 275,000 aircraft movements referred to in the ARGAAAS Report<sup>17</sup> is an estimated runway capacity forecast for Ardmore, based on one sealed runway. I am advised that AAL accepts that improvements to infrastructure could be made to achieve a capacity of 380,000 aircraft movements as also identified in the ARGAAAS Report, by, for example, the establishment of a parallel 03-21 runway. I consider that this is the documented capacity of the airport<sup>18</sup>.

And:

AAL has accepted 275,000 aircraft movements as its basis for the future planning given community discontent with the possibility of 350,000 aircraft movements based on medium growth, and 380,000 aircraft movements on a high growth forecast. 275,000 aircraft movements represent less than the 1.9% compound growth rate to achieve 302,500 in 2005, as forecast in 1997 at the then hearing of the NOR (subsequently withdrawn). This compound growth rate is lower than any other airport I have been involved with<sup>19</sup>.

<sup>14</sup> Foster, brief of evidence, paragraph 13.

<sup>15</sup> Foster, brief of evidence, paragraph 21.

<sup>16</sup> Foster, brief of evidence, paragraph 25.

<sup>17</sup> Auckland Regional Aviation Assessment Study 1995.

<sup>18</sup> Foster, brief of evidence, paragraph 65.

<sup>19</sup> Foster, brief of evidence, paragraph 69.



[85] Mr Foster's firm view, that the level of growth should reflect the airport's capacity, was based on the need to fully utilise such an important piece of infrastructure. He pointed out that:

- (i) Ardmore fulfils a multi-purpose general aviation role, the bulk of movements being for flight training, but it can act as an alternative airport to Auckland International Airport for beach 1900 aircraft;
- (ii) With more than 300 aircraft permanently based at the airport and within a 30-minute driving distance for a quarter of New Zealand's population, Ardmore is strategically located to fulfil its role as New Zealand's premier pilot training facility;
- (iii) The tenants of Ardmore provide a complete range of services to general aircraft users;
- (iv) Ardmore is of particular importance to the Auckland region and the national economy, with approximately 500 people employed by the various organisations operating at the airport; and
- (v) Ardmore is recognised as a national training facility.

Thus, he said, Ardmore is of national and regional importance. Without its existence, other facilities could not currently absorb the projected growth in air movements.

[86] He concluded:

Ardmore is the busiest airport in New Zealand. It has more aircraft traffic than Auckland, Wellington or Christchurch International Airports. In aviation terms, this airfield is nationally significant and can, in my opinion, be deemed to be a national strategic asset.<sup>20</sup>

[87] The importance Mr Foster attributes to Ardmore Airport as a significant part of New Zealand's aviation reflects the provisions of the Auckland Regional Policy Statement and the District Plan particularly as it is proposed to be amended by Plan Change 6. Those instruments recognise the importance of Ardmore and the Regional Policy Statement gives a clear direction to territorial authorities to provide for the protection of important infrastructure from reverse sensitivity issues.

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<sup>20</sup> Foster, brief of evidence, paragraph 46.



[88] Mr Foster's firm view, was echoed by Mr Day the acoustical consultant engaged by the airport. Likewise his brief of evidence was exchanged prior to the agreement reached by the consenting parties and was not presented in support of their consenting position. Again, we were invited, by consent, to read his evidence which thus forms part of the Court's record.

[89] Mr Day said:

The Ardmore Tenants and Users Association has submitted that 350,000 aircraft movements per annum should be used as the basis for the airport noise contours at Ardmore. In my opinion this approach has considerable sense in that airport planning and noise control guidelines should be based on long-term planning for this airport. In terms of effects on the surrounding community, the increase in noise level from the current 200,000 aircraft movements per annum to 350,000 aircraft movements per annum would cause an increase in noise level of approximately 2 – 3 dB. As discussed previously, this is less than used in other New Zealand airports and would not generally be detectable by the residents ie the adverse effects would be minimal. AAL have however agreed to a more conservative 275,000 aircraft movements per annum<sup>21</sup>.

[90] On the other hand, Mr Roberts, a planning consultant engaged by Ardmore Airport Limited, was not so definitive. He said:

The proposed noise contours are based on 275,000 aircraft movements per annum as opposed to the 353,000 aircraft movements per annum used to define the noise contours as part of the 1996 NOR process. The figure was agreed on after discussions with PDC and the EWG and compares with the current 230,000-240,000 aircraft movements per annum. My understanding is that the maximum capacity of runway 03/21 is 350,000 aircraft movements with operational modifications such as air traffic control. As such, constraining airport movements to 275,000 per annum will only allow for limited growth in comparison to the capacity of this component of regional aviation infrastructure. On this basis I could not support a reduction in noise contours to provide for only 200,000 movements per annum as requested in the relief sought by J & S Southcombe and J & D Edwards. This is particularly so when considering the regional policy direction set out in the ARPS to allow for the efficient operation and growth of regional infrastructure as described in the following sections of my evidence<sup>22</sup>.

And:

I agree that developing contours based on 350,000 movements would provide greater flexibility for airport operations. However, it would also impose greater costs on surrounding residents. I therefore consider that while based on a low growth scenario, implementing noise contours based on 275,000 movements achieves a minimal sustainable growth level to address the balance of considerations that in my view is required in such situations. It allows for an expansion of 25,000 above its historical peak of

<sup>21</sup> Day, brief of evidence, paragraph 12.8.

<sup>22</sup> Roberts, brief of evidence, paragraph 100.



250,000 movements in 1974 and provides an additional 35,000 movements above recent operational peak (240,000 movements). It will mean that the airport's operations are able to grow at a minimum low level without being unduly compromised or representing a reasonable level of effects that also provides assurance to surrounding residents. If complimented by an appropriate set of land use controls to reflect the "other side, of NZS 6805, it is consistent with the balance required to maintain consistency with the ARPS provisions requiring avoidance of reverse sensitivity effects (including cumulative effects) on the safe and efficient operation of existing regional infrastructure within "rural areas" and those that state plans should make provision for the avoidance of significant adverse effects on "amenity values" and the "rural character" of rural areas. In saying this however, I consider that any reduction in the contours below 275,000 movements would be overly restrictive given the significance of Ardmore Airport to the regional aviation network and would be unsustainable<sup>23</sup>. (Highlighting ours)

[91] We pause to comment on the highlighted words. The "other side" of NZS 6805, namely an appropriate set of land use controls, referred to by Mr Roberts has not as yet been implemented. The consent position is that the Council resolves to proceed to initiate a plan change to make provision for such controls. Without knowing the details of the proposed land use controls, Mr Roberts is unable to make an assessment as to whether the proposals are appropriate or not. Similarly, we as a Court are unable to make such an assessment.

[92] Mr Roberts' conclusions were more conciliatory than those of Mr Foster and Mr Day. They reflect the evidence of Mr Osborne, a planning consultant who presented a brief supporting the consenting parties' position. He considered that, based on the now somewhat dated Auckland Regional Aviation Assessment Study (1995), 275,000 movements would be consistent with growth of approximately 2.5% over the period 2001-2011. This appears to differ from Mr Foster's finding that 275,000 movements represents less than a 1.9% compound growth.

[93] The difference can be explained by the two witnesses using a different methodology and, it would appear different base figures. Without cross-examination it is difficult for us to reconcile the different approaches. However, both Mr Foster and Mr Osborne respectively opined that: future forecasting is "*crystal-ball*" gazing<sup>24</sup> and "*a somewhat speculative exercise*"<sup>25</sup>.

<sup>23</sup> Roberts, brief of evidence, paragraph 184.

<sup>24</sup> Osborne, brief of evidence, paragraph 59.

<sup>25</sup> Osborne, brief of evidence, paragraph 3.3.4.



[94] Mr Osborne concluded:

I understand that developing contours based on 350,000 annual movements would reflect the theoretical capacity at the aerodrome if there were no night-time curfews or other such controls in place. While this would retain maximum flexibility for the aerodrome, I do not believe that this approach is consistent with the forecasting approach taken in NZS 6805:1992. I also do not believe that 350,000 annual movements is likely on the basis of observable long-term trends in aircraft movements at Ardmore. In my view, establishing noise contours based on 275,000 movements per annum would provide for a realistic level of growth at the aerodrome and accommodate any short-term volatility in aircraft movements.

[95] Of interest Mr Park, an aviation consultant who presented a brief on behalf of the consenting parties had this to say:

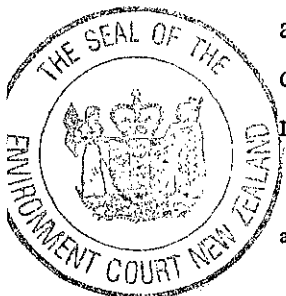
The total number of movements should, in my view, allow for reasonable growth in the airport operations. NZS 6805 suggests a minimum of a 10 year growth projection should be provided for. I agree that 275,000 annual movements provide a limited scope for the airport to grow its business. I also note that there is nothing in NZS 6805 that requires planning to be based on any particular growth scenario.

However as explained at paragraph 36 of my evidence, the decision was made sometime ago by AAL to accept 275,000 limit. This is a commercial decision taken by the owner of the facility and it is not contrary to NZS 6805.

[96] There is considerable force in the submission that the noise contours should be modelled based on the estimated operational capacity of the airport. Ardmore is an important and significant part of the region's and New Zealand's aviation infrastructure. All of the parties accepted that this was the case. Moreover, the Auckland Regional Policy Statement recognises its significance and importance and the need for its protection.

[97] However, as Mr Allan pointed out, we must not ignore the impacts that the aerodrome has on the existing surrounding environment. We are required to recognise the need to balance the competing interests of the airport with those of the nearby residents. We note the paucity of information presented as to the number of residents affected and the effects of the airport on them and their activities.

[98] Mr Day directly addressed this issue from an acoustical consultant's perspective. He premised his comments by the observation that at most overseas airports the effects of airport noise are not generally considered outside the  $L_{dn}$  65 dBA contour. He told us that in New Zealand it is generally regarded that airport noise levels of between  $L_{dn}$  55 to 65 dBA are regarded as low to moderate and not a



sensible location for new housing development. Aircraft noise levels above  $L_{dn}$  65 dBA are regarded as high and not suitable to new residential development.

[99] By an analysis of the projected noise contours, based on 275,000 aircraft movements, being overlaid on the GIS mapping system, he was able to calculate the number of dwellings in each contour. He produced a table setting out the number of dwellings in each contour along with a comparison of other significant airports in New Zealand. We reproduce this table:

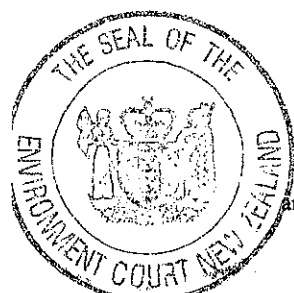
**Table No. 1 – Dwellings Within Current Noise Contours**

Airport	55-60 dBA	60 – 65 dBA	> 65 dBA
Ardmore	33	26	2
Auckland	1880	230	0
Wellington	>5000	2900	380
Nelson	146	10	0

[100] Mr Day pointed out, that Ardmore Airport currently has significantly fewer dwellings affected by airport noise than the airports listed. He also noted that two houses inside the  $L_{dn}$  65 dBA contour are only just inside at  $L_{dn}$  65 dBA.

[101] Mr Day then discussed the often used “Schultz curve” developed from a number of overseas surveys. It shows the percentage of people highly annoyed versus the noise level ( $L_{dn}$  dBA). More recently, analysis by Bradley of particular overseas airport studies, indicated that community response to airport noise is significantly greater than the Schultz curve which applied to general transportation.

[102] By multiplying the number of dwellings by the national average of 2.4 persons per dwelling, Mr Day was able to produce a table that gave a comparison of the number of people likely to be annoyed under the current noise contours, the future noise levels and the differential or increase in number of people highly annoyed. We reproduce this table:



**Table No. 2: Number of People Highly Annoyed**

<b>Airport</b>	<b>Current Contours</b>	<b>Future Contours</b>	<b>Increase in People Highly Annoyed</b>
Ardmore	31	40	9
Auckland	1000	3200	2200
Nelson	76	178	102

[103] With regard to contours based on 350,000 movements per annum Mr Day said:

In terms of effects on the surrounding community, the increase in noise level from the current 200,000 movements per annum to 350,000 per annum would cause an increase in noise level of approximately 2-3 dB. As discussed previously, this is less than used at other New Zealand airports and would not generally be detectable by the residents ie the adverse effects would be minimal<sup>26</sup>.

[104] While Mr Day's evidence addresses the effects on humans, there is no direct evidence of likely effects on existing activities such as the small research facility operated by the University and the various livestock activities that we understand are carried out relatively close to the airport.

[105] We are thus not in a position to adequately determine what is the appropriate balance to give effect to the purpose of the Act as set out in section 5 and elaborated on in sections 6, 7 and 8. The importance of Ardmore by its contribution to the existing aviation infrastructure cannot be underestimated. To restrict the operation of the airport and limit the growth of activities below the capacity of the aerodrome would result in the under use of a valuable infrastructure resource, contrary to the statutory directions contained in sections 7(b) and 7(g).

[106] Ardmore is a resource which is likely to be put under pressure as the region's population continues to grow. It is well known to this Court that the Auckland region's transport infrastructure has been put under enormous pressure by the sprawling urbanisation of rural land arising from the region's population growth. In fact the region's transport infrastructure has not developed commensurately with population growth.

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<sup>26</sup> Day, brief of evidence, paragraph 12.8.





[107] To under use an existing resource such as the Ardmore Airport should not, in our view, be permitted unless there is evidence which establishes to an appropriate standard, that the purpose of the Act will be better promoted by so doing. Unfortunately the lack of evidence is such that we are unable to make an informed decision.

[108] Based on the evidence we have read, it is our tentative view that the airport's potential should not be unnecessarily compromised. Based on Mr Day's evidence the effects would be minor. As we have noted, he said, that in terms of the surrounding community, an increase in noise level from the current 200,000 movements per annum to 350,000 per annum would cause an increase in noise levels of approximately 2-3 dB. This would not generally be detectable by the residents.

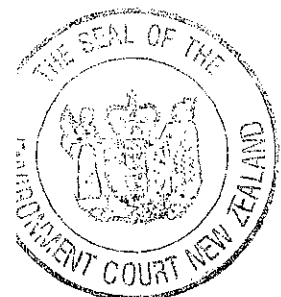
[109] However we are mindful of Mr Allan's submissions, to the effect that the need to protect the airport's potential needs are to be balanced against the interests of the residents and their activities. These are matters that are directly related to the statutory directions contained in sections 7(c) and 7(f). But we have no evidence before us which enables us to undertake such a balancing exercise.

[110] To do so we require evidence relating to such matters as:

- (i) the area of land affected by air noise contours based on 350,000 movements per annum; and
- (ii) the number of people affected and the manner in which they and their activities will be affected.

[111] Importantly, as we have said, NZS 6805:1992 provides for a two-pronged approach – noise management controls on the one hand and land use planning controls on the other. The two need to be considered as a composite package for reasons we will elaborate on in discussing Issue 3.

[112] Mr Gould submitted that the appropriate level of use of the airport is a matter to be determined by Ardmore Airport Limited as both the airport operator and the requiring authority. The consequent noise controls should be determined by reference to that level of use.



[113] We agree to the extent that it is not appropriate for this Court to direct a requiring authority how to use its airport. That is an executive decision to be made by the requiring authority. However, in this instance, it is Plan Change 6 which sets the noise contours. In assessing what the appropriate contours should be in the plan change is a resource management issue to be determined under the provisions of the Act. Having set the level of the contours other consequential land use controls follow. It is therefore necessary that the base level for those contours are set at a sustainable level.

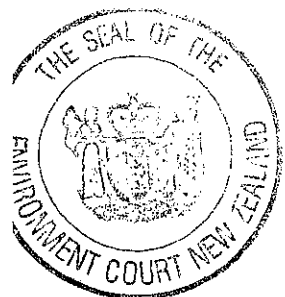
**Issue 2 – the type of current controls which relate to the operation of the airfield, and whether those that are appropriate should be contained in Plan Change 6 or the designation**

[114] The tenants and users were concerned that there are number of controls included in Plan Change 6 which relate to the operations of the airfield, and which seek to control flights from the airfield, and the noise that is generated by those flights.

[115] The issues of concern relate to the controls on:

- (i) flying curfews;
- (ii) training flights;
- (iii) noise controls and limits;
- (iv) airport management;
- (v) ex-military jet flights;
- (vi) noise management plan; and
- (vii) air shows

[116] It is the view of the tenants and users that these controls are more properly contained within the designation, if at all, as they are matters of airfield management, rather than appropriate for regulatory attention. It was the submission of the tenants and users, that the notice of requirement, if it had followed the intent of NZS:6805, would have set out the noise contours, and provided for the airport to be managed to each of those limits. That would have identified both an air noise boundary and an outer control boundary. Those boundaries would be calculated from the noise generating activities of flights from the airfield, and establish the noise impact that the airfield may have.



[117] Mr Cowper submitted:

The boundaries are calculated on the basis of the noise of the aircraft which use the airfield, with penalties applied depending on the time of day or flights, and the mix of aircraft that are using the airfield. The boundaries therefore are based on an assumed number of flights by an assumed mix of aircraft, at an assumed range of times. Any change to any one assumed parameter would require an adjustment to another assumed parameter to enable those noise limits to be met.

[118] In Mr Foster's language, the boundaries "*represent an overall noise budget or 'bucket of noise' for the airport operators to then decide how to allocate and manage on a daily basis*"<sup>27</sup>.

[119] The noise control boundaries thus assume a range of flights, and allow airfield management to ensure that the boundary limits are maintained. It was said by Mr Cowper to be a duplication to regulate and then have separate controls on the number of such flights, since such controls are already implicit in the air noise boundaries that have been established.

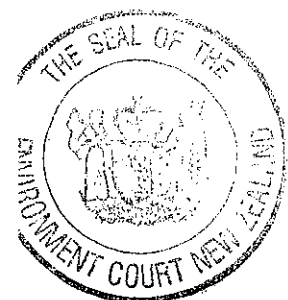
[120] Mr Cowper submitted that the noise management plan, provided for in the district plan, is more appropriately contained as a mechanism in the designation, identifying methods for achieving compliance of the noise controls.

[121] In considering this issue we were particularly referred to the evidence of Mr McCreadie, Mr Putt, Mr Foster and Mr Day. In our view the evidence which most directly address this issue is the evidence of Mr Ronald Eugene Reeves, an internationally recognised acoustical engineer specialising in transportation noise and air quality. His brief of evidence was presented in support of the consenting parties.

[122] It was Mr Reeves' view that the use of the noise contours alone is not always sufficient to adequately control airport noise. He pointed out that the use of the  $L_{dn}$ , which is a cumulative noise metric designated to summarise the complexities of the noise environment into a single number, does not adequately express the totality of the effects of noise on critical human activities such as communication or sleep. In addition to those limitations, he said that the unique nature of the aircraft noise environment at many general aviation airports, and Ardmore in particular, indicate that additional methods of analysis are indicated. For this reason, he said, many

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<sup>27</sup> Foster, brief of evidence, paragraph 84.



countries provide for additional analysis and controls based on SEL, time of day (curfews), or other operational controls to protect community amenity and wellbeing.

[123] Of Ardmore he said:

Ardmore airport is unique from most other airports in respect to composition of the noise environment. Operations at Ardmore consist of operations by aircraft with widely differing noise characteristics. The EMJ aircraft are arguably among the loudest in the world with the exception of high performance military aircraft and the now retired British Airways and Air France Concorde which use after burning or reheated engines. Conversely, the training aircraft operating from Ardmore Airport are among the quietest aircraft. In such instances, it is necessary for airports to delineate the  $L_{dn}$  contribution of the various aircraft types or identify other control measures as appropriate<sup>28</sup>.

[124] He then referred to the New Zealand Standard and in particular noted paragraph 1.1.4 which says:

The Standard provides the minimum requirement needed to protect people from the adverse effects of airport noise. A local authority may determine that a higher level of protection is required in a particular locality, either through the use of the air noise boundary concept or any other control mechanism.

[125] He then referred to the various controls which are the concern of the tenants and users and concluded:

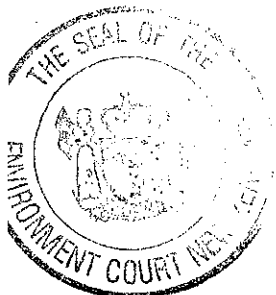
The combination of  $L_{dn}$  contours and the supplementary control measures as provided by the New Zealand Standard are required at Ardmore in order to assure amenity and wellbeing. It is my opinion that the measures proposed in Plan Change 6 provide a balanced, prudent, and practical methodology consistent with the New Zealand and international practices for ensuring the continued long term aviation activities at Ardmore Airport in view of community amenity and wellbeing concerns<sup>29</sup>.

[126] We were impressed with Mr Reeves' brief of evidence. This was so despite the fact that he was not cross-examined. Unfortunately, we did not have the opportunity of cross-examination to have his hypothesis more closely tested.

[127] On the evidence before us, we are tentatively of the view, that at least some of the additional measures proposed, and which are the concern of the tenants and users, address the unique characteristics of Ardmore Airport. However, for reasons that will become more clear when we discuss Issue 3, we consider that the proposed restrictions need to be considered as part of a complete package which includes land

<sup>28</sup> Reeves, brief of evidence, paragraph 4.3.

<sup>29</sup> Reeves, brief of evidence, paragraph 4.9.



use controls within the identified noise boundaries. One should not be considered without the other. To do so may well lead to an unbalanced decision.

[128] It may well be, that from an administrative point of view, and in the interests of the requiring authority, such additional controls would be more conveniently placed in the notice of requirement and designation. However the requiring authority has chosen not to do so. That is an executive decision. As such we are not in a position to interfere with it.

### **Issue 3 – the need for land use controls within the identified noise boundaries**

[129] The third concern of the appellants was the lack of any land use restrictions around the airport. The noise boundaries identify the area affected by airport noise. NZS 6805 proceeds on the basis that the boundaries both identify the scope of the obligations of the airport operator and managing its noise, and also identify the areas within which land use controls are needed.

[130] Mr Foster said:

I note to date that PDC has chosen not to introduce, via proposed Plan Change 6, a prohibition on new noise sensitive users inside the ANB for Ardmore, nor has it introduced restrictions on sensitive activities and the OCB without appropriate acoustic treatment. This, in my opinion, is a serious omission that should be rectified as a matter of urgency<sup>30</sup>.

And again:

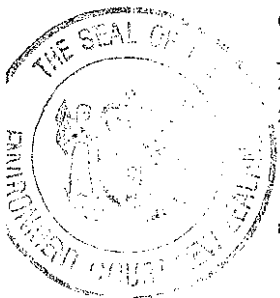
There is no major international or provincial airport in New Zealand operating or intending to operate in the future, without this tiered approach to the management airport noise. Clearly, Ardmore is out of step and the blame for the present situation lies with PDC<sup>31</sup>.

[131] Mr Foster's views were echoed by Mr McCreadie, Mr Putt and Mr Day.

[132] As Mr Cowper said, the Papakura District Council now acknowledges the need for such provisions. They have indicated that they will be introduced by way of a further plan change in nine months time. No detail of the proposed rules are given, and of course, such provisions would be subject to objection and appeal, and may or may not provide adequate controls. In the meantime there is a possibility of urban development continuing to crowd the airport's boundaries.

<sup>30</sup> Foster, brief of evidence, paragraph 28.

<sup>31</sup> Foster, brief of evidence, paragraphs 28 and 30.



[133] Mr Foster pointed out that NZS 6805 is concerned with both the land use planning and the management of aircraft noise in the vicinity of an airport, for the protection of community health and amenity values. The setting of noise boundaries protects the airport from residential encroachment and also ensures that the neighbouring residences are not exposed to unreasonable noise from the airport.

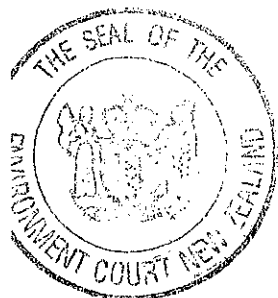
[134] The Standard also recommends that inside the air noise boundaries, new noise sensitive activities (including residential) should be controlled by land use planning. In some instances such development should be prohibited. In other instances such development should be discretionary with provision for acoustic insulation.

[135] Mr Day pointed out that the procedure at most other airports has been that the airport agrees to place within the designation, noise controls on its operation. The balancing arm of NZS 6805 is that the Council then agrees to put land use controls in the district plan to avoid incompatible land use and subsequent reverse sensitivity effects on the airport.

[136] We are satisfied that the Papakura District Council has been remiss and guilty of a serious omission in not making provision for land use controls as part of the package. The Council now accepts its responsibility and proposes to initiate a further plan change to introduce land use controls within a period of nine months. The detail of such controls is in our view necessary for us to make an informed and balanced decision on the first two issues. Without knowing what those land use controls will finally be, we are not in a position to adequately assess the balance between the airport's importance as a significant piece of aviation infrastructure and the amenity of the local surrounding community. We are of the view that a complete package needs to be considered when undertaking such a balancing exercise.

[137] We thus propose to give an interim decision which we hope will be of some assistance to the parties in progressing this matter.

[138] We had considered, at the suggestion of some counsel, to give directions under section 293 of the Act with regard to the land use planning provisions. We accordingly invited submissions from counsel and we thank counsel for their detailed submissions. However on reflection and having read the submissions we think the most appropriate course is for the Council to initiate a plan change as



indicated within nine months. We think that is the most appropriate course. These proceedings are to be put on hold until such time as the plan change for the land use planning provisions catches up.

### Determination

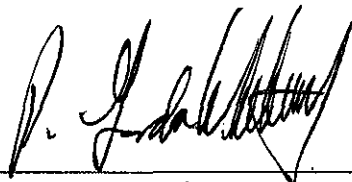
[139] We accordingly direct that these proceedings are to be put on hold until such time as the Papakura District Council initiates a plan change to make provision for land use planning within the noise contours, and the proposed plan change reaches a position that will enable these proceedings to be finally determined. The Council is to file a memorandum with the Court on or before Monday, the 31 October 2005 setting out the stage that the proposed plan change has reached. A copy of the memorandum is to be served on the other parties.

[140] When the proposed plan change has reached the stage when these proceedings can then be finally determined a judicial conference in Court for Chambers is to be held to propose a timetable for the efficient determination of these proceedings. If the decision of the Council on the proposed plan change is appealed, any such appeal is to be heard together with these proceedings.

[141] Costs are reserved.

DATED at AUCKLAND this 23<sup>rd</sup> day of February. 2005.

For the Court:



R Gordon Whiting  
Environment Judge



*under:* the Resource Management Act 1991

*in the matter of:* a Notice of Requirement by Ardmore Airport Limited for alteration to designation and Proposed Plan Change 6 to the Papakura District Plan

*between:* **Papakura District Council** (RMA 0793/03)

**J & K Antunovich** (RMA 0813/03)

**University of Auckland** (RMA 0802/03)

**Ardmore Residents Action Group Incorporated**  
(RMA 0816/03)

**Manukau City Council** (RMA 0818/03)

**J & S Southcombe** (RMA 0817/03)

*Appellants*

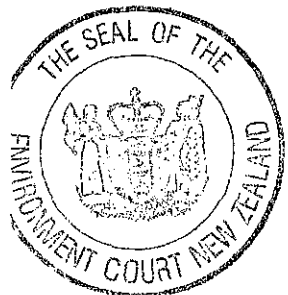
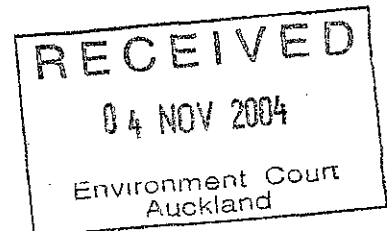
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Joint Memorandum of Counsel in Support of Draft Consent Order

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Dated: 3 November 2004  
Hearing Date: 10 November 2004





*and:* **Ardmore Airport Limited**  
*Respondent*

*and between:* **Ardmore Airport Limited (RMA 0644/03)**

**New Zealand Warbirds Association Incorporated**  
(RMA 0643/03)

**Ardmore Airfield Tenants and Users Committee**  
(RMA 0646/03)

**J & S Southcombe and J & D Edwards (RMA**  
0655/03)

**University of Auckland (Physics Department) (RMA**  
0654/03)

**Ardmore Residents Action Group Incorporated**  
(RMA 0656/03)

**Jet Imports Limited (RMA 0647/03)**

**Manukau City Council (RMA 0657/03)**

*Appellants*

*and:* **Papakura District Council**  
*Respondent*



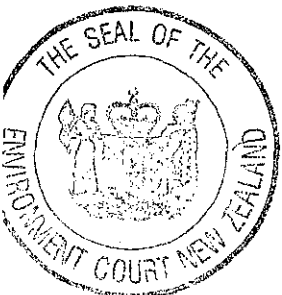
**JOINT MEMORANDUM OF COUNSEL IN SUPPORT OF DRAFT  
CONSENT ORDER**

**MAY IT PLEASE YOUR HONOUR:**

- 1 These appeals relate to the establishment of noise contours and provisions relating to the control of noise at Ardmore Aerodrome (*the Aerodrome*). In September 2001 Ardmore Airport Limited (AAL) as the owner and requiring authority for the Aerodrome issued a notice of requirement (NOR) for alteration to its current designation to incorporate for the first time, provisions relating to the control of noise generated by airport users. This was accompanied by Proposed Plan Change 6 (PC6) to the Operative Papakura District Plan (*District Plan*), initiated by Papakura District Council (PDC), which seeks to alter the District Plan to include provisions which link to the designation, in particular by providing noise contours around the Aerodrome. The two processes are mutually supportive and interdependent for their effect.
- 2 Submissions were received on PC6 and AAL's NOR, and a hearing took place in July 2002 before independent Commissioners appointed by the Council. The Commissioners issued their recommendations in December 2002. The Council issued a decision in July 2003 which amended the Commissioners recommendations on PC6 and the NOR. The Council recommended that AAL confirm its NOR for an alteration to its existing designation, subject to certain modifications and conditions.
- 3 In August 2003, AAL accepted PDC's recommendation to confirm the designation but rejected the modifications made by PDC.
- 4 In September and October 2003, 15 appeals and a number of s274 notices were filed.
- 5 On 6 May 2004, the Court advised the parties that RJ & CJ Carr (a s274 party) had withdrawn from the proceedings as an interested party.

**SETTLEMENT PROPOSAL BY MAJORITY OF THE PARTIES**

- 6 Since the appeals were lodged, the parties have entered into discussions. As a consequence, the majority of parties have now reached agreement as to a settlement of the appeals on PC6 and AAL's designation. Those parties are AAL, PDC, Manukau City Council (MCC), Ardmore Residents Action Group (ARAG), University



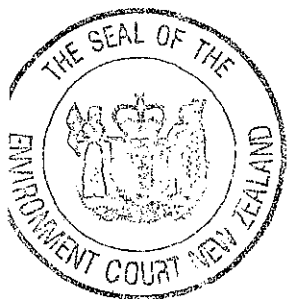
of Auckland, J&S Southcombe, J&D Edwards and J&K Antunovich, as well as the majority of s274 parties (collectively referred to in this Memorandum as the '*majority of parties*').

- 7 The essential features of the agreed settlement between the majority of parties are shown in the **attached** draft Consent Order. In particular the majority of parties have agreed to amendments to the provisions of PC6 and AAL's designation as set out in more detail below.
- 8 The Ardmore Tenants and Users Committee (*Tenants and Users*), have not agreed to the draft Consent Order, and consequently lodged a Memorandum with the Court dated 14 October 2004 (*the October Memorandum*) indicating that they wish to pursue their issues on appeal at the hearing. The majority of parties understand that Jet Imports Limited (*Jet Imports*) and New Zealand Warbirds Association Limited (*Warbirds*) also do not agree with the position reached in the draft Consent Order, but those parties have not lodged any evidence or any memoranda with the Court setting out their position.

#### **AMENDMENTS TO PROPOSED PLAN CHANGE 6 TO THE OPERATIVE PAPA KURA DISTRICT PLAN**

##### **Noise contours**

- 9 A number of parties sought that the noise contours be based on a number of movements different to the 275,000 movements provided for in the noise contours in Council's decision.
- 10 Appeal 0646/03 (*Tenants and Users*) sought noise contours based on 350,000 movements per year and recognition of the Aerodrome's capacity to accommodate that number of movements.
- 11 Appeals 0655/03 (*Southcombe/Edwards*) and 0656/03 (*ARAG*) sought noise controls that excluded *ex-military jet aircraft* and were based on a lower and more realistic (but unspecified) number of aircraft movements per year.
- 12 Noise experts on behalf of AAL and PDC have undertaken further remodelling of the contours, including refinements due to updates in the INM modelling used to develop the contours and the inclusion of helicopter flight tracks.



13 Consequently, the parties to the draft consent order have proposed that the contours be established as set out in Appendix A to the draft Consent Order, based on the following:

13.1 275,000 movements; and

13.2 A Single Event Noise Level (*SEL*) of 115dBA for all new aircraft intending to operate from the Aerodrome.

14 The majority of parties understand that the *Tenants and Users, Jet Imports Limited*, and the *Warbirds* do not accept the revised contours as shown in the draft Consent Order, and maintain their position that the contours should be based on a larger number of aircraft movements.

15 Therefore, it is submitted that this issue requires determination by the Court at the hearing.

#### **Definitions**

##### ***Activities Sensitive to Aircraft Noise (ASANs)***

16 Appeal 0657/03 (MCC) sought the inclusion of a definition of 'Activities Sensitive to Aircraft Noise' to provide guidance as to the matters that will be considered in assessing applications for discretionary activities within the Outer Control Boundary (*OCB*) and Air Noise Boundary (*ANB*) as envisaged by the proposed Rule 8.14(t). It is proposed that this definition be included.

##### ***Ex-Military Jet aircraft***

17 Appeal 0644/03 (AAL) sought that the definition of 'Ex-military Jet aircraft' as publicly notified and recommended by the Commissioners be reinstated, as the definition as amended by the Council was capable of encompassing all jet aircraft. For similar reasons, appeal 0647/03 (Jet Imports) sought removal of the definition altogether.

18 The majority of parties propose to reinstate the definition of 'Ex-Military Jet aircraft' as publicly notified and recommended by the Commissioners. The majority of parties believe that this would address Jet Imports concerns, but have not been able to confirm that with the appellant.

##### ***Public Holiday***

19 The Council inserted a definition of 'Public Holiday', which was not included in PC6 as notified. Appeal 0644/03 (AAL) did not oppose the inclusion of a definition of 'public holiday' but rejected the



inclusion of ANZAC day as this would prevent commemorative flyovers on that day.

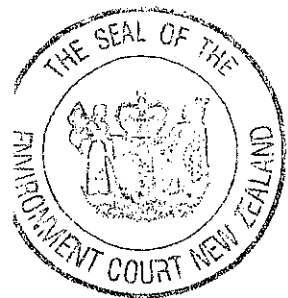
- 20 The definition of 'Public Holiday' inserted by the Council is now largely superfluous, and it is proposed by the majority of parties to delete it. No other party has appealed this definition and therefore it is submitted that this issue does not require determination by the Court at the hearing.

**Section 6.8- Reasons for Policies and Anticipated Results**  
***Introduction of land use restrictions***

- 21 Appeal 0644/03 (AAL) sought amendment to Rule 3.1- Reasons for Policies to reflect a commitment by PDC to implement a further plan change introducing land use restrictions consistent with the principles of NZS 6805. Appeal 0646/03 (Tenants and Users) sought the use of NZS 6805 in full for land use controls for the contoured areas.
- 22 The majority of parties propose that Section 6.8- Reasons for Policies be amended to require the Council to notify a further plan change introducing additional land use restrictions on activities within the ANB and OCB consistent with the principles of NZS 6805, within 9 months of the provisions becoming operative.
- 23 The majority of parties submit that this amendment would address the concerns of the Tenants and Users. However, in its October Memorandum Counsel the Tenants and Users has listed this matter as an outstanding issue to be determined at the hearing.

***Anticipated Results***

- 24 Appeal 0657/03 (MCC) sought an amendment to Policy 6.8 to reflect the obligation to balance the need for the Aerodrome to function efficiently and effectively, with the need to address the impact of aircraft noise on the surrounding community.
- 25 The majority of parties propose to reword this section to better reflect the requirement for balancing of these needs.
- 26 Appeal 0644/03 (AAL) sought deletion of the words 'fixed wing aircraft' from the Anticipated Results section, as it is a misnomer to describe the noise contours as 'fixed wing aircraft noise contours', as they include noise from helicopters.
- 27 The majority of parties propose to delete the words 'fixed wing aircraft' from the Anticipated Results section.



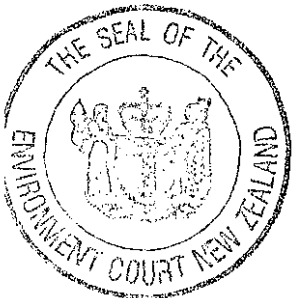
- 28 For clarification, it is also proposed to delete the words 'discretionary activities' in reference to applications on land within the ANB and OCB, as activities within this area could be other than 'discretionary' activities.
- 29 No other appeals have been lodged on the above amendments, and therefore it is submitted that these issues do not require consideration by the Court at the hearing.

**Rule 8.14(t) – assessment criteria**

- 30 Appeal 0657/03 (MCC) sought the inclusion of specific assessment criteria with which to assess adverse effects arising from an activity on the operation of the Aerodrome.
- 31 It is proposed to include assessment criteria in Rule 8.14(t) as set out in Appendix A of the attached draft Consent Order. This amendment links to the definition of ASANs outlined at paragraph 16 above.
- 32 No other party has appealed this matter, and therefore it is submitted that the Court is not required to consider this issue at the hearing.

**Clause 6.3 – Resource Management Issues, Clause 6.4 - Resource Management Strategy, Policy 6.6.1.3, Clause 6.8.6 – Ardmore Aerodrome Zone Description**

- 33 Appeal 0657/03 (MCC) sought amendment to Clause 6.3 to reflect the operational nature of the Aerodrome and greater recognition of the Aerodrome as an important facility for the general aviation industry. The appeal sought amendment to Clause 6.4 so that the resource management strategy corresponds with the noise rules in PC6.
- 34 The appeal also sought to amend Policy 6.6.1.3 to clarify that the noise controls in PC6 and the Noise Management Plan (NMP) should be considered together to control aviation industry noise emissions. The appeal sought that the reference to specific noise management controls being independent from other industrial zone noise controls be removed together with the reference to best practicable option. Similarly, the appeal sought amendment to clause 6.8.6 to remove reference to the noise management regime being independent to the industrial zone general noise controls.
- 35 The majority of parties propose to amend Clauses 6.3, 6.4 and 6.8.6 to reflect the above. Policy 6.6.1.3 is also proposed to be amended,



and now adequately addresses MCC's concerns. No other party has appealed on these matters, and therefore it is submitted that the Court is not required to consider these issues at the hearing.

**Clause 6.14.5 – Outcomes**

36 Appeal 0657/03 (MCC) sought to amend Clause 6.14.5 as it was submitted that this implied that there might be unnecessary controls on aviation activities at the Aerodrome.

37 It is proposed to amend Clause 6.14.5 as requested by appeal 0657/03. No other party has appealed this issue, and it is therefore submitted that the Court is not required to consider this issue at the hearing.

**Ardmore Aerodrome Zone: Clauses 6.14.6- Objectives and Policies**

38 Appeal 0644/03 (AAL) sought deletion of Policy 6.14.6.2.8, which it asserted sought to restrict Ex-Military Jet movements. Appeal 0647/03 (Jet Imports) sought deletion of the Policy for similar reasons.

39 AAL is satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and does not wish to pursue this point on appeal. However the appeal by Jet Imports Limited remains and therefore it is submitted that the Court is required to consider this issue at the hearing.

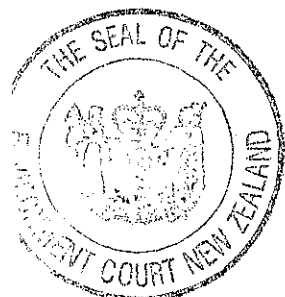
**Clause 6.14.7 - Explanation**

40 Appeal 0657/03 (MCC) sought deletion of reference to the Aerodrome 'not be(ing) unnecessarily constrained' as it ignores the need to protect the surrounding community and suggests such protection may, on occasion, be unnecessary.

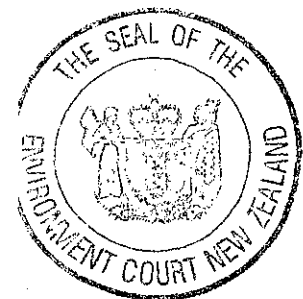
41 The majority of parties propose that the Explanation be amended to remove the phrase 'it should not be unnecessarily constrained'. As no other appeals were lodged on this issue, it is submitted that the Court is not required to consider this issue at the hearing.

**Rule 6.14.9.2- Maximum Noise Level from any Aircraft**

42 A number of parties appealed PDC's decision on the maximum permissible noise level (SEL) limit from aircraft operating from the Aerodrome. The SEL limit was originally imposed following a concession by AAL that no new 'noisier' Ex-Military Jets than currently operating from the Aerodrome, would be allowed to be permanently based at the Aerodrome.



- 43 The Commissioners' recommendations imposed an SEL of 125 dBA at the measurement point. PDC's decision amended the rule to reduce the maximum permissible noise level from SEL 125 to SEL 100 dBA between the hours of 8.00pm and 7.00am Monday-Saturday and on Sundays and Public Holidays, and SEL 125 dBA at all other times.
- 44 Appeal 0644/03 (AAL) sought reinstatement of the Commissioners' recommendations on the basis that the new rule posed an unreasonable restriction on AAL's operations and would be cumbersome to administer. Similarly, appeal 0643/03 (Warbirds) sought that changes made by the Council to the Commissioners' recommendations be rescinded. Appeals 0646/03 (Tenants and Users) and 0647/03 (Jet Imports) sought removal of the SEL controls altogether.
- 45 Appeals 0655/03 (Southcombe/Edwards), 0656/03 (ARAG) and 0654/03 (University) sought that the SEL limit be reduced to 100dBA at all times.
- 46 Appeal 0657/03 (MCC) sought that a lower SEL limit be imposed, with an exemption for Ex-Military Jets that currently operate above that level. The appeal also sought that a more certain measurement point be articulated and that it be legally accessible by the Council and AAL.
- 47 The parties to the draft Consent Order propose that Rule 6.14.9.2 be amended as set out in the Annexure A to the attached draft Consent Order. Essentially it is proposed that the SEL limit for any aircraft operating from the Aerodrome be set at 115dBA, with an exemption for aircraft based at the Aerodrome on 1 July 2004. This would allow the existing Ex-Military Jets based at the Aerodrome to continue their activities, subject to the restricted flight hours and restricted number of movements, described later in paragraphs 52-55 and 62-68. The proposed Rule specifies that the movements of the Hawker Hunter (the noisiest Ex-Military Jet based at the Aerodrome) be limited to a maximum of 58 movements per annum from the total limit of 180 movements.
- 48 The Rule retains the measuring point as on runway centre line, 1700 metres forward of the commencement of takeoff roll, as this measuring point is convenient for the measurement of new potentially noisy Ex-Military Jets at other airports for certification purposes, before they are allowed to fly at the Aerodrome.

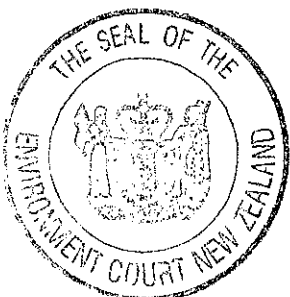




- 49 The proposed Rule also provides an exemption for aircraft brought to the Aerodrome for maintenance and/or restoration to undertake essential flight checks and departure from the Aerodrome, and specifies that these movements will be included in the total allocation of 180 movements per annum for the Ex-Military Jets.
- 50 The Rule allows PDC to request a certificate from an appropriately qualified acoustic consultant for aircraft which have the potential to exceed the maximum SEL before the aircraft can fly from the Aerodrome. It is also proposed to amend the Rule to require such a certificate to be provided to PDC within 6 weeks of the request.
- 51 However, the majority of parties understand from the Tenants and Users October Memorandum that this party wishes to pursue its appeal in relation to noise controls and limits, and therefore it is submitted that this issue will need to be considered by the Court at the hearing.

**Rule 6.14.9.3 – Restrictions on Flight Hours**

- 52 Appeal 0644/03 (AAL) sought that the curfew on circuit training and scheduled flights be reinstated from between '10pm to 7am' to '10:30pm to 7am' as notified in PC6. It was submitted that imposing a curfew of '10pm to 7am' constituted an unreasonable restriction on airport operations. For similar reasons appeal 0646/03 (Tenants and Users) sought a removal of the limits on circuit training.
- 53 Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) both sought that hover training practice and sling load training be limited to the hours of 8am to 5pm (NZLT) Monday to Friday.
- 54 The parties to the draft Consent Order have proposed an extension to the curfew for circuit training until 10:30pm in the summer months, to allow sufficient time for night circuit training. The proposed Rule also clarifies that night training is further restricted on Sunday evenings. Paragraph (f) of the proposed rule allows variations to these restrictions under limited circumstances, as approved by the Ardmore Airport Noise Consultative Committee, although not beyond 11pm NZLT.
- 55 However, the majority of parties understand from the Tenants and Users October Memorandum that this party wishes to pursue its appeal in relation to flying curfews and training flights, and therefore it is submitted that this issue will need to be considered by the Court at the hearing.

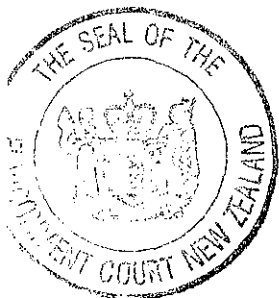


**Ex-Military Jets and other jet aircraft**

- 56 As noted above, appeal 0644/03 (AAL) appealed both Policy 6.14.6.2.8 and Rule 6.14.9.2 on the basis that these provisions placed unreasonable restrictions on airport operations (in particular, on Ex-Military jet aircraft).
- 57 Appeal 0643/03 (Warbirds) appealed Policy 6.14.6.2.8 and Rule 6.14.9.4 (described in more detail at paragraphs 62-68 below) which it asserted attempted to restrict movements of Ex-military Jet aircraft.
- 58 Appeal 0647/03 (Jet Imports) sought removal of the definition of 'Ex-Military Jet' aircraft altogether, and removal of the limits on Ex-Military Jet aircraft in Rules 6.14.9.2 and 6.14.9.4.
- 59 Appeal 0646/03 (Tenants and Users) sought removal of limits on jet movements, SEL controls and other controls on aircraft overflying events.
- 60 Appeals 0655/03 (Southcombe/Edwards), 0654/03 (University) and 0656/03 (ARAG) all sought that the use of jet aircraft from the Aerodrome be a prohibited activity. The parties are satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and do not wish to pursue this point on appeal.
- 61 In order to address concerns relating to the operation of jet aircraft at the Aerodrome, the majority of parties propose to insert a new paragraph (c) into Rule 6.14.9.3, which provides for a night curfew on business jet aircraft that are not Ex-Military Jets.

**Rule 6.14.9.4 – Ex-Military Jet movements**

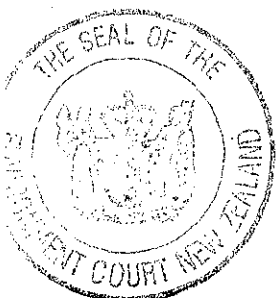
- 62 Appeal 0657/03 (MCC) sought that the number of Ex-Military Jet movements be reduced to a number that reflects the current level of Ex-Military Jet movements, as it was not aware of any evidence that suggests an increased number of movements is required.
- 63 As noted above at paragraph 60, appeals 0655/03 (Southcombe/Edwards), 0654/03 (University) and 0656/03 (ARAG), all sought that the use of jet aircraft from the Aerodrome be a prohibited activity.
- 64 Appeal 0646/03 (Tenants and Users) sought removal of the limits on jet movements, as it was submitted that the controls are unreasonable, unduly restrictive and ultra vires.



- 65 Appeal 0647/03 (Jet Imports) sought that the limit of 170 movements per annum on Ex-Military Jet aircraft be removed, as there is no reason to treat these aircraft any differently to other types of aircraft. It was submitted that the limit of 170 movements would not allow pilots of the current Ex-Military Jet aircraft to remain proficient, let alone provide for new aircraft to come to Ardmore. It was submitted that if a limit must be set, it should be a minimum of 750 movements per annum.
- 66 Appeal 0643/03 (Warbirds) sought deletion of Rule 6.14.9.4 restricting Ex-Military Jet aircraft movements.
- 67 Appellants 0657/03 (MCC), 0655/03 (Southcombe/Edwards), 0654/03 (University) and 0656/03 (ARAG) are satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and do not wish to pursue this point on appeal. Therefore, the majority of parties do not propose to make any further changes to the Rule as per the Council's decision.
- 68 However, the majority of parties understand from the Tenants and Users October Memorandum that this party wishes to pursue its appeal in relation to Ex-Military Jet movements, and therefore it is submitted that this issue will need to be considered by the Court at the hearing.

**Rule 6.14.9.6 – Engine Testing**

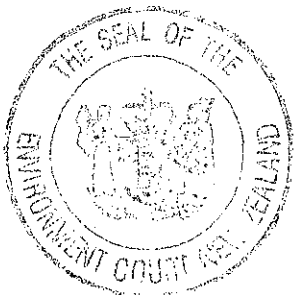
- 69 Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) sought the introduction of a requirement that any engine testing is to take place within the engine testing enclosure, with no exemptions. The parties are now satisfied that not all aircraft can be safely tested within the confines of the engine testing enclosure, and therefore are not pursuing this issue on appeal.
- 70 In this regard, the draft Consent Order reflects the Council's decision with amendments to paragraph (ii) and the Explanation to reflect the fact that the engine testing enclosure has been constructed.
- Rule 6.14.9.7 – Airshow**
- 71 Appeal 0646/03 (Tenants and Users) sought removal of the limits on airshows.
- 72 The majority of parties do not propose to make any changes to the Rule in the Council's decision. However, the parties understand from the Tenants and Users October Memorandum that this party



wishes to pursue its appeal in relation to airshows and therefore it is submitted that this issue will need to be considered by the Court at the hearing.

**Rule 6.14.9.8 – Noise Management Plan**

- 73 The Noise Management Plan (*NMP*) is part of the 3-tiered approach to managing Airport noise, developed following detailed discussions between AAL and PDC. Essentially, the three tiers are:
- 73.1 An alteration to the existing designation for the Airport to replace outdated provisions and require compliance with specific noise management provisions included in the District Plan;
- 73.2 PC6 to the District Plan replacing outdated provisions and introducing specific noise management restrictions on airport operations within the ambit of the RMA; and
- 73.3 Implementation of the NMP to deal with matters outside PDC's jurisdiction, which needs to contain some flexibility with regard to control over aircraft in flight to enable timely future safety and operational changes.
- 74 The NMP made provision for an 'Environmental Working Group' to deal with issues arising from the NMP.
- 75 Appeal 0644/03 (AAL) sought reinstatement of Rule 6.14.9.8 as notified, which required a 60% majority of the EWG before changes could be made to the NMP (as PDC's decision amended the majority to 55%).
- 76 Appeal 0644/03 (AAL) also sought removal of an amendment to Rule 6.14.9.8 and the Explanation by PDC's decision which provided that the NMP 'may impose more stringent requirements on the operation of Ardmore Aerodrome than those contained in Rule 6.14.9', as the amended rule, including modifications, may result in operation restrictions that are unsafe and unworkable.
- 77 Appeal 0646/03 (Tenants and Users) sought restoration of the existing arrangements for the EWG, as the change to the majority requirement is inappropriate and unreasonable.
- 78 Appeals 0655/03 (Southcombe/Edwards), 0656/03 (ARAG) and 0654/03 (University) sought incorporation into the District Plan of all operational matters in the NMP that have a direct bearing on the



noise contours. Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) sought listing in the District Plan of the minimum requirements to be included in the NMP.

- 79 Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) also sought deletion of the helicopter descent segment from the NMP and insert of a Rule in District Plan requiring all helicopters arriving or departing from the Aerodrome to cross the perimeter boundaries at 500 feet above ground level (AGL). Appeal 0654/03 (University) sought a new rule requiring the NMP to contain as a minimum standard that all aircraft movements be at least 1000 ft in any direction away from the University of Auckland's Ardmore Field Station.
- 80 Appeals 0655/03 (Southcombe/Edwards), 0656/03 (ARAG) and 0654/03 (University) also sought insertion of a new Rule requiring the NMP to be approved by PDC before it adopts PC6, and insertion of a new rule requiring an EWG.
- 81 Appeal 0657/03 (MCC) sought that the NMP be available for public inspection and that the matters to be covered in the NMP are clearly articulated.
- 82 As explained above, the NMP and its contents have deliberately been left to the side of the District Plan provisions, to provide for the necessary flexibility to enable timely future safety and operational changes. The NMP is designed to be a 'living' document to enable response to Civil Aviation Authority (CAA) regulations, to keep pace with industry requirements and to deal with changed circumstances. Although the contents of the NMP fall beyond the parameters of this hearing, the NMP forms part of the proposed planning regime and is therefore important evidence for the Court.
- 83 AAL in consultation with ARAG, the Councils and other parties, has reviewed the original NMP proposed and made a number of improvements to this document to better achieve the strategy of having the parties work together in a co-operative manner to resolve issues. Pivotal to these improvements has been an amendment to the structure and functioning of the EWG. The EWG has been renamed the 'Ardmore Airport Noise Consultative Committee' and reworked to ensure that representation on the committee is balanced and appropriate to the issues it will consider. This has included removal of the voting provisions previously set out in the NMP, and reflected in PC6 which meant that the group would very likely become politically driven, confrontational and ineffective



in satisfactorily addressing noise issues. The revised AANCC is intended to encourage the parties to work together co-operatively, sharing information and reaching decisions by consensus.

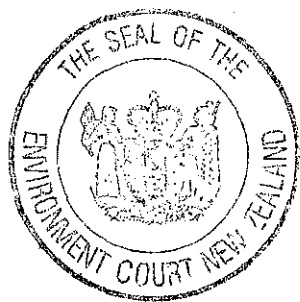
- 84 The draft Consent Order submitted by the majority of parties reflects the revised NMP, including the removal of the % majority required to amend the document. The objectives of the NMP have also been set out in Rule 6.14.9.8. The majority of parties submit that the changes made would adequately address the concerns raised in the Tenants and Users appeal. However, the parties understand from the Tenants and Users October Memorandum that this party wishes to pursue its appeal in relation to the NMP and therefore it is submitted that this issue will need to be considered by the Court at the hearing.

**Rule 6.14.9.9 Affected Dwellings**

- 85 Appeal 0644/03 (AAL) sought that the definition of 'affected dwellings' effectively enabling those persons defined to seek compensation from AAL for acoustic insulation of houses, be reinstated to the Commissioners' recommendations of including houses within the 65 dBA contour (which is consistent with NZS 6805), rather than within the 63 dBA area as amended by the Council's decision.
- 86 Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) sought retention of the requirement that acoustic insulation be installed by AAL for affected dwellings and introduction of a requirement that air conditioning systems also be installed.
- 87 The draft Consent Order proposes to reinstate the 'affected dwellings' definition of 65 dBA, which is consistent with NZS 6805, as notified and recommended by the Commissioners. References to the District Planning Maps have also been updated to reflect the maps re-released by PDC earlier this year.
- 88 As Tenants and Users, Warbirds and Jet Imports have not raised this issue in their appeal, it is submitted that the Court does not need to consider this issue at the hearing.

**Rule 6.14.9.10 Monitoring**

- 89 Appeal 0657/03 (MCC) sought that Rule 6.14.9.10 be amended to require full monitoring of aircraft noise to be establishing within two years of PC6 becoming operative. It also sought that all monitoring information be provided to the public, and the inclusion of a complaints register as part of the monitoring programme.



- 90 Appeal 0656/03 (ARAG) sought the introduction of clearer monitoring requirements, and appeal 0655/03 (Southcombe/Edwards) sought the introduction of continuous monitoring requirements.
- 91 Appeal 0644/03 (AAL) sought reinstatement of Rule 6.14.9.10 as recommended by the Commissioners so that the word 'busiest' and 'ongoing basis' be removed as these restrictions would be unlawful and unreasonable.
- 92 The draft Consent Order presented by the parties reflects the remodelled contours produced by agreement between the noise experts for the parties to the draft Consent Order. The Rule now clarifies how monitoring is to be undertaken with reference to use of the INM model used to produce the refined contours agreed between the noise experts. The Rule also clarifies that both the results and the underlying inputs from physical noise monitoring will be provided to PDC, and that Ex-Military Jet movements are to be recorded on a monthly basis. The Rule specifies that the records of Ex-Military Jet movements and administration and logging of engine testing is to be provided to the Council in a collated form.

**Rule 6.14.9.11 Non-complying activities**

- 93 Appeal 0644/03 (AAL) sought the deletion of this rule, which was not included in PC6 as notified or the Commissioners recommendations, as Rule 6.14.9 provides a method by which compliance can be ensured if there is an exceedence.
- 94 Appeal 0643/03 (Warbirds) sought that all changes proposed by PDC which involve amendments to the Commissioners' recommendations be rescinded.
- 95 The draft Consent Order deletes Rule 6.14.9.11, as the majority of parties considered that it was not necessary for the reasons mentioned above.

**Provision for community fund**

- 96 Appeal 0657/03 (MCC) sought that a community fund be set up to help provide for adverse effects of aviation activities at the Ardmore Aerodrome on the surrounding community.
- 97 MCC is satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and does not wish to pursue this point on appeal.



### **Use of runways**

- 98 Appeal 0655/03 (Southcombe/Edwards) sought that runway 07/25 be reopened so that air traffic is split equally between runway 03/21 and 07/25, therefore reducing adverse noise effects on properties below the flight fan.
- 99 Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) sought the introduction of a requirement that AAL relocate the centreline of grass runway 03/21 to less than 120m from centreline of the sealed runway and prohibit parallel or simultaneous takeoffs.
- 100 The appellants are satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and do not wish to pursue this point on appeal.

### **Simulated engine failure**

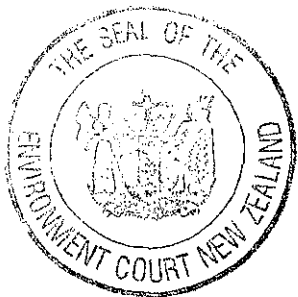
- 101 Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) also sought the introduction of a requirement that simulated engine failure take place within the flight fan only.
- 102 The appellants are satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and do not wish to pursue this point on appeal.

### **Helicopters**

- 103 Appeals 0655/03 (Southcombe/Edwards) and 0656/03 (ARAG) sought the introduction of a requirement that helicopter hover areas, practice areas and sling load training areas be at least 200m from the airport boundaries.
- 104 The appellants are satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and do not wish to pursue this point on appeal.

### **Aerobatic flight**

- 105 Appeal 0654/03 (University) sought that safety controls be introduced into PC6 in relation to aerobatic flight to ensure that all exiting manoeuvres occur at a height of 1000 ft and must take place over the airfield, or alternatively banning aerobatics over the airfield and requiring this to take place at a remote location away from surrounding residential activity.
- 106 The appellant is satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and does not wish to pursue this point on appeal.





### **Low level circuit flying**

- 107 Appeal 0656/03 (ARAG) sought a new rule excluding low level circuit flying and requiring all circuits to be at a minimum height of 1200ft AGL.
- 108 The appellant is satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and does not wish to pursue this point on appeal.

### **Other minor amendments**

- 109 There were minor inconsistencies in wording in the Council's decision. In particular, in some places reference is made to 'Ardmore Aerodrome' and in others simply 'the Aerodrome' which is a defined term. As such, it is proposed that references to 'Ardmore Aerodrome' be replaced in the appropriate places with 'the Aerodrome'.
- 110 Reference is made in Clause 6.14.7 to the 'Complaints Committee'. This reference originated from the NMP. However, as described above the Environmental Working Group (the successor of the Complaints Committee) has been renamed the Ardmore Airport Noise Consultative Committee. It is therefore proposed that the reference in Clause 6.14.7 be amended accordingly.
- 111 Reference is made in Clause 6.14.7 to Council's 'overall discretion' to ensure general compliance with the NMP. However, it is considered by the parties that it would be more appropriate to refer to Council's 'statutory role' rather than 'overall discretion' to ensure compliance. It is proposed that Clause 6.14.7 be amended accordingly.

## **AMENDMENTS TO AAL'S DESIGNATION**

### **District Plan References**

- 112 As noted at paragraph 87 PDC re-released its planning maps earlier this year. The District Plan references have therefore been updated to reflect the current planning maps.

### **Clauses 2-3 Location of Runway Centrelines and Bases**

- 113 Appeal 0813/03 (Antunovich) sought that AAL's NOR be amended so that bases for the approach surface for the southwest end of Runway 03/21 have an elevation of 35.66m above mean sea level (AMSL) and in all other respects are the same as the NOR served by the Minister of Civil Aviation in 1989.



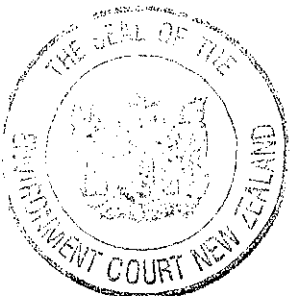
- 114 Appeals 0816/03 (ARAG) and 0817/03 (Southcombe) sought that AAL relocate the centreline of grass runway 03/21 to less than 120m from the centreline of sealed runway and prohibit parallel or simultaneous takeoffs.
- 115 Appeal 0817/03 (Southcombe) sought that runway 07/25 be reopened so that air traffic is split equally between runways 07/25 and 03/21, thereby reducing adverse noises effects on properties near the flight fans. As noted above at paragraph 100 the appellants are satisfied with the agreement reached between the majority of parties as outlined in the draft Consent Order and do not wish to pursue this point on appeal.
- 116 The draft Consent Order reflects the changes proposed by AAL and agreed to by the majority of parties to resolve the issue with the Antunovich property (Appellant 0813/03). Essentially, AAL has reviewed the location of the approach surface to remedy the current situation where it passes through the Antunovich's house, by a combination of moving the surface back, so its origin (base location) is 25m inset from the end of the seal at the southwest end of runway 21, and making the height of the surface origin the same as the height of the runway at that point.

**Clause 10 – Ardmore Aerodrome Sound Emissions**

- 117 Appeal 0818/03 (MCC) sought that clause 10 be amended to state that as physical monitoring is required to demonstrate compliance with Rule 6.14.9.2, AAL shall obtain a registrable instrument in favour of the Authority and PDC providing legal access to the SEL measuring point.
- 118 AAL is currently in the process of securing a registrable instrument over a property containing one of the SEL measuring points, and the appellant does not wish to pursue this issue on appeal.

**Clause 12 – Noise Management Plan**

- 119 Appeals 0817/03 (Southcombe) and 0816/03 (ARAG) sought that a condition be imposed on the designation requiring AAL to have the NMP approved by PDC before the Court makes its decision on PC6. The appeals also sought that clause 12 be amended to require a 55% majority of the EWG to change the NMP.
- 120 Appeal 0816/03 (ARAG) sought that AAL delete the helicopter segment from the NMP and require all helicopters arriving and departing the Aerodrome to cross the perimeter boundaries at 500ft

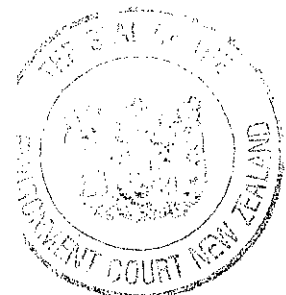


above ground level (AGL). The appeal also sought that the NMP be attached to the NOR and AAL's decision as a condition of consent.

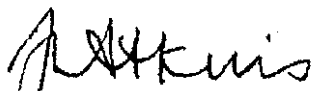
- 121 Appeal 0818/03 (MCC) sought that clause 12 be amended to state that the NMP will not be inconsistent with Rule 6.14.9 of the District Plan and that the NMP may contain more stringent requirements on the operation of the Aerodrome than those contained in the District Plan.
- 122 Amendments to the NMP have been explained at paragraphs 83-84 above.

### CONCLUSION

- 123 PDC accepts that it is appropriate to amend the following provisions of the Plan: Zoning Maps C5-C7, D4-D7, E4 and E5 and Ardmore Airport Height Surfaces, Part 10 -Definitions, Section 6.8 of Part 6 – Reasons for Policies, Section 6.8 of Part 6 – Anticipated Results, Rule 8.14, Clause 6.3 – Resource Management Issues, Clause 6.4 – Resource Management Strategy, Policy 6.6.1.3, Clause 6.8.6 (Ardmore Aerodrome Zone Description), Clause 6.14.1- Introduction, Clause 6.14.2 – Overview, Clause 6.14.4- Resource Management Strategy, Clause 6.14.5 –Outcomes, Clause 6.14.6 – Objectives and Policies, Clause 6.14.7 - Explanation, Clause 6.14.7 – Methods, Rule 6.14.8.1- Permitted Activities, Rule 6.14.8.2- Discretionary Activities, and Rule 6.15- Industrial Zones Rule and to delete Rule 6.14.8.3 and to insert a new Rule 6.14.9 – Ardmore Aerodrome Sound Emissions.
- 124 AAL accepts that it is appropriate to amend the District Plan References, Clauses 2,3 and 12, and the Advice Note to the designation.
- 125 Following discussions the majority of parties have agreed by consent that the relief sought under paragraphs 16 and 17 of RMA 0814/03, paragraph 1 of RMA 0793/03, paragraph 8 of RMA 0813/03, paragraph 8 of RMA 0802/03, paragraph 8 of RMA 0816/03, paragraph 7 of RMA 0818/03, paragraph 8 of RMA 0817/03, paragraph 85 of RMA 0644/03, paragraph 6 of RMA 0655/03, paragraph 6 of RMA 0654/03, paragraph 6 of RMA 0656/03, paragraphs 5.1.4, 5.2.4, 5.3.4, 5.4.4, 5.5.4, 5.6.4, 5.7.4, 5.8.4, 5.9.4, 5.10.4, 5.11.4, 5.12.4, 5.13.4 and 5.14.4 of RMA 0657/03 can be determined by amending the District Plan and designation as set out in Annexures A and B of the attached draft Consent Order.



Dated at Auckland this 3<sup>rd</sup> day of November 2004.

  
\_\_\_\_\_  
for Papakura District Council

\_\_\_\_\_  
for Ardmore Airport Limited

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for Ardmore Residents Action Group Incorporated

\_\_\_\_\_  
for Manukau City Council

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for J & S Southcombe

\_\_\_\_\_  
for New Zealand Warbirds Association Incorporated

\_\_\_\_\_  
for Ardmore Airfield Tenants and Users Committee

\_\_\_\_\_  
for J&S Southcombe and J&D Edwards

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Dated at Auckland this 3<sup>rd</sup> day of November 2004.

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for Papakura District Council

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for Ardmore Airport Limited

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for Ardmore Residents' Action Group Incorporated

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for Manukau City Council

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for J & S Southcombe

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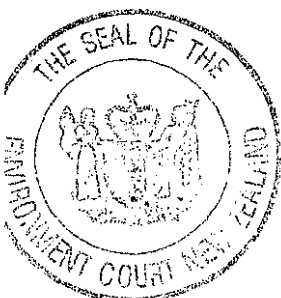
for New Zealand Warbirds Association Incorporated

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for Ardmore Airfield Tenants and Users Committee

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for J&S Southcombe and J&D Edwards



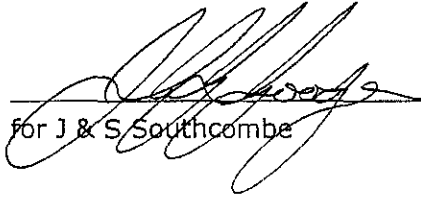
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for Ardmore Airport Limited

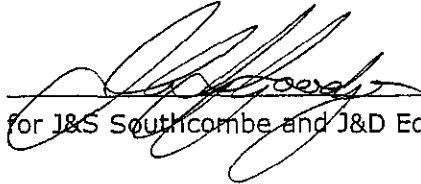
  
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for Ardmore Residents Action Group Incorporated

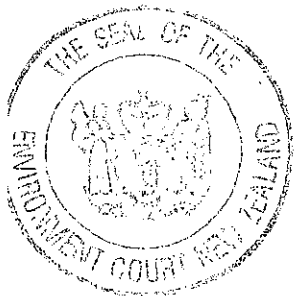
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for J & S Southcombe

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for New Zealand Warbirds Association Incorporated

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for Ardmore Airfield Tenants and Users Committee

  
\_\_\_\_\_  
for J&S Southcombe and J&D Edwards



Dated at Auckland this 3<sup>rd</sup> day of November 2004.

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for Papakura District Council

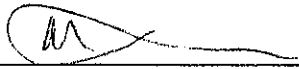
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for Ardmore Airport Limited

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for Ardmore Residents Action Group Incorporated

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for Manukau City Council

*MJL Dickey*

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for J & S Southcombe

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for New Zealand Warbirds Association Incorporated

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for Ardmore Airfield Tenants and Users Committee

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for J&S Southcombe and J&D Edwards



for Jet Imports Limited

*[Signature]*  
for University of Auckland

*[Signature]*  
for J& K Antunovich

*[Signature]*  
for Warren Simpson (s274 party)

for PG & ML Kenny (s274 party)

for Hamlin Holdings Limited (s274 party)

for Airfield Farms Limited (s274 party)

for Roberts Holdings Limited (s274 party)

for Murdoch, Reynolds and JH & LA Graham Family Trusts (s274 party)

*[Signature]*  
for B&K McMath, B Webb, J Rigby, A Burke, D Kirkbride, J Rennell, J Brosnan, W Simpson (s274 party)

*[Signature]*  
for J Rigby (s274 party)

*[Signature]*  
for RE Burnell (s274 party)

*[Signature]*  
for MB Burnell (s274 party)

*[Signature]*  
for B&J Hearing (s274 party)

*[Signature]*  
for E&N White (s274 party)





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for Jet Imports Limited

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for University of Auckland

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for J& K Antunovich

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for Warren Simpson (s274 party)

*Paul A. Kenny*

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for PG & ML Kenny (s274 party)

*Paul A. Kenny*

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for Hamlin Holdings Limited (s274 party)

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for Airfield Farms Limited (s274 party)

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for Roberts Holdings Limited (s274 party)

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Brosnan, W Simpson (s274 party)

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for J Rigby (s274 party)

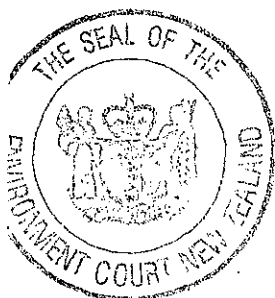
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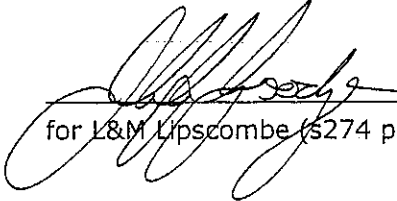
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for B&J Hearing (s274 party)

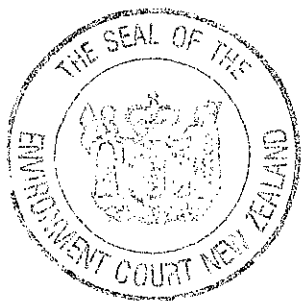
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for E&N White (s274 party)

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for L&M Lipscombe (s274 party)

for M&C Spencer (s274 party)



*under:* the Resource Management Act 1991

*In the matter of:* a Notice of Requirement by Ardmore Airport Limited for alteration to designation and Proposed Plan Change 6 to the Operative Papakura District Plan

*between:* **Papakura District Council** (RMA 0793/03)

**J & K Antunovich** (RMA 0813/03)

**University of Auckland** (RMA 0802/03)

**Ardmore Residents Action Group Incorporated**  
(RMA 0816/03)

**Manukau City Council** (RMA 0818/03)

**J & S Southcombe** (RMA 0817/03)  
*Appellants*

*and:* **Ardmore Airport Limited**  
*Respondent*

*and between:* **Ardmore Airport Limited** (RMA 0644/03)

**New Zealand Warbirds Association Incorporated**  
(RMA 0643/03)

**Ardmore Airfield Tenants and Users Committee**  
(RMA 0646/03)

**J & S Southcombe and J & D Edwards** (RMA  
0655/03)

**University of Auckland (Physics Department)** (RMA  
0654/03)

**Ardmore Residents Action Group Incorporated**  
(RMA 0656/03)

**Jet Imports Limited** (RMA 0647/03)

**Manukau City Council** (RMA 0657/03)

*Appellants*

*and:* **Papakura District Council**  
*Respondent*



**BEFORE THE ENVIRONMENT COURT**

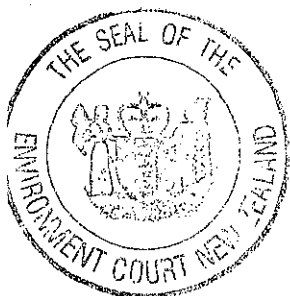
Environment Court Judge R G Whiting sitting alone pursuant to section 279 of the Resource Management Act 1991 (*the Act*) **IN CHAMBERS** at **AUCKLAND** on the      day of      2004.

**[DRAFT] CONSENT ORDER**

**HAVING CONSIDERED** the Appellants' notices of appeal and the Respondents' notices of reply, and upon reading the Memorandum of Counsel filed herein, **THIS COURT HEREBY ORDERS BY CONSENT** that:

- 1 The Operative Papakura District Plan (*the Plan*) be amended by amending:
  - 1.1 Maps C5-C7, D4-D7, E4 and E5, and Ardmore Airport Height Surfaces and deleting Map Ardmore Airport General Plan;
  - 1.2 Part 10 -Definitions;
  - 1.3 Section 2- Rural Papakura; Section 6.8 of Part 6 - Reasons for Policies, Section 6.8 of Part 6 - Anticipated Results and Rule 8.14;
  - 1.4 Section 3 - Urban Papakura, Part 6 (Industrial Zones); Clause 6.3 - Resource Management Issues, Clause 6.4 - Resource Management Strategy, Policy 6.6.1.3, Clause 6.8.6 (Ardmore Aerodrome Zone Description), Clause 6.14.1- Introduction, Clause 6.14.2 - Overview, Clause 6.14.4- Resource Management Strategy, Clause 6.14.5 -Outcomes, Clause 6.14.6 - Objectives and Policies, Clause 6.14.7 - Explanation, Clause 6.14.7 - Methods, Rule 6.14.8.1- Permitted Activities, Rule 6.14.8.2- Discretionary Activities, and Rule 6.15- Industrial Zones Rule and by deleting Rule 6.14.8.3 and inserting a new Rule 6.14.9 - Ardmore Aerodrome Sound Emissions;

as set out in Annexure A of the **attached** Draft Report.



- 2 Ardmore Airport Limited's existing designation be amended by amending the District Plan Reference, Section 2 - Location of Runway Centrelines, Section 3 - Location of Bases, Section 12 - Noise Management Plan, and the Advice Note as set out in Annexure B of the **attached** Draft Report.

Dated at Auckland this                    day of                    2004.

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Environment Court Judge Whiting



**ANNEXURE A**

**1 AMENDMENTS TO THE ZONING MAPS**

1.1 **Amend Rural Zone Maps R2 and R3C5-C7, D4-D7, E4 and E5 by plotting on the Air Noise Boundary and the Outer Control Boundary as shown in Attachment 1. Amend Map Ardmore Airport Height Surfaces.**

1.2 **Delete Urban Map U-18-- Ardmore Airport General Plan**

**2 AMENDMENTS TO SECTION 1 OF OPERATIVE DISTRICT PLAN - GENERAL PAPA KURA**

2.1 **Amend Part 10 "Definitions" by inserting new definitions as follows:**

***Aerobatic Flight -***

- (1) *an intentional manoeuvre in which the aircraft is in sustained inverted flight or is rolled from upright to inverted or from inverted to upright position; or,*
- (2) *manoeuvres such as rolls, loops, spins, upward vertical flight culminating in a stall turn, hammerhead or whip stall, or a combination of such manoeuvres*

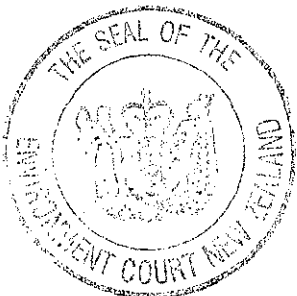
***Aerodrome*** means Ardmore Aerodrome as defined by land contained within the Aerodrome boundary.

***Aircraft*** in terms of the Civil Aviation Act 1990, means any machine that can derive support in the atmosphere from the reactions of the air otherwise than by the reactions of the air against the surface of the earth.

***Aircraft Engine Testing Noise*** means aircraft testing for the purposes of engine maintenance and does not include normal operational aircraft engine run-ups. (i.e.: aircraft warming up prior to take-off) or any noise generated by the taxiing or towing of aircraft to or from the designated engine testing location.

***Aircraft Movement*** means one aircraft take-off, landing, touch-and-go, or missed approach. A "Touch-and-go" shall be deemed to be two aircraft movements.

***Activities Sensitive to Aircraft Noise (ASANs)*** means household units, residential activities, comprehensive residential development, institutional



activities, studio warehousing, temporary household units, rehabilitation facilities, pre-school/education facilities, schools, other educational facilities, child care centres and other care centres, hospitals, other health care facilities, rest homes and other homes for the aged.

**Air Noise Boundary** is a line formed by the outer extremity of the 65 dBA  $L_{dn}$  noise contour.

**Airport Authority** means Ardmore Airport Limited or any person appointed in place of Ardmore Airport Limited as the requiring authority for Ardmore Aerodrome pursuant to section 180 of the Resource Management Act 1991.

**Aerodrome Boundary** means the boundary of the land designated by the Airport Authority for aerodrome purposes.

**Airshow** means the event referred to in Rule 6.14.9.7.

**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; and,
- (b) the financial implications and the effects on the environment of that option when compared with others; and,
- (c) the current state of technical knowledge and the likelihood that the option can be successfully applied.

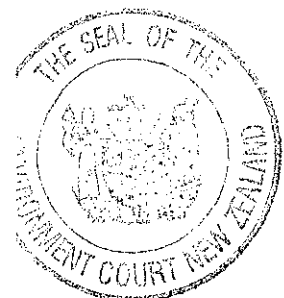
**CAA** means the Civil Aviation Authority of New Zealand.

**CAR** means Civil Aviation Rule.

**Circuit training** means the use of the Fixed Wing Circuit or the Helicopter Circuit for training purposes.

**dB**A is a measurement of sound pressure level which has its frequency characteristics modified by a filter so as to more closely approximate the frequency bias of the human ear.

**Ex-Military Jet aircraft ("EMJ")** means any Fixed wing aircraft designed for, historically associated with, or capable of being used for military purposes (including, without limitation, a replica) propelled other than by a propeller.



**Fixed Wing Circuit** means that pattern, located on the southern side of the Aerodrome flown by fixed wing aircraft for the purpose of sequencing themselves to or from runways 03/21 and/or 07/25 grass.

**General Aviation** is defined by the Civil Aviation Authority (CAA) as all aviation activity at civil aerodromes other than regular passenger flights scheduled by international and domestic airlines.

**Helicopter Circuit** means that pattern located on the northern side of the Aerodrome flown by helicopters.

**L<sub>10</sub>** means the noise level which is equalled or exceeded for 10% of the measurement period. L<sub>10</sub> is an indicator of the mean maximum noise level and is used in New Zealand as the descriptor for intrusive noise (in dBA).

**L<sub>dn</sub> (Day/Night Level)** means the day night noise level which is calculated from the 24 hour L<sub>eq</sub> with a 10 dBA penalty applied to the night-time (2200-0700 hours) L<sub>eq</sub>.

**L<sub>max</sub> (Maximum sound pressure level)** means the maximum sound pressure level measured during the sampling period.

**L<sub>eq</sub> (Time-average sound level)** means the time averaged noise level (on a logarithmic, energy basis).

**MBZ** means that area denominated under Civil Aviation Rules as the Ardmore Mandatory Broadcast Zone or MBZ.

**Notional Boundary** means a line 20 metres from the façade of any rural dwelling or the legal boundary where this is closer to the dwelling.

**NZLT** means NZ local time: time referenced regardless of whether daylight saving is in effect.

**NZS 6805:1992** refers to the New Zealand Standard NZS 6805 1992 "Airport Noise Management and Land Use Planning".

**Obstacle Limitation Surfaces (OLS)** means those defined areas about and above an aerodrome intended for the protection of aircraft in the vicinity of an aerodrome. Such surfaces for Ardmore Aerodrome Runways are depicted in both the Papakura and Manukau City District Plans.

**Outer Control Boundary** is a line formed by the outer extremity of the 55 dBA L<sub>dn</sub> noise contour.





~~**Public Holiday** means any of the following days: New Years Day, the second day of January or some other day in its place, Waitangi Day, Good Friday, Easter Monday, Anzac Day Sovereigns Birthday, Labour Day, Christmas Day, Boxing Day and Auckland Anniversary Day.~~

**Scheduled Flight** means freight or passenger flights that are established on a permanent timetable basis.

**SEL (Sound Exposure Level)** means the A-weighted sound level which if maintained constant for a period of 1 second, would convey the sound energy as is actually received from a given noise event

$$SEL = 10 \log \int_{t_1}^{t_2} \left[ \frac{P_A(t)}{P_0} \right]^2 dt$$

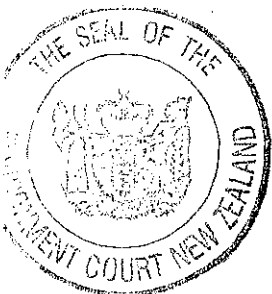
where  $p$  is in pascals and  $t$  in seconds -  $p_0$  is the reference sound pressure of 20 micropascals.

### 3 **AMENDMENTS TO SECTION 2 OF OPERATIVE DISTRICT PLAN -RURAL PAKAKURA**

#### 3.1 **Amend the "Reasons for Policies" and the "Anticipated Results" in Section 6.8 (Ardmore Aerodrome) of Part 6 (Objectives and Policies) to read as follows:**

##### **Reasons for Policies**

~~Specific provision for the management of resources on the Aerodrome site itself are contained in the urban section of the District Plan. The policies and rules in this part of the Plan relate to the off-site effects of the Aerodrome. In general terms, areas which are close to the Aerodrome may experience some restriction of activities due to noise or for safety reasons. No additional land use restrictions are proposed in the Rural Papakura Zone or the Rural Takanini / Drury Zone. Instead, it is considered that the restrictions already inherent in these Zones (e.g. additional dwellings and subdivision are discretionary activities) will allow the existing objective and policy (i.e. Objective 6.8.1(b) and policy 6.8.2(a)) in relation to compatibility of surrounding land uses to be implemented. Consistent with the principles for airport planning contained in NZS 6805-1992 "Airport Noise Management and Land Use Planning", the Council will notify a further plan change introducing additional land use restrictions on activities within the Air Noise Boundary and Outer Control Boundary by way of a future~~



plan change within 9 months of these provisions becoming operative.

### **Anticipated Results**

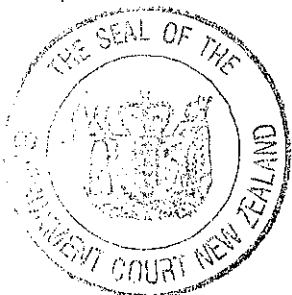
~~Ardmore-The Aerodrome will continue to be a significant land use in the District and a significant contributor to the economic base of the District/local economy. Uses and activities in the vicinity of the aerodrome will be affected by it and will have some limitations placed on them because of the aerodrome. Controls on aircraft noise will ensure that the operation of the Aerodrome does not significantly adversely affect people living in the area. When considering resource consent applications, the Council will have regard to whether activities in the vicinity of the Aerodrome will adversely affect its operations.~~

The Airport Authority and the Papakura District Council have jointly undertaken an investigation of aircraft noise which has resulted in ~~fixed wing aircraft noise contours~~ being established and shown on the Zoning Maps. These contours will be used by the Council as the basis for rules controlling aircraft noise so as to ensure that the operation of the aerodrome does not significantly affect people living in the area. When any future applications for resource consent to discretionary activities within the L<sub>dn</sub> 55 and 65 dBA aircraft noise contour (represented by the Outer Control Boundary and the Air Noise Boundary on the Zoning Maps) are considered by the Council it will have regard to whether those activities carried out in the vicinity of the Aerodrome will adversely affect the operations of the Aerodrome.

### **3.2 Amend Rule 8.14 by inserting an additional clause (t) as follows:**

(t) In respect of any application for a discretionary activity in the Rural Papakura or Rural Takanini / Drury Zones on land within the L<sub>dn</sub> 55 and 65 dBA aircraft noise contours around the Ardmore-Aerodrome (represented by the Outer Control Boundary and the Air Noise Boundary on the Zoning Maps), the Council will have regard to whether the proposed activity will adversely affect the operations of the Aerodrome is defined as an Activity Sensitive to Aircraft Noise in this Plan, and if so:

- Whether, having regard to all the circumstances (including location in relation to the airport, likely exposure of the site to aircraft noise, noise attenuation



and ventilation measures proposed, and the number of people to be accommodated), the nature, size and scale of the proposed activity is likely to lead to potential conflict with and adverse effects upon the operation of the Aerodrome;

- Whether the design and construction of any structure to be used for the proposed activity would achieve an internal noise environment of  $L_{dn}$  40 dBA while providing adequate ventilation; and
- Any other relevant matter set out in section 104 of the Resource Management Act 1991.

#### **4.0 AMENDMENTS TO PART 6 (INDUSTRIAL ZONES) OF SECTION 3 OF OPERATIVE DISTRICT PLAN URBAN PAPA KURA**

##### **4.1 Amend Clause 6.3 (Resource Management Issues) by inserting an additional bullet point as follows:**

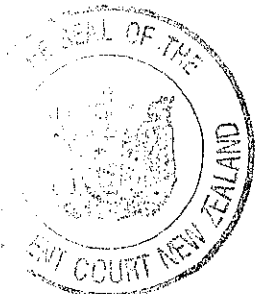
- The operation and growth of ~~Ardmore-the~~ Aerodrome to meet the reasonably foreseeable air transport needs while minimising adverse noise effects on the surrounding community.
- The Aerodrome is an important facility for the general aviation industry as it provides pilot training and recreational flying services. The operation of the Aerodrome should recognise the importance of those services.

##### **4.2 Amend Clause 6.4 (Resource Management Strategy) by making an addition to the fifth bullet point as follows:**

- to establish at ~~Ardmore-the~~ Aerodrome a zone for aviation-related activities with specific noise controls relating to ~~on ground aerodrome activities, aircraft movement numbers and hours of operation~~ aircraft noise.

##### **4.3 Amend Policy 6.6.1.3 to read as follows:**

- 6.6.1.3** To establish at ~~Ardmore Aerodrome~~ a zone for ~~To~~ provide for aviation-related activities at the Aerodrome while controlling the adverse effects of aircraft noise.



~~with specific noise management controls which are independent of other industrial zone noise controls and which are designed to implement the best practicable option in dealing with the actual and potential noise effects arising from the use of the Aerodrome.~~

**4.4 Amend Clause 6.8.6 (Ardmore Aerodrome Zone Description) to read as follows:**

**Ardmore Aerodrome Zone**

~~This zone makes provision for the aviation industry and related uses at Ardmore the Aerodrome. The site is designated as "Aerodrome" in the District Plan as a requirement of the Airport Authority. The zone includes noise management controls that are tailored to the specific effects generated by the Aerodrome, independent of other general industrial zone requirements, to ensure that the noise impact of the Aerodrome is minimised by use of best practicable options.~~

**4.5 Amend ARDMORE AERODROME ZONE, Clause 6.14.1 - INTRODUCTION, to read as follows:**

~~The Ardmore Aerodrome Zone makes provision for the aviation industry and related activities on the Ardmore Aerodrome site. The site is designated as "Aerodrome" in the District Plan. This designation is the requirement of the Airport Authority which controls the operation of the Aerodrome.~~

**4.6 Amend ARDMORE AERODROME ZONE Clause 6.14.2 - OVERVIEW to read as follows:**

~~The establishment of this special zone for the Ardmore Aerodrome results from the need both to enable and protect all aviation activities conducted within the NZS 6805-1992 noise footprints and CAA Rules and to regulate activities which are not part of the public work. Subsequent to consultation with the local community and the Airport Authority the District Council has implemented a noise contour around Ardmore the Aerodrome based on 275,000 Aircraft Movements per year including Ex Military Jet Aircraft. A contour including Ex Military Jet Aircraft movements has been implemented to ensure that the Air Noise Boundary and the Outer Control Boundary reflect actual noise emissions allowing for effective monitoring to be undertaken.~~



*Buildings and uses which are not part of the designated public work are subject to the provisions of the zone and to the consent of the Airport Authority in terms of Section 176 of the Act.*

*Subdivision is permitted within the Zzone. Recognition of the particular requirements of aircraft hangarage, on-site sewerage reticulation, stormwater disposal and bylaw standards needs to be given in any determination of leasehold or subdivision section size.*

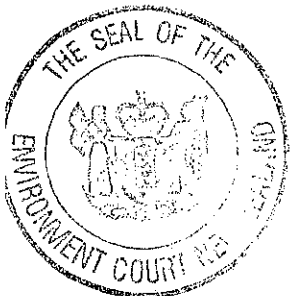
**4.7 Amend ARDMORE AERODROME ZONE Clause 6.14.4 - RESOURCE MANAGEMENT STRATEGY to read as follows:**

*The resource management strategy for the Ardmore Aerodrome Zone is:*

- to establish a framework of controls which secure the on-going operation and growth of Ardmore the Aerodrome for aviation and aviation-related activities.*
- to establish general environmental and noise controls to secure appropriate amenity within the zone and in surrounding areas.*

**4.8 Amend ARDMORE AERODROME ZONE - OUTCOMES Clause 6.14.5 to read as follows:**

*The outcome of this strategy will be the operation and growth of a unique activity node which makes a significant contribution to the present well-being and future development of the District. ~~Aviation activities will be conducted in such a way that the potential of the facility is not limited by unnecessary controls.~~ At the same time, Ardmore the Aerodrome will function in recognition of NZS 6805-1992 "Airport Noise Management and Land Use Planning" to achieve appropriate levels of local amenity and environmental quality. The strategy is aimed at the continuation of those special aviation-related activities which have become established within the zone in such a way that the activities are properly managed to secure amenity values both within and beyond the zone.*



**4.9 Amend ARDMORE AERODROME ZONE - Clause 6.14.6 -  
OBJECTIVES AND POLICIES and Clause 6.14.7 -  
EXPLANATION to read as follows:**

*Objective:*

6.14.6.1 *To provide for uses related to the aviation function of the Ardmore Aerodrome.*

*Policies:*

6.14.6.1.1 *To permit a wide range of aviation-related activities within the zone including the bulk storage of aviation fuels and other aviation related hazardous substances.*

6.14.6.1.2 *To limit the establishment of non aviation related activities.*

*Objective:*

6.14.6.2 *To protect environmental quality and the amenity values of sensitive, adjoining rural areas, including the sensitivity of those areas to aerodrome-related noise, while recognising the operation and growth of Ardmore the Aerodrome.*

*Policies:*

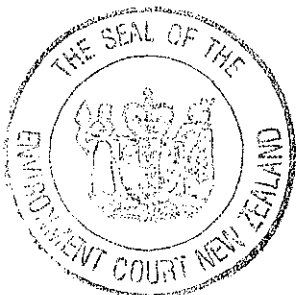
6.14.6.2.1 *To adopt the best practicable option in minimising the noise impact of the Aerodrome on surrounding land uses.*

6.14.6.2.2 *To manage future growth and development of the District and Ardmore the Aerodrome in accordance with the approach promoted in New Zealand Standard 6805:1992 Airport Noise Management and Land Use Planning (NZS 6805:1992).*

6.14.6.2.3 *To impose controls which protect the environmental quality and amenity of neighbouring properties.*

6.14.6.2.4 *To impose amenity controls at site boundaries.*

6.14.6.2.5 *To adopt controls on noise, vibration, air pollution, glare, and soil and water contamination.*



6.14.6.2.6 To require the establishment and maintenance of buffer areas between industrial activities and adjacent activities.

6.14.6.2.7 To limit the height and location of activities.

6.14.6.2.8 To control the adverse effects of Ex-Military Jet Aircraft using ~~Ardmore~~the Aerodrome by limiting their activities in terms of maximum noise levels, operating hours and flight numbers.

#### **6.14.7 EXPLANATION**

~~Ardmore~~The Aerodrome is a significant general aviation facility and comprises a valuable economic and social asset to the District. For this reason, ~~its continued functioning~~the Aerodrome should be enabled to continue functioning as a regional and national facility ~~should not be unnecessarily constrained.~~

Of necessity, such facilities are located in rural areas with the result that the activities related to an aerodrome often cause annoyance or disturbance to adjoining, non-aviation activities. The environmental effects of aviation are often in conflict with the expectations of rural amenity.

The objectives and policies for the Ardmore Aerodrome Zone will enable the future functioning and growth of the aerodrome in accordance with best practicable options and NZS 6805:1992 while minimising adverse noise impacts on surrounding land uses.

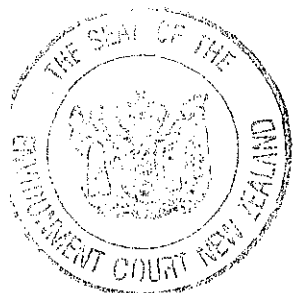
#### **4.10 Amend ARDMORE AERODROME ZONE – Clause 6.14.7 by adding the following Clause on METHODS:**

#### **6.14.7 METHODS**

There are four accepted methods available to control aviation activities:

- i) Zoning and Rules;
- ii) Noise Management Plans;
- iii) Operational Requirements of Other Organisations;
- iv) Designations.

The District Plan through zoning, rules and designation can put in place provisions and standards to provide for the development of the Aerodrome and associated activities and to control adverse



effects. Such controls, however, must be enforceable and must not conflict with operational requirements of other statutory organisations. Although ~~Ardmore~~ the Aerodrome is designated under the District Plan and controlled by a requiring authority, it has been seen as more appropriate to control certain elements of the aerodrome operations by way of zoning and rules. This enables the council to respond to any changes in aerodrome operations (such as the cessation of ex-military jet aircraft operations) and modify the noise contour and zone provisions if required.

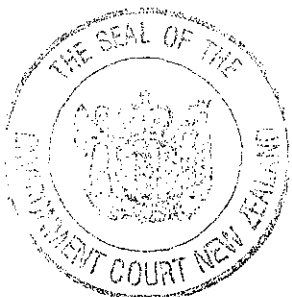
Because of the safety issues involved, the activities of agencies such as the Ministry of Civil Aviation also have a bearing on the operations of the Aerodrome. Further, Council recognises that there are many aspects of aerodrome operations which are best controlled through a noise management plan as opposed to specific rules due to potential conflict with other regulations and the need to allow aspects of aerodrome operations to be continually modified and improved in response to industry changes and to achieve best practice noise management.

A combination of these various methods has been adopted as they represent the most effective means of achieving the objectives and policies for the Aerodrome. The designation requires compliance with the Ardmore Aerodrome Zone rules which allow for effective monitoring and enforcement, if necessary. Compliance with and on-going review of the Ardmore Aerodrome Noise Management Plan is a requirement in the District Plan. This ensures that the various flight related operational aspects of the Aerodrome are controlled and regulated while providing a process of enforceability through the Ardmore Airport Noise Complaints Consultative Committee and through Council's ~~overall discretion~~ statutory role to ensure general compliance with the Noise Management Plan. This combination of control methods has proven to be effective and efficient for the majority of New Zealand's large airports.

**4.11 Amend ARDMORE AERODROME ZONE Rule 6.14.8.1 Permitted Activities by deleting Clause 3 relating to the "Ardmore Aerodrome General Plan" and amending Clause 2 (General Provisions) to read as follows:**

**2. General Provisions**

Activities not provided for by way of the ~~Ardmore~~ Aerodrome Designation shall comply with the following:





- Part 6, Rules 6.15-3 (Air Pollution and Odour Control), 6.15-4 (Hazardous substances) and 6.15-5 (Bulk and Location Controls). For the purposes of Rule 6.15-5 the Ardmore Aerodrome Zone shall be deemed to be subject to the Bulk and Location Controls of the Industrial 1 Zone.
- Part 13, Rule 13.8.
- Part 15, Rule 15.8.

**4.12 Amend ARDMORE AERODROME ZONE Rule 6.14.8.2 Discretionary Activities by amending Clause 1 (General Provisions) to read as follows:**

*1. General Provisions*

*Application must be made for a resource consent for a discretionary activity where it is proposed to vary the standards for permitted activities contained in Rule 6.15-3, 6.15-4 and 6.15-5. An application for a discretionary consent may only be granted to vary those standards to the extent permitted in Table 6. 2 and will be assessed in terms of the criteria contained in Rule 6.15.2.*

**4.13 Delete ARDMORE AERODROME ZONE Rule 6.14.8.3 (Applications).**

**4.14 Insert in ARDMORE AERODROME ZONE a new Rule 6.14.9 as follows:**

**6.14.9. ARDMORE AERODROME ZONE SOUND EMISSIONS**

**6.14.9.1 Sound Emissions – Air Noise Boundary and Outer Control Boundary**

*The Aerodrome shall be managed to ensure that noise emissions from Aircraft Movement shall not exceed  $L_{dn}$  65 dBA outside the Air Noise Boundary and  $L_{dn}$  55 dBA outside the Outer Control Boundary as shown on Zoning-Maps R2 and R3 C5-C7, D4-D7, E4 and E5 when calculated as stated in NZS 6805:1992 Airport Noise Management and Land Use Planning as a 3 month rolling logarithmic average using the FAA Integrated Noise Model (INM) and records of actual aircraft operations.*

*The following operations are excluded from compliance with this rule:*

- (a) Aircraft landing in an emergency;
- (b) Emergency flight operations; and



- (c) One Airshow per calendar year as defined under Rule 6.14.9.7; and
- (d) Use of sealed runways 07/25 for maintenance purposes for seven days per calendar year.

#### Explanation

Council considers that it is important to ensure that the effects associated with aircraft operational noise are managed, as far as practicable, at the source of these emissions. As described at 6.14.2 above, the noise contours are based on a maximum of 275,000 movements per year inclusive of Ex Military Jet Aircraft movements. This rule places a requirement on aircraft operations associated with ~~Ardmore the~~ Aerodrome to comply with this limit specified at the Air Noise Boundary and Outer Control Boundary.

#### 6.14.9.2 Maximum Noise Level from any Aircraft

~~(a) — Except for aircraft listed in (a) and (b) below, the maximum permissible noise level from any aircraft operating from ~~Ardmore the~~ Aerodrome shall not exceed SEL ~~100-115~~ dBA between the hours of 8 pm and 7 am Monday to Saturday or at any time on Sundays or Public Holidays or SEL 125 dBA at all other times. The SEL shall be at the measurement point specified as: on runway centre line; 1700 metres forward of the commencement of the take-off roll.~~

(a) Aircraft based at the Aerodrome on 1 July 2004. The Hawker Hunter aircraft based at the Aerodrome on 1 July 2004 will be permitted up to a maximum of 58 movements per annum out of the limit of 180 movements per annum specified in Rule 6.14.9.4(b).

(b) Aircraft brought to the Aerodrome for maintenance/restoration that have the potential to exceed the maximum noise level specified in 6.14.9.2 are permitted to operate for the sole purpose of undertaking essential flight checks and departure from the Aerodrome. Any such operations will not exceed a total of 16 takeoffs per annum. These takeoffs and subsequent landings are included in the total number of 180 Ex-military jet movements per annum specified in paragraph 6.14.9.4(b).



~~(b) — To confirm compliance with this rule, the Council may request the Airport Authority shall to provide to the Council a certificate from a person with appropriate acoustic qualifications for:~~

~~(i) — Aircraft with noise outputs that have the potential to exceed the maximum permissible noise level, in advance of any such aircraft operating from Ardmore Aerodrome. Such certificate shall confirm that the aircraft comply with the requirements of Rule 6.14.9.2(a) above; and~~

~~(ii) — For any other aircraft, when requested in writing by Council. Such certificate shall be provided to Council within one month 6 weeks of the request and shall confirm that the aircraft complies with the requirements of Rule 6.14.9.2(a) above.~~

#### Explanation

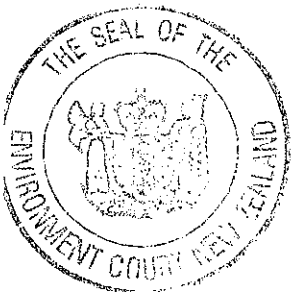
~~To control the single event noise exposure to the local community, Council considers that it is important to set a maximum permissible noise level for aircraft operating from Ardmore the Aerodrome. to address amenity considerations including the potential for awakenings from very noisy events and the differing public expectations on Sundays and Public Holidays. The maximum SEL noise level is based on noise measurements of existing aircraft at the Aerodrome. However, any new aircraft operated from Ardmore must comply with the maximum SEL noise level.~~

~~This provision allows Council to request requires a certificate confirming compliance with the maximum permissible noise level.~~

#### **6.14.9.3 Restricted Flight Hours**

~~The following restricted flight hours apply to specific aircraft operations from the Ardmore Aerodrome zone:~~

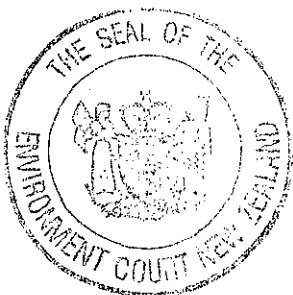
- ~~(a) Circuit training and scheduled flights are not permitted between the hours of 10.00pm (extended to 10.30pm in daylight savings) and 7.00am New Zealand Local Time (NZLT) Monday-Saturday and between the hours of 8.00pm Sunday night and 7.00am Monday morning, on Sundays and Public Holidays circuit training is not permitted between 8.00pm and 7.00am.~~



- (b) *Ex Military Jet Aircraft operations are not permitted between the hours of 8.00pm and 7.00am New Zealand Local Time (NZLT).*
- (c) *Jet aircraft that do not meet the International Civil Aviation Organisation noise standard contained in ICAO Annex 16, Volume 1, Chapter 3 or the equivalent 'Stage 3' United States Federation Aviation Administration noise limits contained in CFR 14 Part 36, are not permitted to operate between the hours of 10.00pm and 7.00am New Zealand Local Time (NZLT).*
- (ed) *Except as permitted by Rule 6.14.9.7 Aerobatic Flight over ~~Ardmore~~ the Aerodrome shall be limited to a maximum of 12 hours per annum and shall be conducted between the hours of 9.00am to 4.00pm Monday to Saturday and 9.00am to 12.00 noon on Sunday New Zealand Local Time (NZLT).*
- (de) *Hover training practice shall only take place between the hours of 8.00am and 7.00pm Monday to Friday and 9.00am and 1.00pm on Saturdays New Zealand Local Time (NZLT), provided that hover training may take place on Saturdays between 1.00pm and 5.00pm NZLT and on Sundays between 9.00am NZLT and 4.00pm NZLT where the activity takes place no closer than 150 metres from any external boundary of the Aerodrome. Notwithstanding the above, no hover training practice shall take place on Public Holidays.*
- (ef) *Variations to the restricted hours on night training under clause (a) of this rule may be approved under limited circumstances by the Ardmore Airport Noise Consultative Committee, but in any event, operations will not be permitted after 11.00pm New Zealand Local Time (NZLT).*

*Explanation*

*This rule has been included in order to minimise disturbance during noise sensitive hours. This rule together with Rules 6.14.9.1 and 6.14.9.2 and the Noise Management Plan will have the effect of minimising noise from aircraft during noise sensitive hours.*



#### 6.14.9.4 Ex-Military Jet Aircraft Movements

Except as permitted by Rule 6.14.9.7, Ex Military Jet Aircraft movements shall be restricted to:

- (a) 170 movements per calendar year averaged over a three year period; and
- (b) 180 movements in any one calendar year; and
- (c) 10 movements in any one seven day period; and
- (d) No simultaneous or parallel take-offs.

##### Explanation

The purpose of this rule is to safeguard against any potential for significant increases in annual and weekly Ex Military Jet Aircraft movements due to noise emission space becoming available within the Air Noise Boundary in the event of an unlikely significant reduction in General Aviation activity.

#### 6.14.9.5 General Sound Emissions

i) For a period of six (6) months from the date this rule becomes operative sound emissions from sources, other than Aircraft Movement, Aircraft Taxiing, Aircraft Engine Testing, and one Airshow per calendar year as defined under Rule 6.14.9.7, shall be restricted to the following limits set out in Table 1 measured at or within the notional boundary of any residential dwelling existing as at 19 September 2001 (and which is not under the ownership of the Airport Authority).

TABLE 1

Monday to Friday 0700-2200 Saturday 0700-1700	$L_{10}$ 55 dBA except that a level of $L_{10}$ 67 dBA will be permitted for a maximum period of 20 minutes in any one day
All other times	$L_{10}$ 45 dBA
Additionally, every day 2200-0700	$L_{max}$ 75 dBA

ii) From the date 6 months after this rule becomes operative, sound emissions from sources other than Aircraft Movement, Aircraft Taxiing, Aircraft Engine Testing, and one Airshow per calendar year as defined under Rule 6.14.9.7 shall be restricted to the following limits set out in Table 2 measured at or within the boundary of any residential zone or at or within the notional boundary of any residential dwelling existing as at 19 September 2001 (and which is not under the ownership of the Airport Authority).



TABLE 2

Monday to Friday 0700-2200 Saturday 0700-1700	$L_{10}$ 55 dBA
All other times	$L_{10}$ 45 dBA
Additionally, every day 2200-0700	$L_{max}$ 75 dBA

## Notes to Tables 1 and 2

1. Measurements shall be taken at or within the boundary of any residential zone or at or within the Notional Boundary of any residential dwelling.
2. Measurement and assessment of noise shall be in accordance with the standards prescribed in NZS 6801:1991 Measurement of Sound and NZS 6802:1991 Assessment of Environmental Sound.
3. The noise shall be measured using a sound level meter complying with the international standards IEC 651 (1979) Sound level meters Type 1 and IEC 804 (1985) Integrating-averaging sound level meters Type 1.

## Explanation

Given the level of activity within the Ardmore Aerodrome Zone associated, for example, with the servicing of aircraft, there is potential for adverse noise effects. The noise limits specified in Table  $\pm 2$  take effect 6 months after the provision becomes operative to provide a transitional period for those industries based at the Aerodrome to achieve compliance. The noise limits are based on the guidelines contained in New Zealand Standard 6802:1992 – Assessment of Environmental Noise. The provisions have been included to protect residents within close proximity to the Aerodrome from noise generated by activities other than those exceptions specified in the rule.

**6.14.9.6 Engine Testing**

- i) All aircraft engine testing undertaken within the Ardmore Aerodrome Zone shall be restricted to the following noise limits set out in Table 3 below measured at or within the boundary of any residential zone or at or within the notional boundary of any dwelling existing as at 19 September 2001 (and which is not under the ownership of the Airport Authority):

TABLE 3

7am-10pm (24 hour rolling average)	$L_{eq}$ 55 dBA
10pm-7am (24 hour rolling average)	$L_{eq}$ 45 dBA and $L_{max}$ 75 dBA



- ii) ~~From the date 6 months after this rule becomes operative, a~~ Aircraft engine testing is required to be undertaken within ~~an~~ the appropriate engine testing enclosure, where it is safe to do so.
- iii) Ten testing sessions per year undertaken between 9.00am and 4.00pm Monday to Friday are exempt from the requirements of Rules 6.14.9.6(i) and (ii) (a session being a series of engine test events carried out on the same day with a total duration of no more than 20 minutes).

#### Explanation

*This rule recognises that there is operational necessity for testing aircraft engines as a core function of the Aerodrome, while limiting the potential for adverse effects on the amenity of surrounding residences, particularly at night. The rule ~~provides a grace period of 6 months to allow the Airport Authority to construct and test an appropriate engine testing enclosure while also allowing~~ allows up to 10 tests per year during working hours for engines with particularly noisy characteristics.*

#### 6.14.9.7 Airshow

*Notwithstanding anything to the contrary in Rule 6.14.9.2, one Airshow within the MBZ shall be permitted within any calendar year based on the following limitations:*

- i) *The flying programme for the Airshow shall be limited to a period of not more than 3 days plus 2 specified days' practice, with alternate days if unable to practice because of poor weather conditions.*
- ii) *The hours permitted for the Airshow and practices shall be between the hours as specified in Table 4:*

TABLE 4

Monday to Thursday inclusive	0700-2000
Friday and Saturday	0700-2000 (except that one only of these days may extend to 2200)
Sunday	0700-1830



- iii) Practice for the Airshow shall be permitted only in the 2 weeks preceding the Airshow.
- iv) The noise and environmental aspects of the flying programme for the Airshow and Airshow practice ("the flying programme") shall be reviewed by Council, which may request changes necessary to avoid unreasonable noise exposure on the community.
- v) The flying programme shall be submitted to the Council no later than 90 days prior to the Airshow taking place. Both the Council and the Airport Authority are to consult with each other as to the noise issues and proposed changes to the flying programme. Comments are to be provided by Council within 10 working days of receipt of the proposed flying program.

#### Explanation

Annual Airshows at ~~Ardmore the~~ Aerodrome are an integral part of the aerodrome operations and provide social and economic benefit to the local and wider community. This rule provides for annual Airshows at Ardmore to continue with limitations on the show duration and practice times and requires the Airport Authority and Council to work together to achieve best practice noise management.

#### 6.14.9.8 Noise Management Plan

As from the date this rule becomes operative, the operation of ~~Ardmore the~~ Aerodrome shall be in accordance with the Ardmore Aerodrome Noise Management Plan, ~~other than that amendments to that Plan are required to be approved by a 55% majority of the Environmental Working Group detailed within the Noise Management Plan.~~ With the exception of those provisions contained in ~~Part Two Appendix A~~ of that Plan, the Ardmore Aerodrome Noise Management Plan shall be reviewed on a 12 monthly basis ~~by the Environmental Working Group, or more often as necessary to ensure Best Practicable Options in terms of noise management are achieved, in accordance with the document amendment procedures contained in Section 1.4 of that Plan. The Council shall be the body responsible for calling and administering meetings of the Environmental Working Group and shall call meetings on a three monthly basis or more often as necessary.~~

~~The NMP as a minimum shall contain details relating to:~~





~~□ Operations and Noise Abatement Procedures to achieve compliance with Designation/District Plan Rules;~~

~~□ Methods for dealing with Complaints and Non-Compliances; and~~

~~Establishment and operation of an engine testing computer programme providing ongoing information regarding compliance with the engine testing rule;~~

~~□ Incorporation of a table regarding engine testing to advise residents of sound levels and time periods that would achieve compliance with the engine testing rule;~~

~~□ Encouraging departing aeroplanes to remain within the flight planes until they reach an altitude of 500 feet;~~

~~□ Encouraging simulated engine failures within the flight planes only;~~

~~Encouraging helicopters to arrive and depart the Aerodrome at no less than 500 feet above the Aerodrome boundary, where this can be achieved safely.~~

~~The Noise Management Plan shall not be inconsistent with Rule 6.14.9 of the Papakura District Plan, including any subsequent amendments, provided that the Noise Management Plan may impose more stringent requirements on the operation of the Ardmore Aerodrome than those contained in Rule 6.14.9.~~

#### Explanation

Council recognises that there are many aspects of aerodrome operations which are best controlled through a noise management plan as opposed to specific rules due to potential conflict with other regulations and the need to allow aspects of aerodrome operations to be continually modified and improved in response to industry changes and to achieve best practice noise management. The Noise Management Plan sets out specific



~~document amendment procedures requiring Council and community input before any changes are made and puts in place a Complaints Committee to act on complaints arising from aerodrome operations. For the sake of clarity and to ensure that the Noise Management Plan can have effective value, it is recognised that the Noise Management Plan may impose more stringent standards on the operation of the Aerodrome than those required by Rule 6.14.9, provided that these are acceptable to the Environmental Working Group. The objectives of the Noise Management Plan are to:~~

- (a) Provide the basis for ongoing noise management and mitigation at the Aerodrome;
- (b) Establish the Ardmore Airport Noise Consultative Committee, as set out in the Noise Management Plan, which replaces the Environmental Working Group;
- (c) Define roles and responsibilities in relation to airport noise management;
- (d) Provide a repository of agreed noise abatement procedures;
- (e) Encourage the parties to work together co-operatively, sharing information and reaching decisions by consensus and agreement.

#### **6.14.9.9 Affected Dwellings**

The Airport Authority shall, if so required by the owners of the Affected Dwellings defined in (ii) below, pay for any remedial or supplementary works that are considered necessary to ensure that the internal acoustic environment of habitable space in those dwellings does not exceed a maximum of  $L_{dn}$  40 dBA with all external doors and windows closed as the result of aircraft movements represented in the Air Noise Boundary noise contour as shown on District Plan Maps R2C5, C6, D5 and D6. Where compliance with the design level relies on doors and windows being closed, alternative approved ventilation in accordance with the Building Code shall be provided. This rule is subject to the following:

- i) Notice of such requirement must be given in writing to the Registered Office of the Airport Authority within 3 months of the receipt by the owners of written notice from the Airport Authority advising the owners of the operative date of this rule and the rights conferred by this rule.



- ii) *The Affected Dwellings are deemed to be those existing habitable dwellings located both within the  $L_{dn}$  ~~63-65~~ dBA Air Noise Boundary contour and on Lots 1-3 and Lots 21-24 DP 173310, Lot 1 DP 179452, Pt Lot 3 DP 19289, Part Lot 1 DP 50029, Part allotment 30 Parish of Papakura as at 19 September 2001. In any case where any existing habitable dwelling is in the course of completion, extension or repair as at 19 September 2001, then the notice to the Airport Authority referred to above must be given within 3 months following the date on which the dwelling is certified as complete by the Council pursuant to the Building Act 1991, or the date of written notice from the Airport Authority advising the Owners of the operative date of this rule, whichever is the later.*
- iii) *For the purposes of this rule engineers with appropriate qualifications appointed by the Airport Authority and engineers with appropriate qualifications appointed by Council shall act as the certifiers for the purpose of determining the nature and extent of the remedial or supplementary works required pursuant to this rule and their determination shall bind the Airport Authority, the Council and the Owners respectively in relation to their various interests pursuant to this rule.*

*Subject to the foregoing, the obligations of the Airport Authority under this rule shall not extend to any subsequent structures, alterations or additions to any of the Affected Dwellings commenced after 19 September 2001.*

#### *Explanation*

*This rule has been included to allow those persons living within the  ~~$L_{dn}$  63 dBA~~ Air Noise Boundary contour to seek compensation from the Airport Authority to ensure that the internal acoustic environment of habitable space in those dwellings does not exceed a maximum of  $L_{dn}$  40 dBA with all external doors and windows closed.*

#### **6.14.9.10 Monitoring**

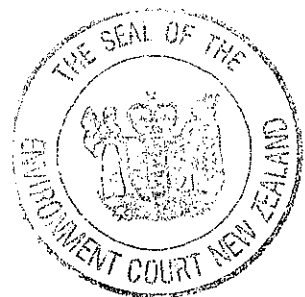
*The Airport Authority shall be responsible for monitoring and reporting of noise (without limiting Council's powers) associated with the Aerodrome and flight activity. Such monitoring shall include:*

- i) *Calculation of aircraft noise as stated in NZS 6805:1992 (s1.4.2.2) using the FAA Integrated Noise Model (INM) and records of actual aircraft operations and calculated as the*



~~busiest~~ a 3 month rolling logarithmic average, for any one year. The results of this calculation together with underlying inputs shall be reported to the Council on a three monthly basis annually. The INM Study is to be developed by a recognised user of the INM with strict adherence to the policies and procedures specified in the INM User's Guide. An executable version of the Study shall be provided to Council via CD-ROM or other suitable electronic means. The use of substitution or surrogate aircraft within the model will be notified in the reporting procedure and will be as agreed between the Airport Authority and Council experts. The INM model used to assess compliance is to be the version used to develop the District Plan contours. The contours may be updated with later versions of the INM in future reviews of the District Plan. When the calculated 3 month average reaches  $L_{dn}$  64.5 dBA, physical noise monitoring shall be carried out at reasonable intervals ~~on an on-going basis to confirm until such time as compliance with Rule 6.14.9.1 is demonstrated.~~

- ii) ~~Physical noise monitoring shall be undertaken for a period of no less than one month within one year of the date of this rule becoming operative. The results of this further monitoring shall be provided to the Council.~~ Physical noise monitoring shall be undertaken for a period of no less than one month every two years following the initial physical noise monitoring. The results and underlying inputs of this monitoring shall be provided to the Council within 6 weeks of the monitoring being undertaken.~~The results of this further monitoring shall be provided to Council within one month of the monitoring being undertaken.~~
- iii) ~~The recording of Ex Military jet aircraft movements on a monthly basis, with any such records kept to be provided to Council on a quarterly basis or in collated form within 48 hours if required upon request by Council.~~
- iv) ~~The administration and logging of all engine testing including exempt activity, with such records to be provided to Council on a quarterly basis or in collated form within 48 hours if required upon request by Council.~~
- v) Further such contingency monitoring as required by the Papakura District Council if the Council becomes aware of significant changes to Aerodrome operations.



Noise from the following Operation shall be excluded from the compliance calculations set out in i) to iii) above:

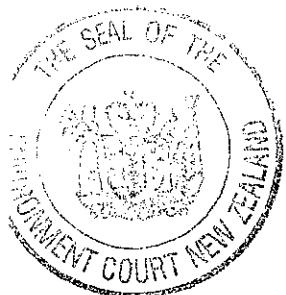
- a. Aircraft landing in an Emergency;
- b. Emergency Flight operations; and
- c. One airshow per year as defined under Rule 6.14.9.7.

**~~6.14.9.11 Non-complying Activities~~**

~~For the sake of clarity any activity that does not comply with the above rules in Rule 6.14.9 shall be a non-complying activity in accordance with the definition of Non-Complying Activity set out in Part 10 of Section One (General Papakura) of the District Plan.~~

**4.15 Amend Part 6 General Requirements for Industrial Zones**  
**Rule 6.15 by adding immediately after the heading "1. Noise", and before the first paragraph (a) of that subsection the following words:**

*Except in relation to the Ardmore Aerodrome Zone:*



**ANNEXURE B****AMENDMENTS TO THE EXISTING DESIGNATIONS CONFIRMED  
BY ARDMORE AIRPORT LIMITED****DESIGNATION 222 - ARDMORE AERODROME**

Designation Notation: Ardmore Aerodrome

Address: Ardmore Aerodrome, Papakura.

Legal Description : DP 190833 Lot 1  
DP 107840 Lots 1, 2  
DP 171923 Lots 22, 41  
DP 173738 Lots 200-209  
DP 173739 Lots 300-307 (Leasehold  
DP 205039 Lots 300,308-310)  
DP 173740 Lots 1-7, 11, 13  
DP 173741 Lots 10, 14-18 (Leasehold DP  
199587 Lots 16, 17 and 150)  
DP 173742 Lots 19-21, 25, 30-38)  
DP 173743 Lots 26-29, 39, 40, 42-65,  
67-70  
DP 178388 Lots 71-85 (Leasehold DP  
199586 Lots 15, 78 and 149)  
DP 179798 Lots 86-97, 113-129, 141-148  
DP 179799 Lots 98-112, 130-140  
DP 192624 Lots 8, 9  
DP 171742 Lot 1.

Requiring Authority : Ardmore Airport Limited

District Plan: Papakura District Council Operative District  
Plan 1999District Plan Reference: WP47, WP49, WP50, R10, U17Ardmore  
Airport Height Surfaces

## ARDMORE AERODROME. SPECIFICATION FOR APPROACH AND, LAND USE AND NOISE CONTROLS

### 1 INTRODUCTION

The purpose of this specification is to define the approach and land use controls over part of Papakura District in the vicinity of the Ardmore Aerodrome and the controls utilised to manage the adverse effects of noise generated from the Aerodrome.

This specification is designed to ensure the continued safety and efficiency of aircraft operations at the Ardmore Aerodrome while managing the Aerodrome to appropriately manage the effects of noise generated from the Aerodrome.

### 2 LOCATION OF RUNWAY CENTRELINES

At the outer ends of the approach surfaces, the extended centrelines for the two sealed runways pass through the following co-ordinates:

Runway 03/21	Northeast End (A)	685621.18N 321336.68E
	Southwest End (C)	<del>680400</del> 680459.82-42N 315994.05316054.82E
Runway 07/25	East End (B)	683324.14N 322308.29E
	West End (D)	683321.53N 314846.00E

The above c-ordinates are in terms of the Mt Eden Meridional Circuit Grid, Geodetic 1949. (Scale Factor 0.9999)

The co-ordinates for Runways 03/21 and 07/25 are based on surveyed fixes of the threshold centreline markings extended for 3000 metres outward from the two bases.

The centreline for the grass runway 03/21 is parallel to and 150 metres from the centreline of the sealed runway 03/21.



### 3 LOCATION OF BASES

For Ardmore Aerodrome the bases for the approach surfaces for the sealed runways are each 90 metres long, i.e. extending for 45 metres at each side of the runway centreline. The bases are perpendicular to the runway centrelines, are horizontal, and the elevation of each base is the ~~highest ground level along the~~ highest ground level along the runway centreline between the runway end and the end of the strip at the base location.

The centres of the bases are located at the following co-ordinates:

Runway 03/21	Northeast End (R)	683 524.68N
		319 191.24N
	Southwest End (S)	<u>682 496.682</u>
		<u>318 139.318</u>
		<u>200.48E</u>
Runway 07/25	East End (P)	683 323.10N
		319 308.59E
	West End (Q)	683 322.58N
		317 845.70E

The above co-ordinates are in terms of the Mount Eden Meridional Circuit Grid Geodetic 1949. (Scale Factor 0.9999)

Bases P, Q and R coincide with the physical ends of the sealed runways. Base S is inset 60-25 metres beyond from the southwest end of the runway.

The level for Base S is R.L. 32.12-32 and for Base R is R.L. 32.87 ~~both levels corresponding to the level on the sealed surfaces at the ends of sealed runway 03/21.~~

The level for base Q is R.L. 29.79 and for Base P is R.L. 33.71 ~~both levels corresponding to the level on the sealed surfaces at the ends of sealed runway 07/05.~~

The bases for the grass runway 03/21 lie 30 metres beyond the ends of the runway and are 80 metres long extending for 40 metres at each side of the runway centreline.





#### 4 **APPROACH SURFACES**

The approach surfaces defined in this specification include take-off/climb requirements. Each approach surface rises from a base.

Approach surfaces for the sealed runways rise from P, Q, R and S respectively at a gradient of 2.5 percent (1 in 40) and continue upwards and outwards for a horizontal distance of 4000 metres from the strip edge. The length of the approach surface is 3000 metres. Each approach surface is symmetrically disposed about the extended centreline and its sides diverge uniformly outwards at a rate of 10 percent.

Approach surfaces for the grass runway rise from bases defined for the runway at a gradient of 2.5 percent (1 in 40) for a horizontal distance of 2600 metres. These approach surfaces are symmetrically disposed about the extended centreline of the runway strip and their sides each diverge uniformly outwards at a rate of 10 percent.

#### 5 **SIDE CLEARANCES (TRANSITIONAL SLOPES)**

Side clearances rise upwards and outwards from the sides of the approach surfaces for the sealed runways at a gradient of 1 in 7 to intercept the horizontal surface at 80 metres AMSL.

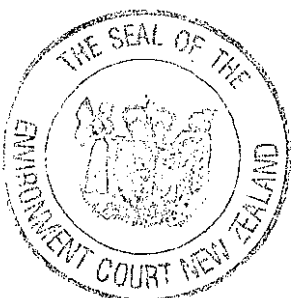
For the grass runway, side clearances rise upwards and outwards from the sides of the approach surfaces at a gradient of 1 in 5 to intercept the horizontal surface at 80 metres AMSL.

#### 6 **HORIZONTAL SURFACE**

The horizontal surface overlays the aerodrome and extends from above the aerodrome for a radius of 4000 metres from bases P and Q. This flat horizontal surface is at 80 metres AMSL. The aerodrome level is 35 metres AMSL. This corresponds to a level 1.5 metres above reference mark "J" on S.O. 49594.

#### 7 **CONICAL SURFACE**

The sloping conical surface rises upwards and outwards from the periphery of the horizontal surface at a gradient of 5 percent (1 in 20) for a further 2100 metres until it reaches a height of 185 metres AMSL.



8 **HEIGHT RESTRICTION**

No building, structure, mast, pole, tree or other object shall penetrate any of the approach surfaces, transitional surfaces, horizontal surface or conical surface as defined in this specification.

Provided that where there is any conflict between these height control limits and the Auckland International Airport height controls, the lower height restriction shall apply.

If developments and land uses within the area below the horizontal surface or conical surface are proposed to penetrate either of these two surfaces, and will also be higher than 9 metres above the terrain, then under Section 176 of the Resource Management Act 1991, the proposal shall be referred for consent to the Airport Authority.

9 **LAND USE RESTRICTION: RURAL AERODROME PROTECTION AREAS (FIXED WING AIRCRAFT OPERATION)**

The Rural Aerodrome Protection Areas are located under each of the flight paths. The areas are shown stippled on plan WP49.

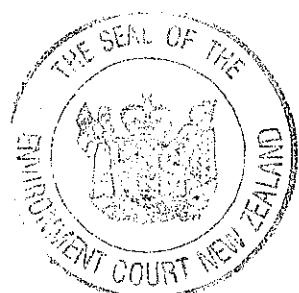
The Rural Aerodrome Protection Area extends from the runway bases P, Q, R and S for a distance of 900 metres.

The land use restriction is essential as aircraft pass over the Rural Aerodrome Protection Areas on landing and take off at low altitudes. These areas are subject to a relatively greater risk of aircraft accident than elsewhere.

Land uses within the Rural Aerodrome Protection Areas which may detrimentally affect the safe operation of aircraft should be avoided.

Within the Rural Aerodrome Protection Areas, any new proposals for buildings or solid structures exceeding 4 metres in height above the ground level shall be referred for consent to the Airport Authority. This specific height restriction overrides the general height restriction in (8) above.

In assessing buildings and structures the Airport Authority will consider the need for the proposal, siting, height and construction materials.



In considering other land uses, the Airport Authority will take into account possible height intrusion, the likelihood of dust, glare, electrical interference and the possibility of the proposal attracting birds to the area or promoting the gathering of people in the area.

In all other respects, the complementary provisions of the District Plan for the area shall apply but subject to the restrictions contained in this specification.

10 **ARDMORE AERODROME SOUND EMISSIONS**

The Aerodrome shall be operated in compliance with Rule 6.14.9 *Ardmore Aerodrome Zone Sound Emissions* of the Papakura District Plan (Urban Section), including any subsequent amendments.

11 **BEST PRACTICABLE OPTION**

In administering the conditions of this designation, the 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 Aerodrome activities.

12 **NOISE MANAGEMENT PLAN**

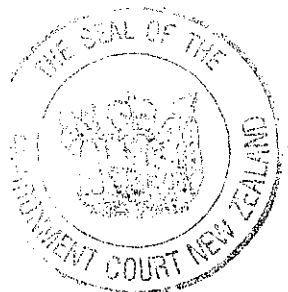
The operation of Ardmore Aerodrome shall be in accordance with the Ardmore Airport Ltd Noise Management Plan, ~~including amendments to that Plan approved by a 60% majority of the Environmental Working Group detailed within the Noise Management Plan.~~ With the exception of those provisions contained in ~~Part Two Appendix A~~ of that ~~Plan~~, the Ardmore Airport Ltd Noise Management Plan shall be reviewed on a 12 monthly basis, or as necessary to ensure Best Practicable Options in terms of noise management are achieved, in accordance with the document amendment procedures contained in ~~Section 1.4~~ that Plan.

13 **MONITORING**

The Airport Authority shall be responsible for the monitoring of noise associated with the Aerodrome and flight activity. Such monitoring shall include all matters detailed in Rule 6.14.9.10 of the Papakura District Plan (Urban Section), including any subsequent amendments.

Advice Notes:

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4/11/2004 12:54



- 1 This amended Designation is to replace the existing Designation presently contained within the Operative Papakura District Plan.
- 2 Planning Maps WP47 (the Designated Area), WP49 (Ardmore Airport Protection Areas), WP50, R10, U17 and Ardmore Airport Height Surfaces are to be amended to reflect the alterations to the Approach Surfaces detailed above and as shown on Harrison Grierson Plan 23-6171 Rev A-B attached.

