

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

of three references pursuant to Clause 14 of the First Schedule of the Act

BETWEEN

WELLINGTON INTERNATIONAL AIRPORT LIMITED

(RMA 66/96)

AND

BOARD OF AIRLINE REPRESENTATIVES OF NEW ZEALAND INC

(RMA 67/96)

AND

RESIDENTS AIRPORT NOISE ACTION GROUP INC

(RMA 83/96)

Appellants

AND

WELLINGTON CITY COUNCIL

Respondent

BEFORE THE ENVIRONMENT COURT

Her Honour Judge Kenderdine presiding  
Commissioner R G Bishop  
Commissioner F Easdale  
Commissioner J D Rowan

HEARING at WELLINGTON on the 4th, 5th, 6th, 7th, 18th, 19th, 20th and 21st days of August 1997

COUNSEL

Mr B Bornholdt, Mr I Gordon and Mr C J Bodle for Wellington International Airport Ltd (WIAL)  
Mr D A Nolan and Mr M J Williams for Board of Airline Representatives of New Zealand Inc (BARNZ)  
Mr K Robinson and Mrs M Harris for Residents Airport Noise Action Group Inc (RANAG)  
Mr Hyder and Ms K Edmonds for New Zealand Post Properties Ltd, appearing pursuant to s.274 of the Act  
Mr C Mitchell, Mrs S Dossor and Mr J Wooley for the Wellington City Council  
Mr B Arthur and Mr N Lucie-Smith for Minister of Defence, appearing pursuant to s274 of the Act



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## RECORD OF DETERMINATION OF APPEALS AND DECISION

### Background

This decision involves references under clause 14 of the First Schedule to the Resource Management Act 1991 ("the Act") challenging some of the provisions of the Proposed Wellington City District Plan relating to Wellington International Airport.

A hearing of submissions and further submissions on the provisions of the proposed plan took place in 1995 before two independent commissioners. Their decision was adopted by the Wellington City Council ("the council"). References were lodged by the Board of Airline Representatives of New Zealand Incorporated ("BARNZ") representing all of the airlines operating at Wellington Airport, by the Residents Airport Noise Action Group Incorporated ("RANAG") which represents a number of local residents living in the vicinity of the airport and several community groups, and by Wellington International Airport Limited ("WIAL"), the owner and operator of Wellington International Airport. New Zealand Post Properties Limited and the Minister of Defence joined the proceedings as parties pursuant to s.274 of the Act.

These references required the Environment Court to consider for the first time the district plan rules governing the current and future use of an airport in New Zealand since the introduction of both the Act and the New Zealand Standard NZS 6805:1992 "Airport Noise Management and Land Use Planning" ("NZS 6805").

### The References

Each party's reference (appeal) is summarised as follows:-

#### WIAL

The WIAL appeal raised two issues, both of which arise from the proposed rule 11.1.1.1.7 dealing with engine testing.

1. WIAL sought replacement of the nine hour averaging rule with a more practicable and enforceable control.
2. WIAL also sought removal of an inconsistency between the text of the rule and the map to be used.

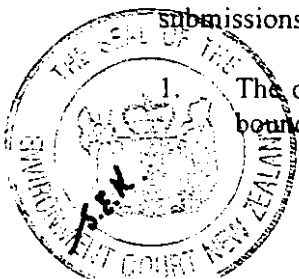
By the time of the hearing, the first of these issues was resolved. A proposed replacement rule was to be put before the Court, however RANAG had not indicated their position on this.

With respect to the second issue, we were told that WIAL and the council had agreed that the inconsistency should be removed and a proposed amendment was to be submitted.

#### BARNZ

The BARNZ appeal was combined with Air New Zealand Limited, although separate evidence was prepared and some separate submissions were made. Where Air New Zealand presented separate submissions this has been noted. The BARNZ appeal involved three issues.

1. The original BARNZ appeal sought to make new residential development within the airnoise boundary a prohibited activity. BARNZ at the time of hearing proposed that any new



residential development be made non-complying. Meanwhile the council regarded new residential development within the airnoise boundary as a permitted activity, subject to compliance with a noise insulation standard.

2. BARNZ also appealed the precise positioning of the airnoise boundary. In submissions before the Court, BARNZ sought to move the airnoise boundary in two areas. It sought to extend it to the east of the airport to include houses on Kekerenga Street. It also sought to retract the airnoise boundary on the western side of the airport around Salek Street.
3. The third issue related to proposed rule 11.1.1.1.9 which exempts ground power units (GPUs) and auxiliary power units (APUs) from compliance with the noise standards for land based activities until 31 December 1998. From that date APUs would still be exempted when aircraft are under tow and for the first 30 minutes after engine shut down. BARNZ now sought to extend that exemption to a period of 60 minutes before and 90 minutes after flight.

### RANAG

The RANAG appeal encompassed issues ranging over a number of topics.

RANAG requested that the proposed prohibition on Boeing 737-200 hush-kitted jets after December 1997 be reinstated. This rule had been deleted by the council in relation to the proposed plan provisions.

RANAG also raised the issue of the positioning of the airnoise boundary in order to reduce the noise experienced by residents in the area.

The proposed rule 11.1.1.1.6(d) to (g) sets out a number of exceptions to the 90 day rolling average noise bucket. Of these exceptions the most contentious is military aircraft movements to which RANAG objected.

RANAG opposed the number of exceptions to the night curfew, with particular emphasis on military aircraft, and night flying exemption aircraft.

RANAG took issue with proposed rule 11.1.1.1.3 which is the ban on non-noise certified or chapter 2 aircraft.

RANAG requested engine testing, under proposed rule 11.1.1.1.7, only be carried out within an acoustically insulated hangar.

RANAG sought increased controls on APUs and GPUs and the removal of the exception in proposed rule 11.1.1.1.9.

RANAG merely listed rule 5.1.3.9 which requires new residential developments within the airnoise boundary to meet specified noise insulation standards. It then made a generalised submission under relief sought seeking to ensure that the plan provisions are coherent and integrated. It considered the provision as stated was unreasonable and incapable of clear definition as no agreed standard of insulation exists.

Finally, proposed policy 10.2.2.6 relates to a noise management plan which will be developed to assist all interested parties in complying with the objectives and rules". This plan is to be prepared by a representative Wellington Airnoise Management Committee. RANAG's appeal opposed any suggestion that the council could abdicate its regulatory and enforcement responsibilities in favour of such a committee.



### Preliminary

This record and decision is divided into two parts. Part I records the process by which the consent orders were arrived at and the consent orders themselves. It also identifies some of the issues that were identified in accompanying memoranda to the consent orders.

Part II contains the one remaining issue before the Court after the consent orders were filed - namely the appeals by BARNZ and WIAL to the effect that any new residential development within the airnoise boundary should be given a non-complying status in the Suburban Centre area provisions of the proposed plan within the airnoise boundary. It was their case that this status would clearly demonstrate to the public that the council does not encourage or envisage housing stock increasing in this limited area. This is to be contrasted with the council's change in approach to the issue requiring such development to be given a discretionary activity (unrestricted) status. Currently new residential development of less than 3 units at ground level is a permitted activity subject to design guide provisions, and multi-unit development is a discretionary activity (restricted).

## PART I

### RECORD OF DETERMINATION OF APPEALS

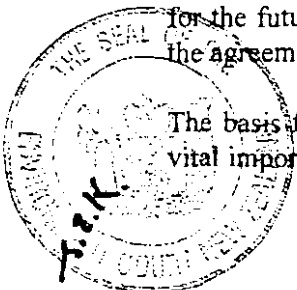
#### General Statement

The hearing commenced on Monday 4 August 1997 when the case for the council proceeded. The evidence of all the parties was called in by the Registrar and read by the Court over the intervening period so that we were fully informed. It soon became apparent from reading and hearing some of the evidence of the council as well as the evidence of one of the RANAG witnesses that there was the need for parties to be given an opportunity for further negotiation and discussion. With the consent of all involved, the further hearing of the references was adjourned on Thursday 7 August 1997 to allow for that process to occur. The Court was kept informed of progress and on Tuesday 19 August 1997 the Court was presented with a memorandum from all counsel inviting the Court to make consent orders in the form of a draft attached to the memorandum. Further memoranda were tabled by counsel for RANAG and counsel for WIAL and BARNZ in response. At that stage RANAG withdrew from proceedings.

The Court, in a previous Minute to the parties dated 21 May 1997 had invited the parties and RANAG in particular to apply for mediation of the issue should they feel so inclined at any time before the hearing. This did not occur at that time but it is to the parties' considerable credit that this approach was eventually taken. It was desirable in that it represented considerable savings in both hearing time (estimated at 3 - 4 weeks) and costs to the parties, as well as a refinement to the issues which finally came before the Court. The parties, in their extensive negotiation/mediation meetings, resolved the majority of the issues before them.

Because of the importance of these issues the Court was also requested, at the time of filing the draft consent orders, by counsel for all the parties to record the background to the way in which the matters before those parties had been resolved. This was to ensure that this background is placed on record for the future. We have added a commentary which follows the consent orders and further explains the agreements which have been reached and the basis on which the parties sought orders by consent.

The basis for the agreement was an acceptance among all the parties that the airport is not only of vital importance to the city, but is also of significant regional and national economic importance. All



the parties accept that this local, regional and national significance requires that adequate provision be made for the growth, safe operation, and continued commercial viability of the airport.

The parties further accept the importance of provisions which maintain and enhance the amenities and viability of the residential communities which surround the airport. Finally, in this regard, the parties agree that the relationship between the airport and the residential communities needs to be based on certainty of future expectations and an efficient and equitable system for discussing and resolving issues and concerns as they arise.

The parties accept that the establishment of future certainty is an important function of the district plan provisions. The establishment of the framework within which outstanding issues and concerns can be resolved is at least equally important, but falls outside of the scope of the district plan. Section 10 of the proposed district plan envisages the establishment of a Wellington Airnoise Management Committee. This committee is to include representatives of WIAL, BARNZ, RANAG, the New Zealand Defence Force ("NZDF") and the council. The parties have agreed that a number of issues before the Court in these proceedings ought to be considered by the committee such as possible future refinements to the location of the airnoise boundary. If the location of the airnoise boundary did change Map 39 would need to be amended accordingly.

The NZDF will maintain a "good neighbour policy" in relation to its operations at Wellington International Airport. It will use its best endeavours to replace the existing Boeing 727-22C with an aircraft which meets rule 11.1.1.1.3 by being neither a non-noise certified jet aircraft nor a chapter 2 jet aircraft. The NZDF will bring the concerns of the residents about this noise issue to the attention of Foreign Defence Forces and to the attention of government agencies when appropriate.

The NZDF will aim to obtain replacement aircraft within five years, but cannot guarantee that this is possible. The obtaining of replacement aircraft is dependent on both finance from government and suitable aircraft being available.

As a result of the draft consent orders filed, in residential areas with the airnoise boundary all new dwellings are to achieve noise attenuation and new multi-unit residential activity is now proposed as a discretionary activity (unrestricted). This will effectively change multi-unit development from its current discretionary activity (restricted) status allowing proposals of this category to be scrutinised at the planning stage by any concerned party.

With the above in mind, it is important to record that there are basically five types of control comprising the package of airnoise provisions. Basically, these controls consist of an airnoise boundary, a ban on non-noise certified and chapter 2 jet aircraft, a curfew, ground noise controls, and land use controls. In relation to these matters, the parties have agreed in general as follows:

- Airnoise Boundary:
  - Located as proposed by WIAL, BARNZ and the Wellington City Council, see Map 39 included in this decision.
  - There is to be a separate arrangement for New Zealand Defence Force aircraft
- Chapter 2 ban:
  - Deletion of provision for calibration flights
- Curfew:
  - New Zealand Defence Force military aircraft will comply
  - Noise levels for night flights reduced
- Ground noise controls:
  - Engine testing noise to be assessed and monitored as proposed by WIAL, BARNZ and the council which includes further controls on night testing
  - APU control as proposed by BARNZ

S.E.K.

- Land use controls:
  - In Residential areas - all residential activity is permitted, except that three or more residential units on a site is to be a Discretionary (Unrestricted) activity.

Parts 4 and 5 of the proposed district plan are to be amended as shown in the consent orders.

Rule 5.1.3.10 is to be amended to encompass a new heading with the agreement of the relevant parties on 17.11.97.

Parts 10 and 11A of the proposed district plan are to be amended as shown in the consent orders.

Map 39 is to be amended as shown in the consent orders.

### THE CONSENT ORDERS

**UPON READING** the notices of reference and the replies of the respondent **AND UPON READING** the briefs of evidence filed with the Court **AND UPON HEARING** counsels' submissions and some of the evidence-in-chief **AND UPON READING** the memoranda of counsel and the draft consent orders filed herein **THIS COURT HEREBY ORDERS BY CONSENT** that the Proposed Wellington District Plan be amended in accordance with the provisions set out below:

#### **AMENDMENTS TO PROPOSED WELLINGTON CITY DISTRICT PLAN**

##### **1. Section 10, 10.2.2.6 Methods**

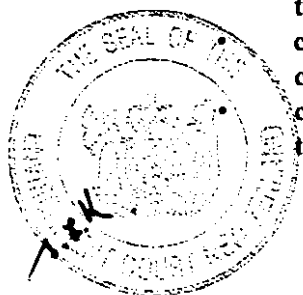
###### **Noise Management Plan**

Delete the final three paragraphs of text (commencing "A noise management plan (NMP) will be ...") and substitute:

**A noise management plan (NMP) will immediately be implemented by WIAL to assist all interested parties in complying with the objectives and rules in the District Plan.**

**The noise management plan will include**

- a statement of noise management objectives and policies
- details of methods and processes for remedying and mitigating adverse effects of airport noise including but not limited to
  - improvements to Airport layout to reduce ground noise
  - improvements to Airport equipment (including provision of engine test shielding such as an acoustic enclosure for propeller driven aircraft) to reduce ground noise
  - aircraft operating procedures in the air and on the ground
- procedures for monitoring and ongoing review of the plan
- dispute resolution procedures
- a programme for immediate and ongoing refinement by way of shrinkage of the location of the ANB, with priority to be given to those areas which through further monitoring are found not to be exposed to forecast  $L_{dn}$  65 dBA, with the intent that the programme be completed within two years
- consideration of land use measures which may mitigate adverse effects through changes to controls
- consideration of any need for insulation of existing houses within the ANB; the extent to which such insulation is appropriate, and the ultimate responsibility for cost





- details of methods and processes for monitoring and reporting compliance with the District Plan rules, including but not limited to
  - airnoise boundary and activity ceilings provided in the rules
  - engine testing
  - APUs/GPUs
  - curfew
- details for certification by WIAL of night curfew exempt aircraft.

A representative Wellington Airnoise Management Committee will as soon as practicable be established. The Committee will draw up terms of reference and a planning timeframe. Until this Committee is established, its functions will be exercised by the existing Standing Committee with the addition of a representative of the New Zealand Defence Force.

Notification of the Committee's terms of reference and planning timeframe is to be provided to the Council. The Council will use its best endeavours to support the Committee and may undertake independent audits of the parties' progress towards implementation of identified methods and processes. The Council will also ensure that it maintains direct access to any relevant data necessary for the effective operation or enforcement of these rules.

2. Rule 11.1.1.1.2

Delete rule 11.1.1.1.2 and substitute the following:

11.1.1.1.2 The following aircraft operations are excluded from the calculation of the rolling 90 day average in rule 11.1.1.1.1:

- Aircraft landing in emergency
- The operation of emergency flights required to rescue persons from life-threatening situations or to transport patients, human vital organs or medical personnel in a medical emergency
- The operation of unscheduled flights required to meet the needs of a national civil defence emergency declared under the Civil Defence Act 1983
- Military aircraft movements which shall be managed in compliance with rule 11.1.1.1.2A.

3. Rule 11.1.1.1.2A

Add after rule 11.1.1.1.2 the following new rule 11.1.1.1.2A:

11.1.1.1.2A The following conditions shall apply to New Zealand Defence Force military aircraft:

- (a) New Zealand military transport aircraft operations shall be managed so that the following 90 day average 24 hour night-weighted sound exposure does not exceed a Day/Night Level (Ldn) of 55 dBA outside the Airnoise Boundary shown on District Plan Map 39.

Aircraft noise will be measured in accordance with NZS 6805:1992 and calculated as a 90 day rolling average.

*All terminology shall have the meaning that may be used or defined in the context of NZS:6805. The level of noise from aircraft operations, for comparison with  $L_{dn}$  55 dBA, is calculated from the total amount of noise energy produced by each aircraft event (landing or take-off) over a period of 90 days. This method of control does not directly control individual aircraft events, but does so indirectly by taking into account their contribution to the amount of noise generated in a 24 hour period.*

(b) *Movements of New Zealand military combat aircraft shall be limited to 80 per year.*

(c) *For the purpose of this rule:*

- **Military transport aircraft means any fixed wing transport or logistics aircraft including Andover, Boeing 727, Hercules, Orion and Airtrainer (and their replacements).**
- **Military combat aircraft means any fixed wing strike or training aircraft including Macchi and Skyhawk (and their replacements).**
- **Movements of New Zealand military combat aircraft equate to:**

**landing = 1 movement**  
**takeoff = 1 movement**  
**touch-and-go = 2 movements**  
**low level pass = 2 movements**

**4. Rule 11.1.1.1.3**

Amend rule 11.1.1.1.3 by deleting the final two bullet points and substituting the following:

- **military aircraft which shall be subject to rule 11.1.1.1.2A.**

**5. Rule 11.1.1.1.6**

Delete rule 11.1.1.1.6 and substitute the following:

**11.1.1.1.6 The following are exceptions to rule 11.1.1.1.5:**

- (a) **disrupted flights where operations are permitted for an additional 30 minutes;**
- (b) **in statutory holiday periods when operations are permitted for an additional 60 minutes;**
- (c) **aircraft using the Airport as a planned alternative to landing at a scheduled airport, but which shall not take off until otherwise permitted under rule 11.1.1.1.5;**
- (d) **aircraft landing in an emergency.**

- (e) **the operation of emergency flights required to rescue persons from life-threatening situations or to transport patients, human vital organs or medical personnel in a medical emergency.**



- (f) the operation of unscheduled flights required to meet the needs of a national or civil defence emergency declared under the Civil Defence Act 1983.
- (g) Foreign military aircraft carrying heads of state and/or senior foreign dignitaries.
- (h) No more than 4 aircraft movements per night with noise levels not exceeding 65 dBA L max (1 sec) at or beyond the airnoise boundary.

For the purpose of (b), statutory holiday period means:

- (i) The period from 25 December to 2 January, inclusive. Where 25 December falls on either a Sunday or a Monday, the period includes the entire or previous weekend. Where New Year's day falls on a weekend, the period includes the two subsequent working days. Where 2 January falls on a Friday, the period includes the following weekend.
- (ii) The Saturday, Sunday and Monday of Wellington Anniversary weekend, Queens Birthday weekend and Labour weekend.
- (iii) Good Friday to Easter Monday inclusive.
- (iv) Waitangi Day.
- (v) Anzac Day.
- (vi) Where Waitangi Day or Anzac Day falls on a Friday or a Monday, the adjacent weekend is included in the statutory holiday period.
- (vii) The hours from midnight to 6.00 am immediately following the expiry of each statutory holiday period defined in (i) to (vi) above.

*The purpose of (h) is to allow certain quiet aircraft to operate at Wellington Airport during the curfew. The 65 L max (1 sec) dBA noise limit has been based on noise levels from aircraft that have been found to be acceptable for operating at night at Wellington. The level does not purport to be the upper limit necessary to avoid sleep disturbance.*

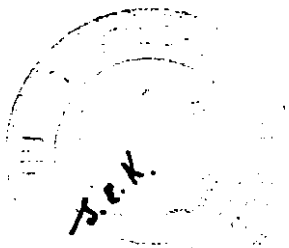
6. **Rule 11.1.1.1.7 Engine testing**

*Delete rule 11.1.1.1.7 and substitute the following:*

**11.1.1.1.7 Engine testing**

(a) *Aircraft propulsion engines may be run for the purpose of engine testing:*

- during the hours of 0600 to 2000
- to carry out essential unscheduled maintenance between 2000 hrs to 2300 hrs
- to operate an aircraft within flying hours but provided the engine run is no longer than required for normal procedures, which for the purpose of this rule shall provide solely for short duration engine runs by way of flight preparation while the aircraft is positioned on the apron.



- (b) No person shall start or run any aircraft propulsion engine for the purposes of engine testing on the hardstand area south and west of the Air New Zealand hangar at any time. This area is depicted by the shaded portion of Map 39.
- (c) Restrictions on engine testing room 2300 hrs to 0600 hrs do not apply if engine testing can be carried out in compliance with all of the following:
- (i) Measured noise levels do not exceed Leq (15 mins) 60 dBA at or within the boundary of any residentially zoned site.
  - (ii) Measured noise levels do not exceed Lmax 75 dBA at or within the boundary of any residentially zoned site.
  - (iii) Noise levels shall be measured in accordance with NZS 6801:1991 "Measurement of Environmental Sound".
  - (iv) The total number of engine tests events to which rule 11.1.1.1.7(c) applies shall not exceed 18 in any consecutive 12 month period.
  - (v) The total duration of engine test events to which rule 11.1.1.1.7(c) applies shall be no more than 20 minutes.

7. Rule 11.1.1.1.9 Ground Power Units and Auxiliary Power Units (GPUs/APUs)

Delete rule 11.1.1.1.9 and substitute the following:

11.1.1.1.9 Ground power and auxiliary power units (GPUs/APUs)

- (a) GPUs are exempt from controls otherwise imposed by rule 11.1.1.8 until 31 December 1998. After 31 December 1998 GPUs must comply with the noise limits in rule 11.1.1.1.8.
- (b) With the exemption of:
- aircraft under tow
  - the first 90 minutes after the aircraft has stopped on the gate
  - 60 minutes prior to scheduled departure
  - the use of APUs to provide for engine testing pursuant to rule 11.1.1.1.7.

APUs must comply with the noise limits in rule 11.1.1.1.8.

8. Planning Map 39

Delete Map 39 and substitute the new Map 39 attached to the end of these consent orders.

9. Clause 4.2 - Residential Objectives and Policies

Amend clause 4.2.1.1 by adding before the final paragraph of the explanatory text the following:

*However within the Outer Residential area adjoining Wellington International Airport there is a need to recognise the potential effects of airport noise on new residential development and conversely, the potential constraints which new residential*



*development might seek to impose on the efficient use and development of the airport. The rules relating to residential development near the airport (being the land inside the airnoise boundary depicted on Map 39) reflect these issues. Reference will also be made to the objectives and policies in section 10 of this plan when considering resource consent applications for residential development within that area.*

**10. Rule 5.1.3.10 - Residential Buildings within the Airport Airnoise Boundary.**

Delete the first paragraph of rule 5.1.3.10 and substitute the following:

Any new residential dwelling inside the airnoise boundary depicted on Map 39 must be designed and constructed so as to achieve an internal level of 45 dBA  $L_{dn}$  inside any habitable room with the doors and windows closed.

**11. Rule 5.3.4: Three or more household units**

Delete rule 5.3.4 and substitute the following:

The construction of residential buildings, including accessory buildings, where the result will be three or more household units on any site is a Discretionary Activity (Restricted), except in a Hazard Zone (Faultline) or inside the airnoise boundary depicted on Map 39 in respect of:

**12. Rule 5.4.6: Three or more household units inside the airnoise boundary.**

Add the following new rule 5.4.6:

The construction of residential buildings, including accessory buildings, where the result will be three or more household units on any site inside the airnoise boundary depicted on Map 39, is a Discretionary Activity (Unrestricted).

**Assessment Criteria**

In determining whether to grant consent and what conditions, if any, to impose, Council will be guided by the following criteria:

- 5.4.6.1 Compliance with relevant conditions in rules 5.1.1, 5.1.3 and the assessment criteria for multi-unit development in rule 5.3.4.
- 5.4.6.2 Whether the proposed development is proposed to be designed and constructed so as to achieve an internal level of 45 dBA  $L_{dn}$  inside any habitable room with the doors and windows closed.
- 5.4.6.3 The location of the site in relation to the airport and the airnoise boundary, and the likely exposure to airport noise.
- 5.4.6.4 Whether the location of the site and likely exposure to airport noise will lead to an unreasonable level of amenity to future occupiers.
- 5.4.6.5 Whether in the circumstances the development is likely to lead to potential conflict with the adverse effects on airport activities.



*Multi unit residential development within the airnoise boundary may be acceptable in some circumstances. In order to adequately assess the effects on prospective owners and occupiers and any adverse effects of airport noise, and to consider potential further constraints or other adverse effects on activities at the airport, each proposal will be considered against these assessment criteria. Applications for resource consents will in general be notified.*

*The certification of an approved acoustical engineer will be accepted as evidence that designs meets the insulation standard in 5.4.6.2. A list of approved acoustical engineers shall be agreed between the Council and the Airnoise Management Committee and shall be made available on request by the Council.*

### Conclusion

Appeal RMA 66/96 by WIAL is allowed to the extent that the decisions sought are included in the orders listed above, and is otherwise dismissed apart from the Suburban Centre appeal to be separately determined in Part II of this decision.

Appeal RMA 67/96 by BARNZ is allowed to the extent that the decisions sought are included in the orders listed above, and is otherwise dismissed apart from the Suburban Centre appeal to be separately determined in Part II of this decision.

Appeal RMA 83/96 by RANAG is allowed to the extent that the decisions sought are included in the orders listed above, and is otherwise dismissed.

There is no order as to costs

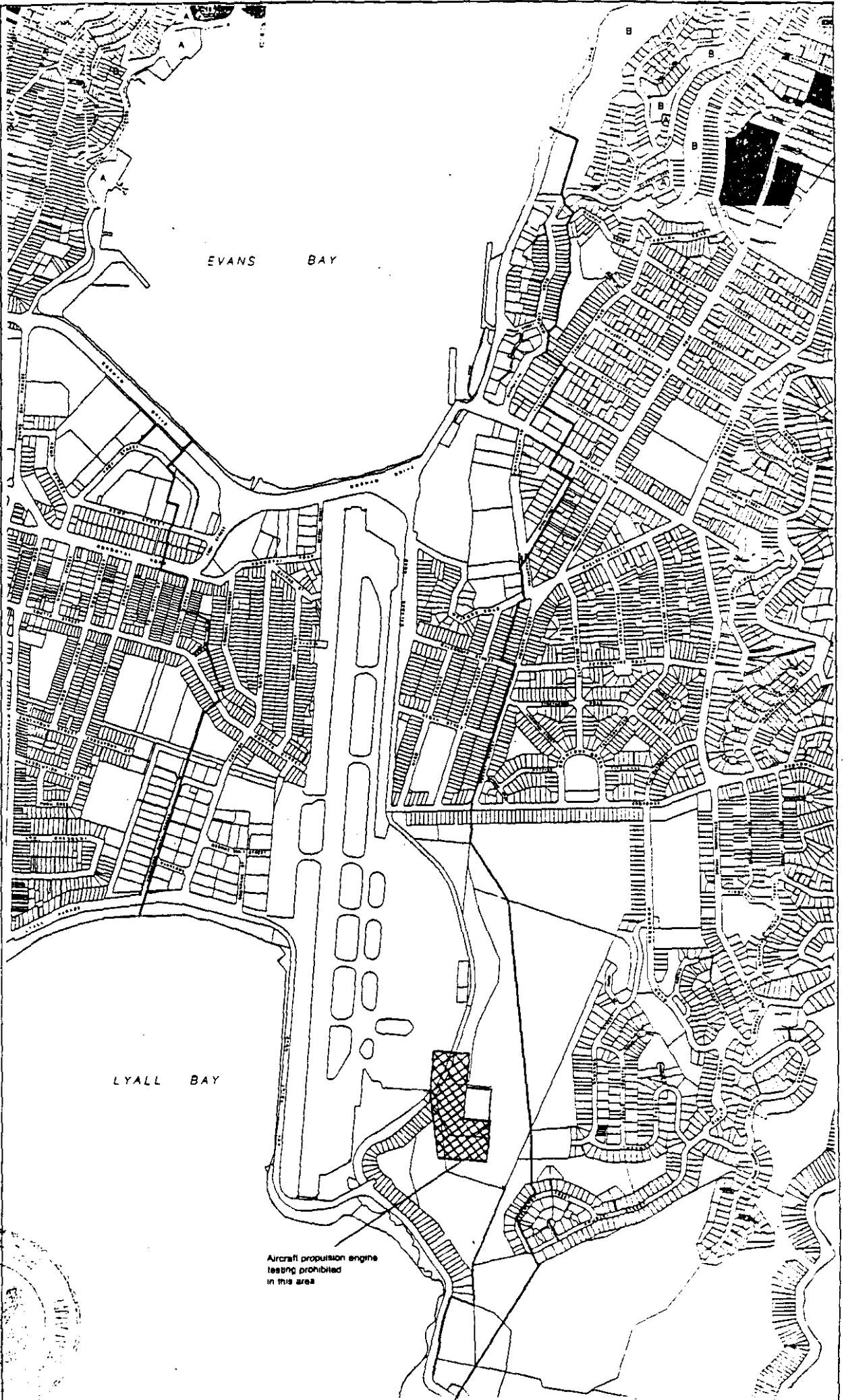
DATED at WELLINGTON this 19<sup>th</sup> day of November 1997

*S. E. Kenderdine*  
S E Kenderdine  
Environment Judge





WELLINGTON CITY LEGEND  
DISTRICT PLAN  
As shown boundary



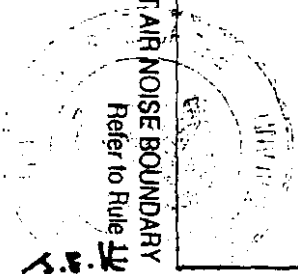
EVANS BAY

LYALL BAY

Aircraft propulsion engine testing prohibited in this area

WELLINGTON INTERNATIONAL AIRPORT AIR NOISE BOUNDARY  
Refer to Rule 11

AMENDED MAP 39



## COMMENTARY

### The Residents' (RANAG) Memorandum

The Residents Group was represented by counsel, Mr K Robinson, assisted by Mrs Maxine Harris, Chairperson of RANAG. Evidence was tabled (and read by the Court) from Mrs Harris; Mrs Rosina Bedford, a former resident of the area who worked extensively in RANAG as a Secretary to achieve a more satisfactory noise environment for the residents; Mrs Mary Beth Weeber, President of the Kilbirnie, Lyall Bay, Rongotai Progressive Association who worked to achieve the same end; Mrs Rosa Margaret Carrick, a supporter of RANAG who researched the effects of excessive noise on the residents and made many submissions on the issue to the local authority; Mrs Elise Webster, a resident of Moa Point Road who gave an overview of the situation; Mr Peter Waring Saxton, a resource management consultant who made general comments on the noise control rules and detailed the adverse environmental effects on the residents within the airport noise boundary. Mr Stanley James Andis, President of the Strathmore Park Progressive and Beautifying Association was heard out of sequence and cross-examined.

As previously noted, RANAG's counsel tabled a further memorandum (a process agreed to by the parties) on the understanding that the points made would become part of the Court's record regarding the consent orders. The following is a summary of what that memorandum contained along with the response to it from the relevant parties. On reflection we considered that these qualifying memoranda to the draft consent orders were more appropriately recorded in the following summaries rather than as recitals.

#### *Airnoise Boundary - Rule 11.1.1.1*

The airnoise boundary has been positioned to allow for the proposed activities of the airport within the plan period on the basis of projections advanced by WIAL and accepted by BARNZ. RANAG sees the projections as optimistic in the light of past history, its understanding of current statements by Air New Zealand on the state of air transport industry, and its knowledge of developments in communication technology. As RANAG do not have the data, or the expertise to assess the airnoise boundary RANAG welcomes the provision in the noise management plan for further refinement of the airnoise boundary and it notes that this work is to be completed within two years.

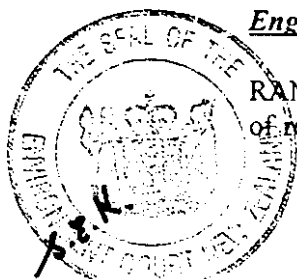
RANAG questioned the jurisdiction to include Kekerenga Street within the airnoise boundary (which was disputed by BARNZ and WIAL, given the wording of BARNZ's submissions), but the issue was not pursued, since Kekerenga Street is one of the streets which falls within the area which, on a future re-measure, may fall outside the airnoise boundary.

#### *Night Flying Operations - Rule 11.1.1.5 and 6*

RANAG stated that this is a matter which has been, and remains, of the greatest practical concern to RANAG's supporters. The changes which have been agreed to in relation to paragraph (h), and the deletion of paragraph (i), of rule 11.1.1.6, are intended to allow for only the quietest operations, and for a limited number. They are not intended to be construed as an abandonment of the curfew, which the residents regard as being of great importance.

#### *Engine Testing - Rule 11.1.1.7*

RANAG notes that further allowance of engine testing during curfew hours has been a source of real concern to many residents, and they hope and expect that the new rule will be applied





with their comfort particularly in mind, and they especially welcome the potential provision in the noise management plan for the construction of a "hush house" type facility for these aircraft. They wish to record that its construction will be a matter of priority for residents' representatives on the Noise Management Committee.

*Ground Power Units and Auxiliary Power Units - Rule 11.1.1.1.9*

RANAG recognised the fact that WIAL, as part of its redevelopment, is taking effective steps about the GPUs. However, with respect to APUs, RANAG has some reservations about the length of time it is necessary to operate the APUs but does not have the detailed knowledge upon which to base its comments.

*Noise Management Plan*

RANAG wish to record their hope that the noise management plan would prove to be a valuable tool particularly as a forum for the exchange of information and co-operation between parties.

*Replacement of Boeing 737-200s*

RANAG expressed its concern about the timetabled introduction of the B737-300 planes to replace the current B737-200 hush-kitted planes, given the delays which have occurred in the past. RANAG had sought a rule in the proposed plan requiring the replacement of the hush-kitted B737-200s by the end of 1997 but RANAG could not afford the sort of discovery required to determine whether such replacement is feasible based on financial issues and airline operational practice. Therefore this issue was not pursued.

*Land Use Controls and Insulation*

RANAG's concerns on the issue of land use controls and noise insulation requirements centred around the costs to be borne by the residents in the areas affected, and the perceived lack of consultation with the residents as to the land use controls to be imposed and did sign this part of the consent orders because they had not been averted to in their submissions. At present residents in Residential and Suburban Centres zones within the airnoise boundary have the same rights to develop their property as others in such zones elsewhere around Wellington. If the proposed amendments are put in place, these residents will no longer have those equal rights, with further restrictions being imposed on them due to their noisy neighbour.

However, RANAG did not feel it had the resources to pursue this matter in Court, nor was it to take part in the hearing of the final issue left for the Court to resolve, being the status of residential development within the Suburban Centres zone within the airnoise boundary.

**BARNZ's Response**

*Airnoise Boundary - Rule 11.1.1.1*

BARNZ had undertaken an independent assessment of the location of the airnoise boundary, in co-operation with WIAL, and had directed considerable resources for further noise measurement and monitoring prior to the hearing which resulted in the revised airnoise boundary based on an  $L_{dn}$  65 dBA contour which was accepted by all the parties.

It was clear from BARNZ's original submissions on the proposed plan that the airnoise boundary should be altered to include Kekerenga Street, and these submissions had been in the

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public arena since 1994. Therefore there was no question as to the jurisdiction to alter the location of the airnoise boundary as proposed.

**Night Flying Operations - Rule 11.1.1.1.5 and 6**

BARNZ understands that the noise limit set (65 dBA L<sub>max</sub>) has been chosen to accommodate the exemption of quieter aircraft and it does not purport to be the upper limit required to protect sleep disturbance.

**Engine Testing - Rule 11.1.1.1.7**

BARNZ commented that its members, including non-jet operators, undertake very few and infrequent tests at Wellington.

**Ground Power Units and Auxiliary Power Units - Rule 11.1.1.1.9**

BARNZ stated that its members are planning to upgrade its GPUs to comply with the noise controls set out in the district plan. BARNZ also stated that APUs comply with the noise controls in the district plan, except in certain climatic conditions where they are marginal.

**Land Use Controls and Insulation**

BARNZ stated that one must consider both the investment of the airlines in reducing noise from 1988 levels, and the fact that many residents have moved to the area in the knowledge that the airport creates noise, when determining who should bear the cost of noise insulation of residential structures.

**Air New Zealand Limited's Response**

**Replacement of Boeing 737-200s**

Air New Zealand noted that it has invested \$50 million to hush-kit its B737-200 fleet, and this step reduced total noise at Wellington by 5 dBA. Air New Zealand also noted that the total reduction in overall airport noise from a replacement of half the hush-kit fleet with the B737-300 would be less than 1 dBA L<sub>dn</sub>.

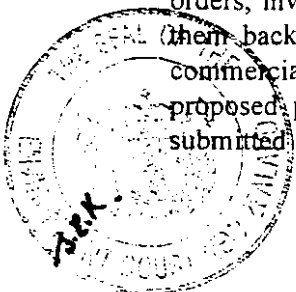
**WIAL's Response**

With respect to the location of the airnoise boundary, it was WIAL's view that considerable effort had gone into assessing where the airnoise boundary could be adjusted, and this was noted in Mr Gordon's rebuttal evidence.

Otherwise WIAL noted and adopted the stance taken by BARNZ in response to the matters raised by RANAG. WIAL did not comment on Air New Zealand's response.

**Land Use Controls and Insulation Issues:**

Counsel for RANAG, at the time of tabling their memorandum accompanying the draft consent orders, invited the Court not to deal with the issues of land use controls and insulation but to refer them back to the council because they impose a cost on property owners whether residential or commercial within the airnoise boundary. Counsel submitted the controls were not part of the proposed plan and seem to have arisen largely as a result of BARNZ's submissions. Counsel submitted that the property owners most affected appear not to have been effectively consulted in



spite of what seems to be a potentially considerable loss of development value and implications from s.85 of the Act. Attached to his memorandum was a letter from Mr Doherty, a valuer, dated 12 August 1997, outlining purely indicative potential impacts on property values.

The relevant provisions of s.85 of the Act are set out below:

**Section 85. Compensation not payable in respect of controls on land -**

- (1) An interest in land shall be deemed not to be taken or injuriously affected by reason of any provision in a plan unless otherwise provided for in this Act.
- (2) Notwithstanding subsection (1), any person having an interest in land to which any provision or proposed provision of a plan or proposed plan applies, and who considers that the provision or proposed provision would render that interest in land incapable of reasonable use, may challenge that provision or proposed provision on those grounds -
- (a) In a submission made under Part I of the First Schedule in respect of a proposed plan or change to a plan; or
- (b) In an application to change a plan made under clause 21 of the First Schedule.
- ...
- (6) In subsections (2) and (3), the term "reasonable use", in relation to any land, includes the use or potential use of the land for any activity whose actual or potential effects on any aspect of the environment or on any person other than the applicant would not be significant.
- ...

In his memorandum Mr Robinson submitted that the matters referred to surfaced during the course of this hearing and unfortunately had not been adverted to in any direct way by his clients largely because there was little or no reference to them in the proposed plan.

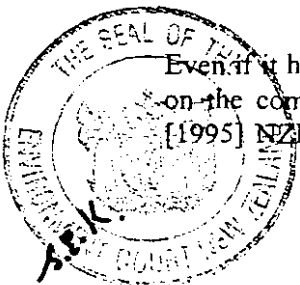
It may be noted that Section 85(2) requires a submission to be made under Part I of the First Schedule: see Clause 6 of the schedule. The summary of these submissions is then notified by the council pursuant to Clause 7. Any person may make a further submission to the council on the provisions of the proposed plan, but only in support of or in opposition to those original submissions made under Clause 6.

RANAG did not make any such submissions in relation to compensation. RANAG simply considered the noise insulation provision incapable of clear definition and the issue was not pursued any further. So unless RANAG makes an application to change the plan under Clause 21 of the First Schedule, s.85 does not apply.

As to the issue of insulating existing dwellings or businesses within the airnoise boundary pursuant to s.85 we consider that that is an issue which should be directed at the Airport Noise Committee managing noise emissions through the noise management plan: see Section 10.2.2.6, Airport Precinct which specifies that the plan will include

- details of methods and processes for remedying and mitigating the adverse effects of airport noise (see further discussion on noise management plan pp 45 - 46).

Even if it had been raised in the reference, it is doubtful whether this Court could have made a ruling on the compensation issue as pursued by RANAG. As stated in Leith v Auckland City Council [1995] NZRMA 400 the Resource Management Act, unlike its predecessor the Town and Country



Planning Act 1977, does not provide for compensation to be paid. While a local authority is able to provide financial incentives, it does so in its executive capacity, and not as a planning authority. The Environment Court does not have the authority to interfere with a local authority exercising its executive functions. Consequently, it was held in Leith (p420) "that the Tribunal has no authority to interfere with local authorities in such matters, either directly by ordering the offering of incentives, or indirectly by directing amendments to district plans on the basis of the existence or absence of any policy to grant incentives".

The Court was also invited to consider the matters pursuant to Clause 15(2) of the First Schedule or s.290(2) or s.293(2) of the Act and refer them back to the council. It was submitted the Court had the jurisdiction to do so pursuant to those provisions. It is clear from Mullins v Auckland City Council A 35/96 that the Court is able to use its powers under Clause 15(2) to address a s.85 issue which is raised in a reference made pursuant to Clause 14.

The other relevant statutory provisions are set out below:

**Clause 15. Hearing by the Environment Court**

...  
 (2) Where the Court holds a hearing into any provision of a proposed policy statement or plan (other than a regional coastal plan) that reference is an appeal, and the Court may confirm, or direct the local authority to modify, delete, or insert, any provision which is referred to it.  
 ...

**Section 290. Powers of Environment Court in regard to appeals and inquiries -**

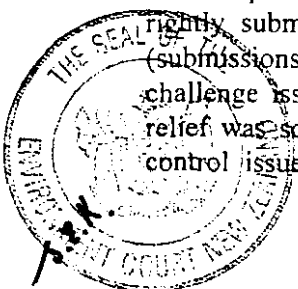
...  
 (2) The Environment Court may confirm, amend, or cancel a decision to which an appeal relates.  
 ...

**Section 293. Environment Court may order change to policy statements and plans -**

...  
 (2) If on the hearing of any such appeal or inquiry, the Court considers that a reasonable case has been presented for changing or revoking any provision of a policy statement or plan, and that some opportunity should be given to interested parties to consider the proposed change or revocation, it may adjourn the hearing until such time as interested parties can be heard.  
 ...

In response to RANAG's request, BARNZ submitted that the issue of the airnoise boundary and land use controls had been in the public arena since 1994 when BARNZ lodged its first submissions to the council requesting that no residential activity be allowed within the airnoise boundary. If RANAG chose not to pursue the point before now then that was its option. At this stage of proceedings it cannot be entertained by the Court.

We accept the Court has legal difficulty in proceeding as RANAG has requested. As Mr Bornholdt rightly submitted on behalf of WIAL at the outset of proceedings when the issue first arose (submissions with which the Court at the time concurred) RANAG and associated parties did not challenge issues relating to land use controls within the airnoise boundary in their reference. No relief was sought in that regard. RANAG's submission that the airnoise boundary as a land use control issue has only surfaced in the course of the hearing is quite incorrect. The evidence



established that the residents were involved in the drafting of the New Zealand Noise Standard NZS 6805 which included the concept of the airnoise boundary. The issue has been extensively debated since submissions were lodged in 1995.

The Court is an appellate body which, in this instance, deals only with matters referred to it under Clause 14 of the First Schedule to the Act which arise out of the council's decision on submissions. There are two difficulties with doing as Mr Robinson suggested. Firstly, the proposed changes to the plan rules and the concept of the airnoise boundary were brought to the public arena some time ago, they are not new; and secondly, RANAG has failed to respond to these issues in its original submissions and reference to the Court. This creates a problem of lack of notice to interested parties with respect to the issues RANAG now wishes to raise, quite apart from other legal difficulties canvassed by us at length in Telecom New Zealand Limited v Manawatu-Wanganui Regional Council W 66/97 pp 5 - 10. We find as a matter of law the course suggested by RANAG does not come within the provisions of Clause 14 of the First Schedule of the Act.

As to Clause 15(2) of the Act which refers to the Court's powers to modify, delete, or insert any provision referred to it, there was no suggestion by RANAG in its submissions that the proposed land use controls (which in effect are the provisions referred to) should require any of these modifications. In fact RANAG specifically excluded amendments to Parts 4 and 5 of the proposed district plan in endorsing the consent memorandum in confirmation. Therefore the process used in Mullins (see above) is not applicable in the current situation.

As to s.290(2) of the Act we consider in this record there is no reasonable case for changing or revoking any provision of the plan other than as set out in the consent orders. What RANAG has suggested is outside any of the original submissions. Such matters are more properly considered in the processes to be triggered by the airnoise management plan as RANAG itself acknowledges this will become a valuable tool for co-operation between the parties.

## PART II

### Unresolved Issues

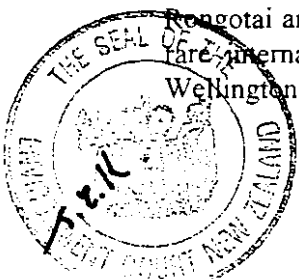
The issue which remained unresolved by these orders was the appeal by BARNZ which sought to make new residential activity a prohibited activity in the Suburban Centres zone within the airnoise boundary. As a result of the negotiation/mediation, BARNZ amended its appeal to require new residential development to become non-complying in that area. In the event WIAL supported this amended approach. The council's new position (also taken as a result of the negotiation process) was for all new residential use to become a discretionary activity (unrestricted).

The hearing then proceeded with these new objectives in mind.

### Historical Background

To understand the issues behind this part of the BARNZ and WIAL appeals it is necessary to briefly traverse the history of the airport and the environmental controls which have encompassed its use until now.

Prior to and immediately after the Second World War there was a small airfield between the suburb of Rongotai and the shoreline of Lyall Bay. At that time there were few large civilian aircraft, and the few international services used flying boats which could land on Evans Bay. As late as 1948 Wellington was regarded as unsuitable for the development of a major land airport.



In the early 1950s, however, the Government decided to build a modern airport at Rongotai. To the north of the existing airfield, much of the suburb of Rongotai was to be cleared, and to the south, several hundred metres of Lyall Bay would be reclaimed for a runway. To the west, a large area of land had been developed for the New Zealand Centennial Exhibition in 1940, and the land again became available when the Exhibition buildings were destroyed by fire in 1948. In the 1950s, the land was developed by the council as an industrial estate. The airport, more or less in the shape we know it now, was completed in 1959. The industrial development on the Exhibition land continued through the 1960s and 70s.

The surrounding suburbs of Rongotai, Kilbirnie and Lyall Bay to the west, and Miramar to the east, were fairly well established in the first three decades of the century, though sparsely populated. The suburb of Strathmore (to the south of Miramar and the east of the airport) was largely developed after the war along with the development of the airport. Miramar grew up as a district area. Many of the houses were built by the Government. Substantial subdivisions have continued on the hills of southern Strathmore over the last few years.

Both of the well established suburbs to the east and west of the airport were mixtures of residential, commercial and industrial uses. The industrial areas are less of a feature now. Miramar was formerly a part of the port area, and contained the city's gasworks, a brick works and oil depots. Kilbirnie contained a council transport depot and workshop. To the extent that historical context is important, it must be acknowledged that these suburbs were traditionally industrialised, albeit that the effects at that time might have been quite different to those of a modern airport.

The proposed district plan shows that the airport area is surrounded by four different 'zones'. The largest neighbouring zone is Residential reflecting the suburbs of Rongotai, Lyall Bay, Strathmore and Miramar. The Suburban Centres area consists largely of industrial properties. Some are located close to the airport for business reasons. The open space areas are mostly the coastal strip between the road and the sea.

The current surrounding land uses can be split into four general areas as follows:-

- To the north-east are the offices of Wellington International Airport Limited and the Miramar and Burnham wharves. Through the Miramar cutting there is the Suburban Centre area of Miramar including retail, industrial and warehousing uses.
- To the east of Calabar Road and north of properties in Broadway are residential properties and Miramar South School.
- To the south-east is the Miramar Golfcourse and elevated above the airport are residential properties in Strathmore. Currently under construction in this area is the Moa Point Sewerage Plant.
- To the west are industrial properties and several residential streets. There is a further suburban centre area with industrial and warehousing uses. The residential properties in this area are primarily located on the flat land with the exception of some of those in Titirangi Road and Lonsdale Crescent which are on an elevated knoll which also contains the Civil Aviation Authority Tower. Some houses in Bridge Street and the eastern end of Couatts Street back on to the airport.

More recently there have also been boundary adjustments between the Miramar Golfcourse and the airport. Future developments at the airport include the new domestic facility.



The airport sits on an isthmus and the land surrounding it is bordered by Evans Bay at one end and Cooks Strait and Lyall Bay at the other. Thus many of the areas surrounding it have sea views and a variable landform with some relatively flat areas in between.

### History of Environmental Controls

Wellington's first district scheme was made operative in 1972. In this 1972 scheme, the land shown designated for "airport" is almost identical to the current proposed district plan Airport Precinct (the only significant changes are that the precinct now includes some industrial land to the west and excludes the land to the east which has now been developed for the Moa Point wastewater treatment plant). The 1972 scheme was reviewed in 1979, and this review became operative in 1985. The 1985 operative district scheme is now the transitional district plan.

The transitional district plan similarly designated land for "airport", and the brief commentary on this designation in scheme statement (section 12) raises some interface issues, but noise is not explicitly one of them. If airport noise was generally regarded as a significant environmental issue for the city in 1979, one might have expected it to have been more prominently dealt with in the transitional plan. But the time it was notified in 1979 and/or adopted in 1985, airport noise had achieved considerable prominence and importance. There were a number of reasons for this. The airport undoubtedly became significantly noisier ten years ago with the advent of Ansett New Zealand into the domestic market. Not only was there a very substantial increase in the number of flights, but Ansett began its operations with old and noisy Boeing 737-100 planes. After a relatively short time, Ansett replaced these with the new, and very much quieter BAe 146 planes marketed as "Whisper Jets". Those were significantly quieter than both the 737-100s that they replaced and, perhaps more importantly, the 737-200s flown by Air New Zealand.

In the late 1980s, there was considerable pressure on the council to regulate to control aircraft noise. It concluded that even if it could change the transitional district plan in the face of an existing designation, there was likely to be a very lengthy hearing and appeals process. The council ultimately resolved to deal with the problem by way of two bylaws. The first would control engine testing. The second would control noisy aircraft. The proposed bylaw on noisy aircraft would both extend the "curfew" (then applying under a Civil Aviation Safety Order) to run from 10.00 pm to 7.00 am, and would require a phase out of "non chapter 3" aircraft. Non chapter 3 aircraft is a noise certification standard used by the US Federal Aviation Authority for jet aircraft. Series 100 and 200 Boeing 737 and 727 are not chapter 3 aircraft. But series 300 and higher, and series 200 hush-kitted are chapter 3 aircraft, as are the BAe 146 and Boeing 767. Jet aircraft flights scheduled into Wellington by Air New Zealand and Ansett involve only chapter 3 aircraft. Only the Crown (through the Ministry of Defence) routinely flies non chapter 3 aircraft into Wellington. The Crown is not bound by the bylaw.

The two bylaws were ultimately enacted and consolidated and remain in force. There are restrictions on engine testing and the use of Ground Power Units (GPUs) and Auxiliary Power Units (APUs) during the night, and there is an operational curfew and (since the end of 1994) a ban on the scheduling of non chapter 3 aircraft.

The current curfew restrictions at WIAL were set under the Civil Aviation Safety Order NZ (CASO 2) which sets the following hours for aircraft landing and take offs:

- domestic operations must not occur between midnight and 6.00 am
  - international operations must not occur during the hours:
    - midnight to 6.00 am for departures
    - 1.00 am to 6.00 am for arrivals
- with exceptions for late-running, and emergency flights.

This order was deleted as at March 1997.



This 'curfew' has been modified to some degree since its introduction in 1975 (at that time, essentially for engine testing). Resident groups were concerned at the perceived erosion of their night time peace, and concerned that such erosion might continue with either an across the board shortening of the curfew, or an expansion of the exceptions.

Airlines generally accepted the curfew, noting as an aside that there was normally little demand for scheduled domestic operations within that time. Changes to the wording of the proposed rules will better define the situation; but it is clear that extensions to the curfew, either permanent or casual, should be made only with compelling cause. There was evidence that in particular international flights must have regard to the existence of overseas curfews, and in order to maximise the efficient use of aircraft, so that flights are likely to be scheduled to the limit of the times permitted.

There was an acceptance by all parties that a curfew was probably an essential consequence of the situation of Wellington Airport because of its proximity to residential dwellings.

### **The Airport Noise Provisions and Noise Standard NZS 6805**

In 1992 the New Zealand Standards Association developed a standard for use by local authorities in regulating airport noise. This Standard (NZS 6805:1992) is a key part of the proposed district plan provisions for the control of aircraft generated noise. The Standard was published after several years of preparation, including consultation with a number of interest groups including RANAG. Its aim is to provide a mechanism to manage the potential adverse effects from the airport, such as noise, while recognising the need to operate a major resource with national significance.

NZS 6805 anticipates the use of the airnoise boundary concept as a means whereby local authorities may establish compatible land use planning around an airport and set limits for the management of aircraft noise at airports. Its adoption was seen by the expert noise consultants as a significant step forward with acoustic planning around airports. It is based on the Day/Night Sound Level ( $L_{dn}$ ) which measures the cumulative 'noise energy' that is produced by all flights during a typical day, evenly measured over a rolling 3 month period, with a 10 dBA penalty applied to night flights to make allowance for the greater disturbance these represent. It was explained that the  $L_{dn}$  measurement is used extensively overseas for noise assessment and it has been found to correlate well with community response to aircraft noise.

The total package in NZS 6805 involves fixing two noise boundaries, the main airnoise boundary around the airport and, further out, an outer control boundary. The airnoise boundary is the location where, given the parameters of airport activity, topography and so on, it is projected that a limit of  $L_{dn}$  65 dBA will fall. It thus becomes the location beyond which that noise level shall not be exceeded. The noise boundary, as calculated, will be in the form of a 'noise contour' but an airnoise boundary will be drawn having regard to roads and property boundaries. The outer control boundary is to be drawn with regard to the projected  $L_{dn}$  55 dBA criteria, similarly adapted to physical boundaries. The outer control boundary is not in itself an airnoise compliance boundary, but is intended for land use controls.

NZS 6805 sets out (in Tables 1 and 2) recommendations for land use control with regard to an airnoise boundary and outer control boundary. Inside the airnoise boundary at  $L_{dn}$  65 dBA, new noise sensitive uses (including residential) are prohibited unless a district plan permits such use subject to appropriate sound insulation and alterations or additions to existing noise sensitive uses (including residential) should include appropriate sound insulation. At the  $L_{dn}$  70 dBA contour it is recommended consideration be given to purchasing homes or relocating residents and re-zoning the area to non-residential use only. Within the  $L_{dn}$  75 dBA contour the standard records that there is a

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high possibility of adverse health effects. Land is not to be used for residential or other noise sensitive uses. These recommendations have not been adopted relative to the proposed district plan.

The concept of development of an airnoise boundary was described to the hearing as a 'noise bucket' which is useful in further discussing the management of airport noise. In simple terms, implication of the use of a 'noise bucket' as a management tool are that:

- the quieter an aircraft, given an equal number of events (take-off or landing), the longer it takes to fill the bucket
- as noise levels double with each 10 dBA, noisier aircraft will fill the bucket more quickly
- if the bucket fills too quickly within a defined time period, the airline has to take remedial action
- a penalty will be applied to noise events at particular times eg. at night.

The effective operation of this concept requires:

- reliable and consistent measuring at a points agreed to by all concerned parties
- the ability to relate a particular noise event to a defined aircraft movement
- the effective monitoring of results to ensure that there is early warning of significant variances from forecast trends.
- the availability of results, in reasonable detail, for all concerned parties.

The location of the airnoise boundary, that is the line outside of which the noise dose may not overflow, will determine the extent of noise emission from the airport. An airnoise boundary set closer to the airport than noise levels generated by its current activity could require immediate measures to reduce that noise and could curtail the activity of the airport as a result. By setting the airnoise boundary further out, expansion of airport activity is possible, but the adjacent population will be exposed to higher levels of noise.

There is reference in the NZS 6805 to matters the local authority may take into account in considering whether the airnoise boundary and outer control boundary will be a reasonable basis for land use planning. Specifically it recommends that,

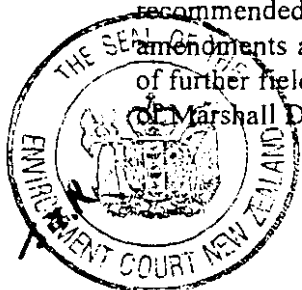
"... the local authority should incorporate into its district plan a map showing the projected sound exposure contours, or showing the contours in a position further from, or closer to the airport, if it considers it more reasonable to do so in the special circumstances of the case."

(NZS 6805, part 1.4.3.8)

This direction has been incorporated into the provisions of the proposed district plan **Map 39**, and was determined on projections made in 1993 and 1994, based on 1992 data, and representing the airport operating at a capacity or close to capacity situation, based on expected developments in aircraft use and accepting regulatory, marketing and operational constraints.

Over the last two or three years, and especially with the implementation of the current noise monitoring programme, the quality of data input into these assumptions changed quite significantly, which then led to further refinement of where the airnoise boundary will fall, based on the above assumptions.

After consideration of submissions, in particular that from WIAL, the council's analysts recommended several changes to Map 39. In the evidence before us the parties requested further amendments again. These more recent modifications made to the airnoise boundary were the result of further field measurements undertaken by Mr M Hunt, acoustic consultant to WIAL and Mr C Day of Marshall Day Associates for BARNZ (peer reviewed by Mr N Hegley, acoustic consultant for the



council). These modifications are set out in Figure 10 taken from Mr Day's evidence-in-chief and attached to this decision as Appendix I.

A high level of confidence was expressed at the hearing that the airnoise boundary as now proposed (in particular by WIAL and BARNZ), would represent an achievable 'noise dose' for Wellington Airport operating at predicted capacity. As Mr Hegley deposed, it is the total daily noise dose received by the residents that is important, not individual events.

The projected  $L_{dn}$  65 dBA contour, in all cases, falls well inside the estimated equivalent 1988  $L_{dn}$  65 dBA contour, and consequently there are now far fewer houses that are inside this area. The projected  $L_{dn}$  65 dBA contour falls outside the calculated 1995  $L_{dn}$  65 dBA contour line. Acceptance of the proposed noise dose for Wellington Airport in the period up to the year 2020 (see Appendix I) therefore represents a slight overall increase of noise from that experienced at present, but retention into the future of a situation significantly better than that experienced in 1988. (We note the projection goes well beyond the life of the proposed plan.)

The plan does not define an outer control boundary, although this was the subject of submissions. It was not recommended by the Hearing Commissioners and its omission was not under challenge before this Court.

While NZS 6805 forms the basis of the airport noise provisions in the proposed plan, the plan provisions differ in relation to the land use planning measures in recognition of the fact that the area on either side of the airport is an existing residential neighbourhood.

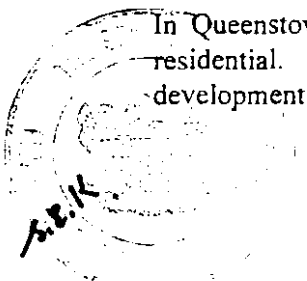
There are two designations in relation to the airport, both of them administered by WIAL as the Requiring Authority. One relates to airport land itself and the other to airspace in the vicinity of the airport. The proposed Airspace Designation has restrictions to limit the construction of any structures which may inhibit its safe and efficient operation. A hearing has recently been held on this designation and a recommendation from the Hearings Committee to the Requiring Authority at the time of hearing these appeals was awaited. In respect of the land designation, there were several legal and practical difficulties associated with its promotion but the Court was advised the designation would be withdrawn once they were resolved. The plan provides that when the Airport designation is withdrawn it will be replaced by the Airport and Golfcourse Recreation Precinct (Section 10.1) with its own objectives, policies and rules administered by the council as the territorial local authority.

### The Wellington Airport, the NZS 6805 and Other New Zealand Airports

Other councils around New Zealand have applied the NZS 6805 to their airports such as Christchurch City, Manukau City and Queenstown-Lakes District. In Christchurch the airport was created in a rural area. We understand it was therefore possible for the council to impose land use controls as recommended in NZS 6805. Within the  $L_{dn}$  dBA 65 noise contour, new residential development is a prohibited activity.

Auckland International Airport has partially imposed NZS 6805. That facility has an existing buffer of predominantly rural land with limitations on new residential activities. New noise sensitive development in the proposed plan is a controlled activity between the outer control boundary and the airnoise boundary. New noise sensitive activities and extensions to existing properties are discretionary activities within the airnoise boundary.

In Queenstown the airport is surrounded on two sides by rural land and the other two sides by residential. Within the airnoise boundary of the proposed Residential area, new residential development is a non-complying activity but visitor accommodation and recreational uses are



permitted, subject to achieving noise attenuation. In the existing Residential area new residential uses are controlled within the outer control boundary.

We understand BARNZ has appealed some of these decisions.

### **Other Provisions of the Proposed District Plan**

One of the main approaches the council has taken in drawing up its proposed district plan is a simplification of zoning. There were 45 zones in the Wellington City Council Transitional District plan. These included almost 30 different residential areas and 16 zones covering suburban, retail and industrial areas in the city.

The proposed district plan is restructured into different areas including two principal Residential areas (Inner and Outer areas), one Central area, and one Suburban Centres area.

The council has taken an effects based approach in respect of former commercial areas. In the Central area and in the Suburban Centres area any activity is permitted subject to additional performance based conditions, with the exception of those activities listed in the Third Schedule to the Health Act 1956. Multi-unit residential development is also subject to a Design Guide where three or more units are proposed. In the Airport and Golfcourse Precinct activities that relate to the primary functions of the precinct and activities ancillary to those functions are permitted.

We have set out below only those provisions of the proposed plans that have relevance to the issues remaining before the Court. Because the Suburban Centres area within the airnoise boundary is proximate to the Airport Precinct we set out those provisions also.

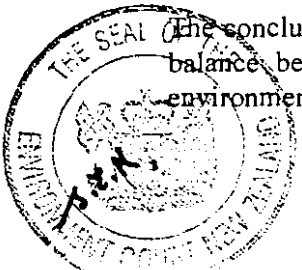
### **General Objectives and Policies**

Section 1.2 "**Significant Resource Management Issues for Wellington**" sets out the General Principles of Sustainability. They include ... **Diversity, Efficiency, Finite Resources, Equity, Precautionary Approach**. The summation of these identifies that:

"These principles do not mean that society is restrained from moving forward. They mean that where change or development occurs, sustainability and what it entails must guide the management process."

Under Section 1.3 "**Working toward Achieving a Sustainable Wellington City**" includes various statements such as **Managing Adverse Effects of Human Activities on the Environment** which records that human impacts can be managed by establishing environmental limits for the effects of development. Another, **Enabling People to Meet their Needs**, records that the plan makes provision for activities that enable people to meet their needs and aspirations while at the same time it aims to ensure that the environment can sustain the needs and aspirations of future generations. It records the plan provides a level of certainty to the community about what can happen in their environment and gives people the ability to influence how things occur. Under the heading **Future Generations**, the plan records that just as we benefit from the city's heritage so we must ensure that future citizens inherit a clean, conserved, functioning environment in a viable economy. Under the heading **Efficient Resource Use** it notes that sustainable management requires the city to use natural and physical resources in an efficient manner. Improving the way resources are used can lessen adverse environmental effects.

The conclusion to Section 1.3 is that sustainable management in Wellington is about maintaining the balance between development and the need to protect natural and physical as well as human environments.



Section 1.4 identifies that one of the issues for the City is "**Integrated Management of the Environment**". That states:

"Numerous other institutions and policies influence, and in some cases dictate, the direction the Council takes managing the environment or controlling adverse effects. Other influences range from community aspirations to Government legislation. To achieve sustainable management, and to maintain it, means managing all these diverse aspects in an integrated manner. Integrated management is the foundation on which sustainability can be built."

Section 1.6.1 sets out identified "**Qualities and Values**" associated with Wellington. They include an **Efficient City, Amenity, a Health/Safe City, an Accessible City, a Natural Environment**. Section 1.6.2 sets out '**Specific Issues**' for sustainable management including **Containing Urban Development, Managing Rural and Coastal Areas, Protecting Open Space, Maintaining the Quality of Living Environments, Providing Areas to Facilitate Economic Growth and Development, Maintaining and Enhancing the Quality of the Built Environment, Maintaining and Enhancing the Quality of the Natural Environment, Lessening Hazards**.

Section 1.6.3 **District Plan Objectives** for managing the city state:

"The significant resource issues identified above have been used to define objectives that describe the direction that Council intends to take in the management of the City. These are expressed for each part of the City in the relevant part of this Plan.

The objectives listed here provide a template that has been applied to each area of the City. They provide a link between the resource management issues and the more specific provisions of the Plan. Ultimately they allow the rules to be traced back to their role, under the Act, of promoting sustainable management."

The objectives we consider relevant in these appeals are as follows:

- To maintain and enhance the amenity values of the City. (Q2, S3, S4, S6)
- To maintain and enhance the physical character of Wellington ... (Q2, S4, S6)
- To promote the efficient use of natural and physical resources within Wellington. (Q1, Q4, S1, S5, S6)
- To encourage most new residential development to take place within existing developed parts of the City, and ensure that new subdivisions, where developed, are on suitable sites and are well designed and adequately services. (Q1, Q4, S1)
- To manage the actual and potential effects of contamination, waste disposal and pollution. (Q3, S7, S8)
- To promote the development of a safe and healthy city. (Q3, S4, S6, S8)"

Section 1.8 sets out **The Plan's Components**. Section 1.8.1 **Objectives and Policies** are further defined as follows:

"Objectives within the Plan set out the direction Council intends to take in relation to any particular issue. Its methods do the same, on a more specific level. Both Objectives and Policies allow the Plan's rules to be interpreted in the context of what Council is trying to achieve and what environmental outcomes are being sought.

The objectives and policies will guide decision-making when the granting of resource consents is being considered or when Plan changes are contemplated. Because integrated management is essential to the proper working of the Plan, they will also have influence on other Council policies."

The Objectives listed in section 1.6.3 are described in section 1.8.5 of the proposed district plan as:

1.8.5

".... the environmental outcomes the Council seeks to attain and the policies are the ways the objectives or outcomes will be achieved. The rules provide the means for Council to carry out its functions under the Act and to achieve the objectives and policies of the Plan."

The plan identifies methods for achieving such environmental outcomes under its heading **Objectives, Policies, Rules**. Section 1.8.2 "**Methods**" puts the relationship between regulation in the form of rules in the plan and other methods of achieving outcomes into context. This states:-

"In many cases, the method used in the District Plan to achieve objectives and policies will be the setting of rules to control land use. Resource consents (and their associated conditions) are a crucial tool for the management of the effects of development. Integrated management of the environment will, however, require the use of other mechanisms to help achieve environmental outcomes, particularly in cases where a rule may not be the best solution.

Council will use advocacy, the provision of information, education and incentives (including economic incentives such as financial contributions, or rates relief) where appropriate. Often these approaches are backed up by District Plan rules. Council also has the ability to use other regulatory means (for example, bylaws) and its operational activities to influence the use, development or protection of natural and physical resources."

Section 1.8.4 **Rules** states that the rules in the plan are intended to protect the environment from the adverse effects of activities. The plan uses the following categories: Permitted, Controlled, Discretionary (Restricted), Discretionary (Unrestricted). It records:

"Broadly speaking, the rule types are listed in order of increasing actual or potential adverse effects. Resource consents (land use consents or subdivision consents) are not required for Permitted Activities but are required for all others. Discretionary activities have been divided into those where Council has chosen to restrict the exercise of its discretion to certain matters, and those where there is no restriction on the exercise of Council's discretion: these are identified in the plan as Discretionary Activities (Restricted), and Discretionary Activities (Unrestricted). Where rules in the Plan are contravened, applications will be deemed to be Non-complying.

The Resource Management Act also allowed for a Prohibited category to be used. This category has not been used in this District Plan.

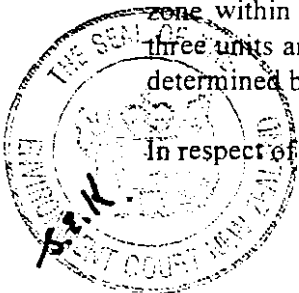
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The rules will also state which applications will be notified. Applications for resource consents will be publicly notified where Council is of the opinion that community input into any decision is necessary. Where Council thinks that the effects of an activity are not significant or immediate neighbours are unaffected, or where the matter under consideration involves the administration of city infrastructure, the rules may state that notification will not be needed. This may also apply in cases where Council is acting on behalf of the wider community to achieve a better quality environment, such as urban design issues, or to enable the efficient administration of the Plan."

### Residential Areas

Section 4 of the plan sets out the objectives and policies which apply to residential areas. Before the consent orders were filed, the residential provisions applying to the properties adjoining the airport were the same as those applying in (for example) Karori or Tawa. Residential activities were a permitted activity in the residential areas within the airnoise boundary subject only to a Design Guide for Multi-Unit Housing. Now new residential development of up to two units in the Outer Residential zone within the airnoise boundary is permitted subject to the insulation rule and developments of three units are more on sites in the Outer Residential zoned land within the airnoise boundary can be determined by way of resource consent application as discretionary (unrestricted) activities.

In respect of noise, the Residential Area policy 4.2.2.3 provided for:-



"Control the adverse effects of noise within Residential Areas.

**Methods**

- Rules
- Other mechanisms (Enforcement Orders, Abatement Notices)"

Rule 5.1.3 provides that:

"The construction, alteration of, and addition to, residential buildings, including accessory buildings, is a permitted activity (except in residential character areas or on a legal road) provided the new building or the new part of the building complies with the following conditions ..."

In its decision, the council placed one restriction on land uses inside the airnoise boundary. It sought to apply the approach taken in the noise standard (NZS 6805:1992) to the area outside the airnoise boundary, ie the approach recommended in Table 2 of the standard to apply to land falling between 55 dBA and 65 dBA. The new rule from the consent orders reads as follows:

**"5.1.3.10 Residential Building Within the Airnoise Boundary**

Any new residential dwellings inside the airnoise boundary depicted on Map 39 must be designed and constructed so as to afford a reduction in noise of 30 dBA L<sub>max</sub> from the noise level outside, to that expected inside (doors and windows closed) and any living room, dining room, kitchen, bedroom or study.

The certification of an approved acoustical engineer will be accepted as evidence that designs meet the insulation standard. A list of approved acoustical engineers shall be agreed between the Council and the Airnoise Management Committee and shall be made available on request by the Council."

It was agreed on the advice of the various acoustic consultants at the hearing before us that this standard should be changed to achieve an interior noise standard of 45 dBA L<sub>dn</sub> and the draft consent orders filed on 19 August 1997 reflect this change. It was accepted this standard should now apply to new residential dwellings in the Suburban Centre area also.

**Suburban Centre Areas**

The introductory paragraphs of section 6.1 state:

The Suburban Centre provisions in the District Plan cover the more significant retail and industrial centres in the suburban areas of Wellington City. These important areas provide a base for a wide range of economic activity essential for the City's growth and development.

...

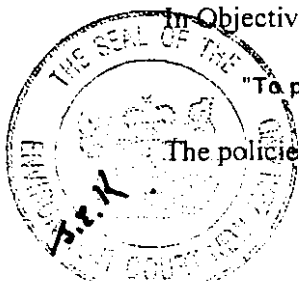
The District Plan recognises these changing patterns in Suburban Centres by enabling most activities (with limited exceptions) to be Permitted Activities. This will provide flexibility for centres to respond to changing market situations.

Section 6 contains the objectives and policies which apply to the Suburban Centres area. The remainder of the land within the airnoise boundary, not located within the Airport and Golfcourse Precinct and Outer Residential area, is within the Suburban Centres area.

In Objective 6.2 **Suburban Centre Objectives and Policies**, Objective 6.2.1 seeks:

"To promote the efficient use of natural and physical resources within the Suburban Centres."

The policies used to achieve this objective include:



- 6.2.1.1 Generally contain existing Suburban Centres within defined boundaries.
- 6.2.1.2 Encourage a wide range of activities by allowing most uses or activities within a Suburban Centre provided that the conditions specified in the Plan are satisfied.

This is subject to the standards which are then listed, to include a requirement for noise insulation as required in the Residential area within the airnoise boundary.

Objective 6.2.9 seeks:

**"To promote the development of a safe and healthy city."**

Policy 6.2.2.3 states, in respect of noise, that the council will control the adverse effects of noise within Suburban Centres by way of rules and other mechanisms such as abatement notices and enforcement orders.

The explanation to the policies and objective records:

**".... Noise levels are designed to allow most activities to occur. Where noise sensitive uses (including residential) are proposed for Suburban Centres it is the responsibility of the developer or user to ensure that buildings are appropriately insulated against excessive noise."**

Section 7 sets out the rules which apply to the Suburban Centres area.

Under Rule 7.1.1 any activity is permitted, subject to performance standards and bulk and location requirements, except for:

- those specified as **Controlled Activities, Discretionary Activities (Restricted) or Discretionary Activities (Unrestricted)**

Rule 7.1.2 states that the construction, alteration of, and addition to buildings and structures is permitted except for those specified as **Controlled Activities, Discretionary Activities (Restricted) or Discretionary Activities (Unrestricted)** provided they comply with certain conditions.

Under **Discretionary Activities (Restricted)** Rule 7.3.4 states that:

**The construction of residential buildings, including accessory buildings, where the result will be three or more household units at ground level on any site is a Discretionary Activity (Restricted) in respect of:**

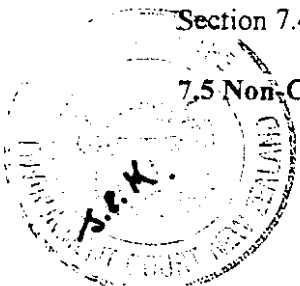
- 7.3.4.1 design, external appearance and siting;
- 7.3.4.2 site landscaping; and
- 7.3.4.3 parking and site access

It should be noted that multi-unit residential development in the Suburban Centres areas is not restricted by yard and coverage requirements as in the Residential zones. Therefore higher density could be achieved, particularly since height controls in the Suburban Centres area allow development up to 12 metres.

Section 7.4 describes which activities are **Discretionary Activities (Unrestricted)** in Suburban Centres.

Section 7.4.3 states that any use of a contaminated site is a **Discretionary Activity (Unrestricted)**.

**7.5 Non-Complying Activities** are defined as:



"Activities that contravene a Rule in the plan. Resource consents notifications will be notified but any application may not be notified if the effect of the activity is minor and written approval is obtained of all affected persons.

In general, applications will be notified. An application may not be notified if the effect of the activity is minor and the written approval is obtained of all affected persons ...."

### **Airport and Golf Course Precinct**

Section 10.2 sets out the Airport and Golf Course Precinct Objectives and Policies. There are two specific objectives in respect of the Airport Precinct:

- 10.2.1 To promote the efficient operation of the Airport and a planned approach to its future development; ...
- 10.2.2 To protect the amenities of areas surrounding and within the Precinct from adverse environmental effects.

The intention of the proposed plan is to provide the maximum amount of flexibility for the Airport and the Golfcourse in recognition of the fact that they are special land uses within the City which have a key role in its economic wellbeing.

To achieve **Objective 10.2.1** the council applies the following **Policies**:-

- 10.2.1.1 To identify the Airport as an area within the Precinct with a distinct character and uses.
- 10.2.1.2 To establish District Plan provisions which can accommodate future comprehensive re-development of the Airport.

To achieve **Objective 10.2.2** the council applies the following **Policies**:-

- 10.2.2.1 Exercise an appropriate level of control over Airport and ancillary activities for the avoidance or mitigation of adverse effects.
- 10.2.2.2 Ensure a reasonable protection of residential and school uses from Airport activities by providing controls on bulk and location, ensuring sufficient space is available for landscape design and screening, and by retaining a buffer of land of a recreational nature to the east of the Airport.
- 10.2.2.3 ....
- 10.2.2.4 ....
- 10.2.2.5 ....
- 10.2.2.6 Manage the noise environment to maintain and where possible enhance community health and welfare.

It also includes the addition of new wording under **Policy 10.2.2.6** which includes under methods for achieving policies the following:

.....

- A noise management plan (NMP) will be promoted to assist all interested parties in complying with the objectives and rules in the district plan.

Within the Airport area a range of uses are permitted which are essential for the safe, efficient and economic operation of the Airport. These include runways, taxiways, terminals, air carrier facilities and aircraft maintenance as well as a number of support and commercial activities.

S.C.K.



The **Airport Area Rules** for Permitted Activities allow for activities related to the primary function of the Airport area and activities and services ancillary to this primary function to be Permitted Activities provided that they comply with conditions relating to issues such as noise. These are rules now amended, as set out in the Consent Orders above.

### The Council's Case

The council's counsel, Mr Mitchell provided a comprehensive background of the issues before the Court in his opening submissions. We note that these were made before the parties had agreed to new multi-unit developments in the Residential zone within the airnoise boundary becoming discretionary activities (unrestricted). So we reproduce part of them here with that caveat. He submitted that we are required to balance the competing sensitivities of the airport operation with those of the residential community and stated:

"It is generally accepted that prolonged exposure to the noise levels which will typically occur within the ANB (airnoise boundary) is unhealthy for people with normal sensitivity, and for that reason, the area inside the ANB is not a good residential environment. Equally, it is not desirable for either the airport or the airlines to have to make major financial decisions constrained by the potential for clashes with residential activity.

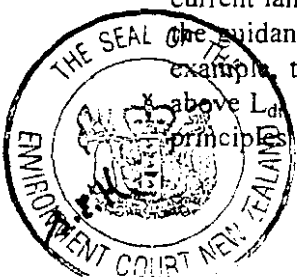
[But] the solution suggested by NZS 6805 and advocated by BARNZ is neither practical nor equitable. The reality the court is confronted with is that there are a significant number of residential properties within the ANB which were there long before airport noise assumed the level of importance it is today. The options of prohibiting or requiring non-complying activity consents for new residential developments on these properties (which could include extensions to existing houses) both, on the face of it, impose significant penalties on the current property owners.

One of the questions posed [by the council] was just how the costs of controlling noise should be allocated. The council's view is that the NZS 6805 answer advocated by BARNZ imposes too much of the cost on the airport's residential neighbours. It is a solution which is inconsistent with both s.7(c) and, arguably, s.31(d). In other words, encouraging people to relocate is a crude and suboptimal way of protecting amenity values and controlling the adverse effects of noise.

On balance, the solution given by the proposed district plan is preferable. If people want to carry out new residential developments within the ANB, then they should be free to do so, subject to controls which will ensure an acoustically improved living environment."

Evidence was given to the Court by Mr L J Daysh, Policy Analyst in the Physical Urban and Natural Policy section of the council; Mr R W Styles, Policy Analyst/Adviser to the council on airport noise, financial contributions and s.32 analysis of costs and benefits; and Mr N Hegley, noise consultant. Evidence was tabled by Mr J Sule, Environmental Health Officer for the council, Mr P W J Clough, consultant economist who gave an analysis of the economic impact of potential changes to the proposed controls, Mr P Beddek, consultant quantity surveyor whose office has recently undertaken extensive studies of the costs of introducing new thermal insulation code requirements for housing throughout New Zealand; and Mr G Kirkcaldie, consultant valuer who discussed trends in residential valuations around the airport.

Part of Mr Daysh's evidence was taken up with the council's explanation as to why it had (originally) proposed that new residential dwellings be permitted in both the Suburban Centres and Residential zones, an analysis commensurate with its duties under s.32 of the Act. He attested to the fact that the Christchurch, Auckland and Queenstown airports, mentioned above, are very different in terms of current land uses and topography from Wellington Airport in that they are more easily able to utilise the guidance of NZS 6805, particularly in respect of an outer control boundary. He considered, for example, that re-zoning the long standing residential properties which are exposed to noise levels above L<sub>d</sub> 65 dBA is not an option in Wellington, and that such an approach is inconsistent with the principles of sustainable management in the Wellington situation. Such an action in his view may



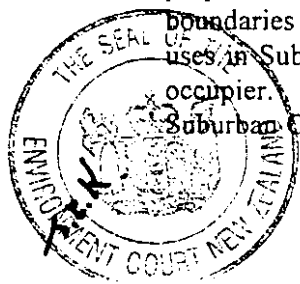
lead to sterilisation of land in the hope that uses which are not noise sensitive will establish. In such a situation there would be a strong likelihood of blighting existing houses through uncertainty and disinvestment and it would create a significant negative social impact for a community which is well established. He pointed out that re-zoning residential properties so they are not used for residential purposes in the future leaves the existing property owners with existing use rights.

A further option was for WIAL to designate the land and purchase the freehold by compulsion if necessary, but this approach was not favoured by either WIAL or the council. In Mr Daysh's opinion "re-zoning" would have to be achieved by a combination of progressive purchasing and/or gradual replacement with new land uses which are not sensitive to airport noise. Other options might include non-statutory methods such as incremental insulation of properties. This could include direct or indirect payments by WIAL to private landowners. In Mr Daysh's view the most difficult factor to establish is equity since the large majority of existing landowners have bought properties in the area in the knowledge of the existence of the airport and its noise effects. If insulation of existing properties was paid for totally by other means, then a private benefit would accrue to property owners who have bought at a lower cost. The council anticipates that this is an issue which can be dealt with through the development of the noise management plan.

In response to the BARNZ and WIAL amended appeals Mr Daysh deposed that labelling activities non-complying has not been used anywhere else in the proposed plan and was a technique not recommended. Firstly, because the council did not consider it equitable in that existing owners have legitimate expectations that they should be able to utilise their land to its potential. Categorising the new residential use within the airnoise boundary of the airport as non-complying may lead to blighting effects with landowners possibly reluctant to carry out even incremental improvements. Secondly, the council's general approach is that the non-complying activity provision of s.105(2)(b) of the Act would only apply in respect of any proposal that does not meet the standards and terms for permitted controlled or discretionary activities. Thirdly, making new residential development non-complying would run counter to the council's position on promoting better utilisation of land in its Urban Containment objective. Fourthly, making new residential development a non-complying activity would also increase administrative costs as the assumption is that such applications would be notified.

If there were standard issues to be resolved to allow adverse affects to be minor in his view it would be a better option to include a standard condition in a permitted activity rule, as recommended by the Hearing Commissioners in requiring construction to a higher specification of noise attenuation. Further, while the council could in theory decline all applications that were non-complying, it was more likely to approve some applications and not others which would be seen to be unfair. It would also be difficult to establish what relative impact to the airport there would be of approving 10 new insulated houses (for example) compared with say 50. If the objective was to provide adequate levels of noise attenuation, then a condition on permitted activities requiring insulation would achieve this satisfactorily.

The council also took a position on the issue of "reverse sensitivity" submitted for the Court's consideration by BARNZ. Mr Daysh identified that a submission by Optoplast Limited had requested that new residential development within Suburban Centres be a discretionary activity instead of permitted. This was based on the argument that legitimate existing industrial or business occupiers may be constrained by the existence of new residential development. The submission was rejected on the basis that the Hearings Committee did not consider that public notification of all development proposals was necessary in Suburban Centres areas. The Committee acknowledged that the boundaries between uses are the points where most conflict can occur, but establishing residential uses in Suburban Centres areas would still need to be at the discretion of the landowner and future occupier. Mr Daysh considered that the same issue that applies to new residential activity in Suburban Centres areas generally applies to new residential activity within the airnoise boundary. He



supported a new condition being imposed in Suburban Centres which mirrors the decision of council in respect of noise insulation in Residential areas within the airnoise boundary. This would place the onus on all residential developers to provide the same levels of noise attenuation within the vicinity of the airport.

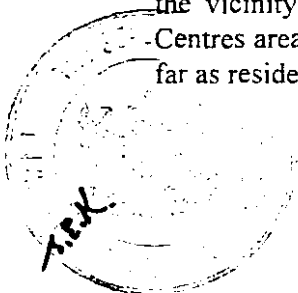
### The WIAL Case

The background to the planning and development of the airport was comprehensively reviewed by Mr D S Gordon, Planning and Development Manager for WIAL. He also detailed operational reforms. He traversed the details of WIAL's liaison with the residential community, the promotion and involvement of the community in respect of noise issues in the proposed noise management plan, and the establishment of the consultative group now known as the Wellington Airport Noise Management Committee which has representatives from all parties. Mr Gordon also analysed the details of the considerable economic benefit the airport brings to the region. Overall, the witness provided a helpful overview to the Court which was confirmed in most of its practical aspects during the site visit undertaken with him and with Mrs Maxine Harris from RANAG.

With respect to the unresolved issue before this Court, WIAL moved to support the BARNZ approach that new residential development in the Suburban Centres area inside the airnoise boundary should be considered a non-complying activity because the area currently contains no significant residential development.

Mr A Aburn, planning consultant to WIAL identified that there are a quite specific set of circumstances revolving around the issue of airport noise and potential residential development within the Suburban Centres areas within the airnoise boundary, which do not exist within the other Suburban Centres areas in the proposed plan. He pointed out that the introduction to the Suburban Centres section of the proposed plan identifies that they cover "the more significant retail and industrial centres in the suburban areas of Wellington City (s.6.1)". These "important" areas provide for a wide range of economic activity essential for the city's growth and development and are not focused on residential use as a consequence. They have their planning roots in the major port, railway or airport functions of the city, or they flow from such (former and current) uses as quarries, abattoirs or gas works. And he identified that the quite specific set of circumstances in this case, revolving around noise issues from the airport area within the airnoise boundary, do not exist in the other Suburban Centres areas and therefore they will not be affected by the proposed changes in the same way (as for example would be major industrial uses in Kaiwharawhara).

And in contrast with the Outer Residential area within the airnoise boundary, which is very substantially developed with few vacant sites, Mr Aburn deposed there is no need to provide for potential renewal in the Suburban Centres area within the airnoise boundary for it currently has no significant residential development. It is therefore not a question of providing the opportunity for further development requiring sustainable management of an existing resource. The witness deposed that it is not good planning to encourage new residential development in Suburban Centres areas where they lie inside the airnoise boundary. As a result it was his conclusion that new residential development should not be given any encouragement to locate there - which a proposed discretionary (unrestricted) status would do. And he concluded the council's stance regarding the need to retain the consistency of district plan provisions is (in effect) not strong enough to potentially allow a significant additional number of residential dwelling units in those areas where presently residential dwellings are not a feature, given the history of airport noise and its impact on residential amenities in the vicinity. His opinion, which supported that of BARNZ, was that these identified Suburban Centres areas within the airnoise boundary may be seen as equivalent to a "greenfields" situation in so far as residential development is concerned.



Evidence was also tabled by Mr M J Hunt, noise consultant to WIAL and Mr G Andrews, consultant economist.

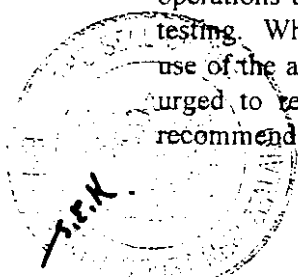
### The BARNZ Case

The case for BARNZ was outlined in submissions by its counsel, Mr Nolan. He identified that because the Wellington International Airport is part of both the domestic and international airline networks, the implications of the provisions of the proposed plan extend far beyond this city to the whole of the regional and national economy. Consequently we were urged to take a more direct focus on the significance of the airport resource to these economies than did the council. And we were urged to make proper allowance for the potential adverse effects on the airport and its users from a further increase in residential activity in close proximity. It was submitted that the sustainable management of the airport requires any local adverse issues to be considered along with the positive local, national and international benefits which accrue from the airport's activities. The example was given that there is little point in the council protecting the airnoise boundary around its airport if domestic flights from Christchurch to Wellington are constrained by the council failing to adequately protect land use around the airport. Accordingly, it was put to us that the proposed plan needs to contain provisions which promote sustainable management from that broad perspective and accordingly appropriate land use controls must be an integral part of this. It was the evidence of one of the BARNZ witnesses that the proposed plan provisions in respect of the airport was sending the wrong signals; that it was one sided in favour of the residents only.

We were invited to consider also that just because BARNZ agreed to discretionary activity status for new residential uses in the Residential zone, this should not be taken as any indication the same provision would be appropriate for residential activities at other airports in New Zealand or the residential activities within the airnoise boundary in the Suburban Centres zone in Wellington. Discretionary activity status would mean the district plan sees the relationship between the residents and the airport as "neutral" - the type of activity may or may not be suitable and will depend on individual scrutiny. Either that, or the district plan sees the generic use (residential development) as generally acceptable in those zones, but not necessarily all manifestations of that use on all sites in the zone. As a result the non-complying activity status is the stronger control which is needed. Whilst it may be acknowledged that the proximity of residential dwellings to the Wellington airport is somewhat unique, BARNZ was of the opinion there are no special local circumstances applying to the Suburban Centres zone which would require the same approach. It was submitted that the area must be seen as primarily an area set aside for commercial and industrial activities with minimal existing intrusion of housing; for all practical purposes it is as much a "greenfield" situation as exists in some other airports where rural land is located nearby. Although there is little existing housing, it is the zone which has by far the greater potential for multi-unit development as former industrial land is vacated.

We were advised that while BARNZ had initially seen advantages in the prohibited activity approach to residential use at other airports, it has moved to a considerable compromise in Wellington accepting a mixture of permitted and discretionary activity status for new housing in the Residential zone which will now allow some increase in housing stock but a certain degree of control over activities. It was submitted that the proposed plan should be upfront indicating that new housing is not appropriate and should discourage its promotion by allocating it a non-complying status.

Counsel also submitted it is not enough to avoid adverse effects on the residents by limiting aircraft operations to  $L_{dn}$  65 dBA at the airnoise boundary and by controlling APUs and GPUs and engine testing. What is also required is proper land use planning to recognise and provide for the ongoing use of the airport and to avoid potential adverse effects of other uses on the airport itself. We were urged to remember that the need for consistency is one of the reasons that led to NZS 6805 recommending a two-handed approach to the issue of airport noise - i.e. controls on airport noise but



also controls on land uses. Thus non-complying status is essential to achieve these effects. It was submitted that BARNZ's members have done everything that could be expected of them. They are operating Chapter 3 compliant aircraft through Wellington, years ahead of international requirements and they have accepted the wide range of airport noise controls in the proposed plan. However, these need to be complimented by land use controls in the form of non-complying activity status for new housing in the Suburban areas zone.

Counsel then analysed the BARNZ proposed approach to the Suburban Centres zone in terms of the purpose of the Act emphasising the need to avoid, remedy or mitigating any adverse effects of activities around the airport on the use of the airport. In this regard the issue of "reverse sensitivity" was raised as an issue for debate, that is, the effects sensitive activities can have on other uses in their vicinity, particularly by leading to restraints on airport activities. Citing a number of cases recently decided on the issue counsel submitted that it is settled law that the adverse effects of potentially incompatible uses should be avoided, remedied or mitigated where they would be likely to place restrictions on, or inevitably come into conflict with, the use of other resources.

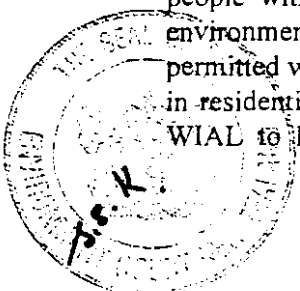
Evidence for BARNZ was given by Mr D S Park - former Manager Flight Operations for Air New Zealand National and closely involved in the formation of NZS 6805 and who represented the company on the Environment Task Force (ENTAF) of the International Air Transport Association (IATA); Mr C W Day - Marshall Day Associates, acoustic consultant; Mr I R Brown - MacGregor and Co consultant in Transport Economics; Mr R Batty - planning consultant. Evidence was tabled from Mr W W L J Bourke - Manager, Aircraft Development and Performance Engineering for Qantas Airways Limited Australia and Mr J H Webb, Executive Director of BARNZ.

### The Remaining Issues

There are two main resource management issues in respect of airport noise that remain to be addressed by the appeals by BARNZ and WIAL. It was put to us that the first is to ensure that appropriate methods are in place which balance the needs of the airport, and the future legitimate expectations of adjoining landowners and occupiers. The second is to maintain the economic viability of the airport while safeguarding the health and amenity of residents of surrounding areas and avoiding, remedying or mitigating adverse effects.

In essence what WIAL and BARNZ, and the witnesses supporting them were saying is the noise environment in the vicinity of the airport is undesirable for residential use. It is not practicable to ameliorate this external noise environment further, therefore new residential use should be firmly discouraged within the airnoise boundary. More residents will add to the agitation for reduced airport activity, something that WIAL and BARNZ know is not possible now or in the future. It is alleged that much time and expense will be taken up dealing with anticipated agitation. The Suburban Centres zone contains few examples of residential use at present but the potential appears to be considerable. Residential use in these zones should be discouraged preferably by prohibition but as a concession a non-complying rule would be acceptable. Mr Batty's evidence underlines this view and he was of the opinion that a discretionary rule under which the council could require noise insulation in new properties would not adequately deal with the situation.

At the outset of the hearing we identified an inherent dichotomy in the council's case which caused us concern. Mr Mitchell for the council acknowledged that it was generally accepted that the prolonged exposure to the noise levels which will typically occur within the airnoise boundary, is unhealthy for people with noise sensitivities and for that reason the area inside it was not a good residential environment. But in spite of this approach the council had allowed new residential activities to be permitted within the airnoise boundary subject to only minor qualifications and a noise insulation rule in residential areas. In addition, there appeared to be no mechanism available to either BARNZ or WIAL to have some input into the resource use application process itself whereby they could



challenge any residential proposals that might concern them. We queried whether this was appropriate planning for the airport.

The proposed plan recognises the airport as the hub of New Zealand's air transport system and is its busiest domestic airport. It also recognises that the international trans-Tasman flights may increase in frequency and that the airport also provides a major arrival and departure point for cargo (Part 10 s.10.1). The Airport Precinct zone includes some objectives relating to both the efficiency of the airport's operations and also to the need to protect amenities of areas surrounding the precinct from adverse environmental effects. There were, until these hearings began, no equivalent policies in either the Residential or Suburban Centres zones except in the explanatory statement in the revised provisions.

The concession by the council, BARNZ and WIAL, as evidenced by the filed consent orders requiring new residential activities for multi unit developments in the Residential zones to be processed as discretionary (unrestricted) activity applications went some way to meet our concerns; as did the requirement for insulation in all new dwellings. It remained to be seen whether the proposed amendments now accepted by council would achieve the same effects for BARNZ and WIAL in respect of all new residential developments in the Suburban Centres within the same airnoise boundary. This was to involve a close scrutiny of the way the plan's provisions (objectives, policies, rules) were constructed and a detailed analysis of the issues raised by the parties.

**1. Projected Increase of New Residential Development within the Airnoise Boundary of the Suburban Centres Zone**

There are two aspects to the BARNZ and WIAL appeals - the effects on those companies of new residential use in the Suburban Centres Zone within the airnoise boundary and the effects of aircraft movements on any residents locating within the airnoise boundary within that zone.

Mr Daysh told the Court that NZS 6805 identifies that residents of properties within the  $L_{dn}$  75 dBA contour could suffer adverse effects in terms of health effects and he identified that between 65 and 75 dBA there is a loss of amenity which becomes more pronounced the closer the residents move to the 75 dBA contour, so the effects on any new residential development are relatively clear cut. Mr Batty deposed that the present airport's operations are already restricted during night time hours as a result of potential noise effects on the surrounding areas.

Discretionary activity status does not meet the concerns of BARNZ or WIAL. They considered residential activity needs to be actively discouraged in the area. Mr Brown for BARNZ made it clear that there has been a history of complaints from residents, that is common with many other airports, and there is no reason to expect anything other than ongoing residential pressure against intrusive noise to increase in the future. Whilst the past history of complaints have been sheeted home to the operation of the 737 - 200 hush-kitted aircraft, Mr Bornholdt noted that even with the introduction of the 737-300 noise levels in the distant future the  $L_{dn}$  level will be 3 dBA  $L_{dn}$  above present daily levels so therefore they are going up, not down. Mr Hegley acknowledged that 30 houses are within the 75 dBA contour on the western side of the airport.

It is necessary to examine first of all how extensive any new residential development might be in the Suburban Centres zone within the airnoise boundary. The evidence established that Suburban Centres land close to the airport is generally occupied with existing commercial and in some cases very substantial existing industrial buildings. Mr Gordon for WIAL identified that whilst land acquisition particularly on the eastern side of the airport had resolved much of the residents' concerns, tensions still exist in that vicinity; overall however, WIAL had experienced very little complaint from residents west of the runway.

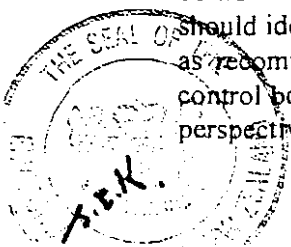


The capacity for new development within Suburban Centres area within the airnoise boundary was discussed at length. According to Mr Daysh there are approximately 660 existing houses within the total airnoise boundary. In cross-examination by Mr Nolan, Mr Daysh acknowledged that 49 additional new houses have come into the area since 1993 - and of those, 19 very recently. He estimated 40-60 new houses might establish in the Residential zone in the future, but had not done a specific study on the Suburban Centres zone. He acknowledged however that whilst the historical increase in dwelling numbers around the airport was small, under the proposed district plan there would be an expectation that this could rise through some development in the Suburban Centres area. In further questioning Mr Daysh identified the potential for a further 30 houses in the Suburban Centres zone within the airnoise boundary but this assessment was based on a number of variables such as the market, different site characteristics, and speculation about housing types and numbers. He made the point that in the Eastern Suburbs residential land is a relatively scarce resource. The council would be obliged to weigh up competing objectives in respect of promoting urban containment and maximisation of the potential of land to be used - as against exposing new residential occupiers to high noise levels.

Mr Batty for BARNZ was of the opinion that the city's planners had not appreciated the potentially significant numbers of new houses that could be constructed in the Suburban Centres zone within the airnoise boundary. He was critical of their conclusion that further provisions in the district plan for avoiding any conflicts were not needed because the noise insulation rules were sufficient. He considered that as the majority of houses are of older weatherboard type some can be anticipated to require development during the next 10 year plan period. In his opinion the potential exists for the amalgamation of such sites to produce increased densities of new housing units and therefore essentially more people living in the same area. The witness had observed similar increases in residential densities in Christchurch and he considered a similar potential exists on currently commercially zoned land within the Suburban Centres zone where redevelopment for multi-unit housing may prove an attractive alternative to commercial development in respect of higher overall returns on initial capital investment. Similarly, he deposed people are often attracted to multi-unit areas because the price of smaller dwelling units is competitive with lower density conventional housing. Mr Daysh in questioning by Mr Robinson appeared to agree with this view. He acknowledged it was entirely feasible to amalgamate 2 or 3 lots in the area and build a number of smaller units as had happened elsewhere in the Wellington City.

It was Mr Batty's evidence that so far only 16 existing residential dwellings exist in the Suburban Centres area within the airnoise boundary but after an extensive survey of the area he considered there is potential for 300 additional new houses in the zone now under discussion, with the potential for 280 of these to be on at least three sites in the Suburban Centres zone within the airnoise boundary - on the corners of Cobham Drive and Kemp Street, Cobham Drive and Rongotai Road, and also on Stone Street which were labelled D, E and F, and are described in more detail later in the decision. He considered these three sites were particularly suitable for residential development being flat land. He concluded that there is currently nothing in the marketplace to prevent such redevelopment and to illustrate the point he indicated that some 30 new houses have been built at Tahurangi Street in the Suburban Centres zone in Miramar recently which in effect straddle the revised airnoise boundary.

In Mr Day's opinion, for BARNZ, the potential for 280 new residences within the Suburban Centres zone within the airnoise boundary is clearly a significant potential increase in land use given that there are currently 380 houses exposed to greater than  $L_{dn}$  65 dBA. He stated (in referring to the measures taken by the airlines in recent years to reduce noise levels) "allowing an additional 300 houses would significantly erode the gains made by the airlines in reducing the number of houses exposed to  $L_{dn}$  65 from 1,800 houses (in 1988) to 400 houses". He stated that, in his opinion, land use planning rules should ideally be included for areas inside an outer control boundary and inside the airnoise boundary as recommended in the NZS 6805. He made the point that in the Wellington situation an outer control boundary is not now sought and that it was important to keep this aspect of the NZS 6805 in perspective, as the relief now sought by BARNZ is modest by comparison with the recommendations



in the NZS 6805. He stated that the two reasons given for not including land use restrictions have been that it is politically unpalatable to put such controls on land and in any event there is only minimal potential for new residential development within the airport area. In Mr Day's opinion the NZS 6805 concept is sensible and it is not appropriate to allow even a small number of new residential developments within the airnoise boundary if at all avoidable. Mr Day used as an example the fact that if it is sensible planning to prevent a nominal 30 new families from building in an area exposed greater than 65  $L_{dn}$  dBA at Christchurch Airport, why should 30 new families be allowed to move into the same noise environment at Wellington? He considered that it was "high time" sensible land use planning was implemented around Wellington Airport. To this end, new noise sensitive uses within the airnoise boundary should either be prohibited in accordance with NZS 6805, or, at least, made non-complying activities.

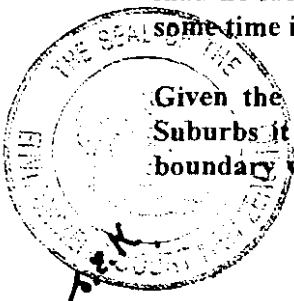
### *Discussion*

In our evaluation of these issues we see that currently within the Suburban Centres zone, as a matter of council policy, the widest range of activities is permitted. If there is a restriction applied to the zone within the airnoise boundary it would limit the range of activities which could be undertaken within it although we acknowledge that excluding residential use would in no way limit the range of other permitted activities. In the Residential zone, multi-unit residential developments are currently subject to yard and coverage restrictions and other restrictions imposed under the consent orders filed. Multi-unit residential developments are not so restricted in the Suburban Centres zone however and the maximum height may be up to 12 metres and there is no rule to restrict density. Much would depend therefore upon relative market demand for either commercial or residential properties at the time a site is committed for redevelopment if such developments are not constrained in the way the BARNZ and WIAL suggest.

The Court questioned Mr Styles on the interest shown in industrial and commercial properties within the airnoise boundary of the Suburban Centres zone. He stated that most of the industrial/commercial properties were tenanted and there was one particular vacant area on Stone Street where film studios may be being negotiated. He also stated that in the last three years there had been no proposal to put residential housing in the Suburban Centres areas in question, although at the same time there had been around 500 units proposed in the Central City. He stated if one was looking at where residential development was most likely to happen, one would not bet on a Suburban Centre area next to the airport.

In questioning of Mr Daysh by the Court it emerged that in one recent meeting with residents over the Airspace Designation very few had expressed a desire to move away from the area. It also emerged from the evidence and cross-examination that the residential dwellings in the Rongotai and Miramar suburbs close to the airport were on the whole well maintained or renovated, so on first analysis this is not a situation where the residents appear either reluctant to live or anxious to leave as a noise nuisance area. We were certainly not given any evidence to the contrary. Other evidence from the council indicated the median house sales for Kilbirnie, Lyall Bay and Rongotai is currently rather lower than other Wellington suburbs so that may be part of the residential attraction to the area. And indeed the fact that a group of some 30 new houses have been built in the Suburban Centres area bordering the airnoise boundary since the new district plan was notified, tends to confirm Mr Batty's suggestion that at least some of the land he identified within the airnoise boundary could be developed for residential purposes at some time in the future.

Given the policy of urban containment and the shortage of residential land in the Eastern Suburbs it should not be assumed that commercial/industrial zoned land within the airnoise boundary will not be used for residential purposes. As Mr Mitchell pointed out, in the 1990s





there is nothing at all unusual about the conversion of industrial buildings to other uses including residential in any of the major cities nor is there anything unusual about buildings being cleared off sites to be replaced with new buildings with the same or different activities such as residential.

Mr Batty's Area D is an area of open space between Cobham Drive and Kemp Street. While it is exposed to the wind and a noisy road, it also has views to the harbour and there are no buildings on the site other than a toilet block. It could be a prime candidate for multi-unit residential development.

Area E is located to the east of Troy Street, close to the runway. It is flat land with partly vacant buildings and industrial uses on other parts. It appears to be on the market as an industrial development site. While it is close to residential land, the area's proximity to the runway, and current industrial use mean it is unlikely to be used for residential development.

Area F in Miramar has had commercial and industrial development for a long time. Its soil has, in part, been polluted by gasworks operation and by paint manufacturing operations. It is still covered for the most part by commercial buildings. Section 7.4 sets out the provisions for Discretionary Activities (Unrestricted) in the Suburban Centres zone and section 7.4.3 sets out Assessment Criteria for the use of contaminated sites. It may be assumed that residential development is unlikely for some time in the future, as no evidence to the contrary was brought forward.

We concluded there may well be potential for further residential development within the airnoise boundary in the Suburban Centres zone although we doubt whether it is likely to be as extensive within the planning period as BARNZ has predicted.

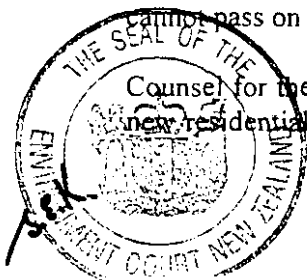
If such future residential dwellings are subject to the same assessment criteria as similar dwellings will now be in the Residential zone, we have to ask, as did Mr Mitchell, why would they have greater potential effect on the airport?

## 2. Costs and Benefits

It is clear that a s.32 analysis was carried out by the council, and this process itself was not challenged in any of the references. The value to the Court of this cost and benefit analysis lies in the substance of the evidence as it relates to the remaining issue now before the Court. The bulk of the council's evidence on costs and benefits focussed on residential development within the airnoise boundary as a whole, due to it being prepared and presented to the Court prior to the draft consent orders being agreed upon. It also did not look in depth at the new BARNZ proposal of making residential activity a non-complying activity, as opposed to prohibited. Therefore, we have set out below a brief summary of the costs and benefits evidence which relates to the issue now before the Court.

The council's general approach was that the environmental costs of airport noise should be borne by the airlines as they cause the adverse effects and profit from the activity. It was considered WIAL too may carry some of the costs but that organisation at the end of the day will recover these and still be a successful business. The council submitted that if a cost is imposed on the residents through an effective inability to use land for which there is a market demand these costs are less easily recoverable. They can be discounted through cheaper property prices per new entrants to the area or indirectly through the share of the overall economic benefit that the airport brings, but the residents cannot pass on the costs.

Counsel for the council submitted that the options of prohibited activity or non-complying status for new residential developments on the existing properties (which could include extensions to existing



houses) both impose significant penalties on the current property owners. If people wish to carry out new residential developments within the airnoise boundary they should be free to do so, subject to insulation requirements.

Mr Mitchell hypothesised that WIAL could designate all land within the airnoise boundary and thereby exercise complete control over the development. The cost then becomes WIAL's and not the landowners. He submitted that the existence of a mechanism such as designation in the Act under which WIAL and its users could obtain that benefit and pay for it should be a relevant consideration. Meanwhile we were told the council placed considerable emphasis on the noise management plan as a means of addressing airport noise including, as it does the acquisition of residences (within the  $L_{dn}$  75 dBA contour), noise mitigation programmes, differential landing charges on noise, and restructuring ground operation procedures.

In terms of a s.32 costs and benefits analysis, a number of options were looked at by the council. Mr Styles identified the key costs and benefits as:

- environmental costs of airport activities (adverse effects of airport noise on the health and amenity of the residents);
- compliance costs (costs incurred by those complying with rules proposed in the district plan);
- economic benefits to the city and region of the airport's activities.

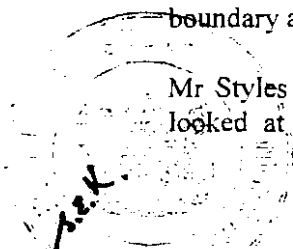
In order to calculate the environmental costs of airport activities Mr Styles adopted two methods which had been recommended in an Economic and Environmental Impact Report in 1990 from McGregor and Company, W D Scott, Deloitte, and Hegley Acoustic Consultants ("the McGregor Report"). The first method was in terms of depreciation of property prices attributable to the change in noise exposure. The second was in terms of the expenditure required to satisfactorily insulate affected dwellings. Mr Styles noted that no system of assessment was perfect because one is dealing with non-market effects for which there are, by definition, no prices.

With respect to property price depreciation he followed the methodology from the report by adopting a representative depreciation of 0.5 percent per dBA change in noise exposure from  $L_{dn}$  60 to  $L_{dn}$  65, rising to 0.8 percent per dBA change in noise exposure above  $L_{dn}$  75. He noted that the OECD recommends using the 0.5 percent per dBA change. The total depreciation, thus calculated, amounts to 2.5 percent for a house exposed to  $L_{dn}$  65; 5.5 percent for a house exposed to  $L_{dn}$  70, and 9 percent for a house exposed to  $L_{dn}$  75.

Mr Styles considered that an additional factor to be considered is the "inertia cost", which describes the situation where people feel trapped by the high cost of shifting away from an area when they have miscalculated their tolerance to the noise. In the McGregor Report the inertia cost was calculated at the same amount as the property price depreciation value. However the witness preferred a lower level, taking it to be 50 percent of the depreciation value, making the estimate of environmental cost between one and one and a half times property price depreciation. Therefore, total dependency for a house exposed to  $L_{dn}$  65 dBA is 3.75 and for a house exposed to  $L_{dn}$  70 dBA it is 7.75 percent. Estimates from real estate professionals of the house price depreciation of affected dwellings due to airport exposure indicated a figure of 5-10 percent. Their findings therefore are consistent with and support the methodology used by Mr Styles.

The other methodology used was calculation of the insulation required to attenuate noise to acceptable levels but those calculations included all residential dwellings within the airnoise boundary and was not strictly relevant to the amended proceedings now before the Court.

Mr Styles went on to consider land use controls within the airnoise boundary. In this respect he looked at three specific options in terms of district plan rules, although none of these options



adequately reflected the proposal BARNZ put before the Court. The aggregate figures presented by him relating to the costs and benefits of the options were based on the whole area within the airnoise boundary. Given that the Court is now only concerned with the Suburban Centres area within the airnoise boundary, these figures too are not strictly relevant.

Mr Styles identified an environmental benefit from requiring appropriate insulation for new residences constructed within the airnoise boundary. The additional costs of construction would be 8 to 9 percent for houses between the  $L_{dn}$  70 contour and the airnoise boundary. In cross-examination by Mr Nolan, Mr Styles established that for new dwellings the costs of insulation could be calculated at \$1,800 per dwelling. He concluded the insulation requirement for new residential dwellings inside the airnoise boundary was the best practicable option in the circumstances.

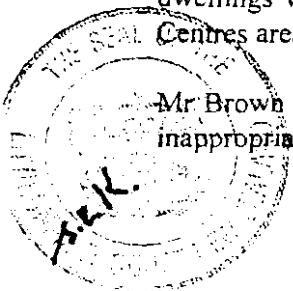
At the end of his evidence Mr Styles considered the option of non-complying status for new residential activities within the airnoise boundary now sought by BARNZ & WIAL. His analysis was predicated upon the fact that he was expecting a maximum of 30 or so new dwellings in the area that he was assessing. In his view, non-complying status would entail quite high administrative costs, and could only potentially have two practical outcomes for applicants, being either approval or refusal of applications. If it was refusal, then this would be tacit prohibition which would have the same negative impacts such as loss of amenity value and compliance costs. If the new dwellings were approved with a requirement for insulation, then this was no different from having a permitted activity with a rule requiring compliance with respect to insulation. Thus permitted activity status would be "more efficient" by avoiding the additional costs of administration of non-complying activities.

Mr Styles concluded that the proposed use of the noise management plan and the use of NZS 6805 as the basis for the plan rules, with the addition of a curfew and the ban on non-chapter 3 aircraft were the best options in terms of costs and benefits.

In cross-examination, Mr Nolan established that Mr Styles had applied a depreciation rate to the cost of housing when the noise level was not expect to change overall in the next decade. Mr Nolan put to Mr Styles the benefits from the BARNZ non-complying option that would accrue to the airport, to the airport users, and to those administering the process, and that these benefits were not brought to the Court's attention by his evidence. Such benefits included avoiding adverse amenity impacts on residents, avoiding economic costs to the region from reduced airport activity, and avoiding compliance costs to the airlines and the public. There were also benefits to the Environment Court and the council from having full participation in resource consent hearings due to the notification of non-complying activities. Mr Styles maintained that such benefits were very difficult to quantify but agreed that they would be benefits. Mr Nolan put to Mr Styles that there was potential for around 300 new residents within the airnoise boundary; that residents seek constraints on the airport and that the more residents there are the more complaints and the more pressure is put on the airport: therefore there is a benefit to BARNZ in limiting that pressure. Mr Styles agreed. In re-examination Mr Styles was given the opportunity to point out that the benefits referred to by Mr Nolan would not be huge, and that the three main costs and benefits, as he saw them, were explored in his evidence.

For BARNZ, Mr Brown, consultant to McGregor and Company aviation consultants, was asked to examine Mr Styles' application of the McGregor Report methodology and comment on the conclusions regarding the appropriateness of land use controls on residential buildings within the proposed airnoise boundary. He worked on the basis that Mr Batty's evidence had shown 316 new dwellings were possible within the airnoise boundary, of which 280 could be within the Suburban Centres area.

Mr Brown regarded Mr Styles' interpretation and use of methodology from the McGregor report as inappropriate because in the report it was used to assess the costs and benefits associated with a



change in noise levels, whereas the relevant issue here is the costs and benefits associated with any change in the number of dwellings exposed to a constant level of noise. Mr Brown queried whether any loss in property value arising from non-complying activity status for new residential uses in Suburban Centres area within the airnoise boundary is likely to be significant at all. Almost no residential dwellings currently exist in the zone (16 properties) and residential use is in fact just one of a wide range of activities provided for.

Mr Brown concluded that the focus should be on the costs and benefits arising from permitting or not permitting new residential activities within the airnoise boundary. Mr Brown's costs included those of the extra complaints arising from the in-coming residents and more pressure for further constraints on the airport - these eventually imposing significant costs on the airport and on the New Zealand and Wellington economy. He stated, for example, that over 10 years a 1 percent reduction in passenger numbers would amount to a \$37 million reduction in spending in the Wellington region. Thus constraints on the airport would not need to be dramatic before they began to cause significant economic effects within the region.

In terms of the compliance costs associated with the BARNZ proposal, Mr Brown stated that the \$500 per application, as estimated by Mr Styles, is also not significant. Even if one assumed a worst case scenario of 280 applications, the potential compliance costs would be only \$140,000 for all applications. This would seem small in comparison to the economic costs to BARNZ that may arise from not restricting new housing development in the Suburban Centres area within the airnoise boundary. Furthermore, where an individual applicant can establish a special case and obtains consent as a non-complying activity, then the application fee may be the only economic cost. Mr Brown was happy to recommend non-complying status based on the economic evidence.

Mr Daysh had acknowledged that if the land is subdivided under the proposed plan within the airnoise boundary, individual houses or any 2 unit developments could be built in the Suburban Centres zone as a permitted activity, subject only to bulk and location requirements. He agreed the possibility of compulsory acquisition is not desirable, although he noted that some residents have agreed to acquisition in the Residential zone.

Mr Nolan questioned Mr Daysh on the compliance costs of making new housing non-complying within the airnoise boundary. He confirmed that all new housing developments, which comprised three or more units, already required resource consent. Compliance costs would be \$600 if non-notified and \$1,500 if notified. But he confirmed that for total additional compliance costs to be significant, it would mean there would have to be a large number of applications for new development.

On re-examination Mr Mitchell asked Mr Daysh about the effect the BARNZ control would have on sustainability. Mr Daysh's answer related to Residential areas, where permitted uses are fewer than in Suburban Centres areas. However, his concerns about uncertainty for property owners, and possible blight or disinvestment are worth noting as being applicable to Suburban Centres areas to some extent. This is particularly so, given the scarcity of flat land in Wellington and the policy of urban containment.

WIAL's point of view was comprehensively presented by Mr Gordon. He deposed the passenger traffic through the airport is projected to grow at 6 percent per annum until the year 2000. If growth were to continue beyond that, it is expected to double by 2005 to 2006. The 1994 BERL study "Economic Impact of Wellington International Airport" (updated in 1997) stated that aviation services have a significant influence on Wellington's future in maintaining its current economic and commercial base and supporting growth in new directions. Airport activities as a whole, including all of the businesses providing services necessary or complimentary to airport operations, is estimated to have an annual output of \$137.7 million and employment of 1,246 full time equivalents. Also the

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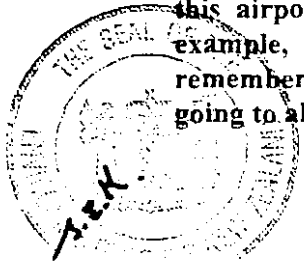
economic impact of the airport is much larger than its direct output as its activities generate a considerable flow-on effect. According to the report the airport is responsible for direct and indirect benefits to the city and region in the order of \$276 million per year. WIAL's conclusion is that the airport is a major strategic asset for Wellington region and a significant direct contributor to the local economy. Any constraints on airport operations therefore become constraints on the region's development.

### *Discussion*

We found the council's analysis of key costs and benefits of restricting residential activity within the airnoise boundary of the Suburban Centres area flawed in some respects. Its witness applied a blanket depreciation rate to house prices when the noise levels at the airport are actually likely to be lowered in the short term with a slight rise towards the end of the planning period as seen in a graph produced by Mr Hegley. Mr Hegley's statement on the meaning of noise terms, which was read by agreement by Mr Day, explained how the addition of two noise sources of 60 dBA each results in a noise level of 63 dBA. This increase of 3 dBA Mr Hegley considered as just perceptible. Mr Day stated on reading Mr Hegley's statement that there was some difference of opinion as to whether 3 dBA  $L_{dn}$  would in fact be perceptible. Mr Bornholdt was of the opinion that a rise of 3 dBA  $L_{dn}$  is possible in the distant future but even this on Mr Day's evidence would be scarcely perceptible. Also, from Figure 2 of Mr Day's revised evidence (attached as Appendix I) the increase to the year 2020 is only about 1 dBA  $L_{dn}$  above present levels.

As a result of the council's concessions with the amended proposals now before us compliance costs are basically the difference between processing a restricted or unrestricted discretionary activity and that of a non-complying one. These costs differences would be minor. In any event the depreciation costs associated with the restriction upon new housing should not be significant. Land may be used for commercial offices and small scale non-intrusive manufacturing within the existing assessment criteria for the zone. The evidence from WIAL satisfactorily demonstrated that commercial activities around the airport are quite likely to increase creating a demand for such land use.

As to the economic costs to BARNZ of future complaints, first of all as we have indicated we consider the number of residents who may reside in the Suburban Centre zones is not likely to be nearly as great as BARNZ projects. But 16 residential dwellings currently exist in the zone as of right anyway. Short of prohibiting any residential activity in the zone in question, which is no longer an issue in this case, the potential for complaint from these residents exists in any event - as it would potentially for residents who gain access to the zone on a non-complying application. Further, the new controls on noise generation need re-emphasis for their potential to alter the noise environment be it in the Airport Precinct or both the Residential and Suburban Centres zones within the airnoise boundary. And thirdly, Mr Gordon for WIAL set out the limitations of this site which dictate the type of aviation possible in the planning period in question. WIAL regards itself as an Australasian "domestic aerodrome" and is developing its terminal facilities accordingly. The reason for this is runway length, and the prohibitive cost of creating further runway extending out into Cook Strait is the key to its restricted development. Those factors constrain the variety and performance of aircraft that use the airport and the range of direct services to more distant destinations. The airport's performance is also limited by the high terrain to the sides of the approaches and takeoff clearance surfaces and by the hills to the north, namely the Newlands Ridge. Thus there are a number of permanent features to this airport which are not going to allow much change to its existing services unlike, for example, the airports at Auckland and Christchurch. This analysis is very important to remember particularly with reference to the location of the airnoise boundary which is not going to alter significantly in the next planning period.



Thus there is no infrastructure proposed which would expose areas to aircraft noise where this is not already an issue, or new runways or procedures being developed which would expose new areas to noise where this is not previously a question (such as in Sydney). The procedures and controls now proposed ensure, as some of the evidence indicated, that noise emissions are to be kept within reasonable limits. And with a noise management plan required (now common we understand for overseas airports) as a necessary adjunct to the existing legal controls (such as the s.16 duty on noise emitters to adopt the best practicable option to control noise), any future concerns of residents may now be channelled more effectively through this device. What is more, Map 39 which delineates the proposed airnoise boundary, is an effective planning tool which will serve as a guide to future residential developers as to what noise emissions are predictable within the boundary, whilst the plan provisions will predict how they are to be controlled.

What we conclude from this analysis is that the airport, the airlines, the residents and the council are now in a position where they may all have a part to play in sustainably managing what is a very significant resource to the region in a way not previously considered. It is our conclusion that this is the appropriate way of dealing with the effects of airport noise - not through an effective prohibition on any further residential use.

What BARNZ and WIAL are implying by their amended challenges to extended residential use in the Suburban Centres zone is that the planning for this airport with its unique characteristics is not going to work - an implication we do not accept. By their signatures on the draft consent orders the parties have effectively conceded they will work for Residential areas within the airnoise boundary, so if there, why not in the Suburban Centres areas?

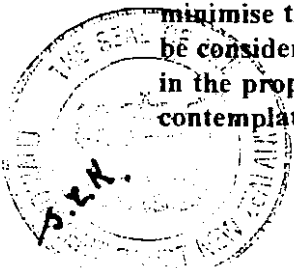
### 3. The Greenfield Aspect

The proposed plan notes that the Suburban Centres zone applies to the more significant retail and industrial centres in the suburban areas of Wellington City (Section 6.1). It is not therefore primarily intended for residential activity and currently there is little existing housing within the zone. For this reason it was seen by BARNZ and WIAL to be a greenfield situation. Non-complying status would therefore be a clear signal that residential development has not yet taken over and is indeed not intended.

#### *Discussion*

We do not accept the identification of the Suburban Centres area within the airnoise boundary to be a greenfield situation by comparison with that of the Residential zone. We accept Mr Mitchell's submission that it derives from an attempt to compare the current situation with airports developed in a genuine greenfield (rural) situation and which then come under threat from urban sprawl. The Suburban Centres areas within the airnoise boundary are not greenfields. They are, with the exception of Cobham Park, fully developed. The three sites identified by Mr Batty and discussed earlier, with the exception of the open space adjacent to Cobham Park, have only become available through the decommissioning of industrial plant and are immediately proximate to Residential areas.

In Objectives 4.2.4 and Policies 4.2.4.2 relating to the residential areas of the proposed plan, the word "greenfield" is used in relation to the subdivision of existing sites where the council seeks to minimise the peripheral expansion of urban development. A "greenfield" subdivision will only be considered as part of a district plan change to extend the urban area. Thus the term as used in the proposed plan is the converse of what the BARNZ and WIAL submissions and evidence contemplate.



We consider that what BARNZ and WIAL are trying to achieve through the tacit prohibition of residential use by giving it a non-complying status, is to begin to effectively re-zone the area through that device and thus create the beginnings of a de facto buffer zone. Neither party appealed the zoning of the areas in question. We do not consider the appellants' approach at all appropriate because there are already existing residential areas patchworked amongst the areas identified "D, E and F" in Mr Batty's evidence and existing legitimate residential uses in the Suburban Centres zone. The appellants' approach would result in further planning fragmentation of the land resource rather than integrated management of its use. If WIAL wishes to achieve this result it should designate the areas for airport use - but this appears not to have been contemplated.

#### 4. The Question of Reverse Sensitivity

BARNZ urged us to consider the question of "reverse sensitivity" under s.5(2)(c). It was submitted that an increased population close to an airport such as Mr Batty suggests is likely to cause future conflicts and adverse effects with the inevitable consequences that new residents will seek to place restrictions and controls on the airport. It was submitted that it is settled law that the adverse effects of potentially incompatible uses should be avoided, remedied or mitigated when they would be likely to place restrictions on or inevitably conflict with the use of other resources.

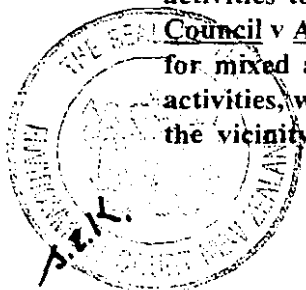
Mr Park pointed out that to efficiently utilise airport facilities and to ensure that the benefits which airports and air commerce provide for the wider community can continue to be derived, it is desirable to place some controls on the type of activities that can take place near an airport so that there can be reasonable co-existence. In particular, this involves placing some restriction on the encroachment of new noise sensitive uses, such as housing, around an airport.

The council's response to this issue was to argue that the use of the term "reverse sensitivity" should not obscure either of two things. First, it is not a term which is either used in the Act or given any particular status. Second, it is no more than a description of a class of effect - the sensitivity of a person quite lawfully creating adverse effects to pressure from people who may be potentially affected by those adverse effects. But, like any other "effect", reverse sensitivity needs to be considered in the context of all effects.

#### *Discussion*

As Mr Mitchell pointed out all the cases referred to by Mr Nolan involve one significant difference to the present. They all concern the possible entry of potentially sensitive people into an area where they may be affected by existing adverse effects which are not only lawfully created within the area, but for which the area is indeed designed. That is not the case here. It would be if we were looking at residential activity within the Airport Precinct, or within land zoned by WIAL. But we are not. We are assessing an activity which is generally considered acceptable within the zone (as it is elsewhere in the city), but for the activities in a neighbouring zone. We agree with Mr Mitchell none of the authorities referred to by Mr Nolan advance the proposition that far.

Even if there was support for the application of the reverse sensitivity principle within the Suburban Centres airnoise boundary, that would not necessarily require noise sensitive activities to be given a non-complying or a prohibited activity status. In Auckland Regional Council v Auckland City Council A 10/97 - the Business 5 and 6 zones were specifically designed for mixed and heavy industry. The relief sought by the regional council was that permitted activities, which are likely to be adversely affected by discharges to air from other activities in the vicinity, be reclassified from permitted to controlled or discretionary activities because



heavy industry was seen as a scarce resource needing an environment in which it could function effectively and where public health and safety was not compromised. In that case the regional council did not look to zoning out sensitive issues - but to controlling them effectively. For that reason the Court held that it was acceptable to make provision for reverse sensitivity in these zones but as a discretionary rather than non-complying activity.

We turned to the terms of the consent orders to see if there was anything included in a discretionary (unrestricted) use application applying in the Residential zone within the airnoise boundary to recognise the sensitivity of the airport to residential development and concluded there was. In this case, Assessment Criterion 5.5.6.5 of a discretionary (unrestricted) activity would be of some persuasion in any resource use application. It requires assessment of:

"Whether in the circumstances the development is likely to lead to potential conflict with and adverse effects on airport activities."

We concluded that the inclusion of a similar provision attached to the description of discretionary (unrestricted) activities in the Suburban Centres zone within the airnoise boundary would further assist BARNZ and WIAL - as would the noise insulation rule. We consider reverse sensitivity uses would in that event be more properly accounted for in the proposed plan.

In our opinion there is no need for new residential development to be non-complying in this case. There are numerous caveats now agreed to in the consent orders which can most usefully be adopted as a result of the council's (now) considerable concession on the issue. There are others already existing as a result of the proposed plan's provisions.

##### 5. Noise Management Plan

Mr Gordon deposed that the noise management plan as a result of amendments to 10.2.2.6 will include:

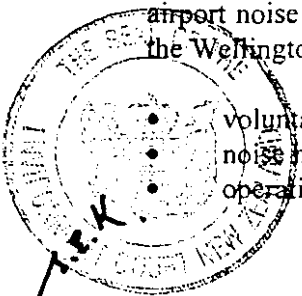
- a statement of noise management objectives and policies;
- details of methods and processes for remedying and mitigating adverse effects of airport noise;
- procedures for monitoring and ongoing review of the plan;
- dispute resolution procedures
- land use zoning and insulation issues

We note he added in "land use zoning" and "insulation" as an oral addition to his evidence-in-chief. We consider this addition important as a result of our findings on the two issues in Part I of this decision (see p 14).

The inclusion of the details of the noise management plan was not seen as appropriate in the district plan itself. Mr Park for BARNZ stated it needs to be a working document able to be changed relatively frequently to take account of ongoing circumstances at the airport. Its inherent feature he deposed must be its flexibility.

It was Mr Styles' evidence that the promotion of the noise management plan as a means of addressing airport noise is a factor in many airports around the world, and that some of the key components of the Wellington plan might be:

- voluntary acquisition of residences (for example within the  $L_{dn}$  75 dBA contour);
- noise mitigation programmes, such as provision of funding for insulation of existing dwellings;
- operational procedures, such as fly friendly programmes;





- ground operation procedures;
- funding issues for the noise management plans programmes;
- differential landing charges based on noise.

He did not comment on these individual components other than to say it is anticipated that some of these and other measures will ultimately be reflected in the noise management plan for Wellington Airport.

### *Discussion*

We agree that to have a document such as this enshrined in the district plan, where it can be only changed by way of a plan change or variation, would work against the whole purpose of having it in the first place. It is a useful tool or other method to assist ongoing noise mitigation at the airport. It reinforces the statement of intent in the plan Enabling People to Meet Their Needs now and for the future, and we see the mechanism or method as part of the intent of the council under Equity to empower the community to care for its environment and influence change.

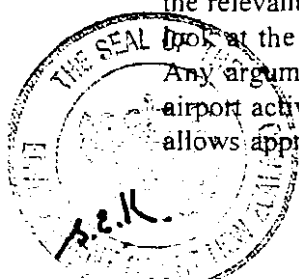
The noise management plan does not replace council's regulatory functions in any way as the rules may be considered to be the best practicable option for setting overall noise controls (as they were not effectively challenged) but the purpose of such a plan is to provide a framework for ongoing discussion; it is not intended for council's powers to be delegated to the Airport Committee.

We agree with the parties it is entirely appropriate in achieving the purposes of the Act for the council to institute such non-regulatory approaches to resolving particular issues such as these on an ongoing basis.

### **6. Non-Complying or Discretionary (Unrestricted) Activities in the Suburban Centres Zone?**

Section 1.8.4 Rules contains a description of how the use of the discretionary activity status is contemplated. The rule types are listed in order of increasing actual or potential adverse effects. And it is stated that improving the way the rules are used can lessen adverse environmental effects. Discretionary (unrestricted) uses are seen as having potentially the most adverse effects and the council's discretion is unrestricted in that regard. Even the development of contaminated sites is given this status where assessment indicates it poses or is likely to pose an immediate or long term hazard to health or the environment, a point of which we took note. Where rules in the plan are contravened the activity proposed is seen as non-complying. Noise rules differ for different locations in the plan.

In order to determine whether the use should be non-complying or discretionary, we turned to an appeal related to an analysis of the issue - Caltex New Zealand Limited v Auckland City Council A 95/97 - which usefully sets out the legal tests for both activities. In determining what constitutes the two categories of use, the Court outlined what is required as to compliance with the provisions of the Act. The question must always be asked: is classification of the activity as non-complying or discretionary necessary in achieving the purpose of the Act, namely sustainable management of the city's physical and natural resources (s.5(2))? And in considering that question, the consent authority has to have regard to the actual and potential effects of the activity on the environment and to decide the relevant classification in order to achieve the objectives and policies of the plan. It is required to look at the primary function of the relevant zone based on the objectives and policies of the plan. Any argument for a discretionary activity will mean the effects of the activity (residential use on airport activities) can be adequately mitigated or avoided and the proposed procedure for assessment allows appropriate examination of applications and an assessment of whether the activity meets the



needs of the local community. There is a need for consistency in the theme running through the plan provisions. If a common theme suggests such an activity would not be suitable then it would be better to have a presumption against it.

The Caltex case related to a plan reference from Caltex which sought to have provisions for service stations as a discretionary activity on sites in the Residential 5, 6 and 7 zones fronting district and regional roads. The council had proposed that the use be non-complying. In its decision the Court disallowed service stations being a discretionary use in the residential zones against the background of the council's examples that some existing service stations exceed limits for noise and light and most have a high visual impact. In addition, the evidence indicated that some of the (failed) attempts to mitigate adverse effects allowed for the extrapolation of the effects on the environment of service stations to those of the future (see page 9 of the decision and in particular footnote 17). The Court held that there was sufficient justification as a result for not providing for service stations in Residential zones so that by default they become non-complying.

An analogy may be made with this case because BARNZ and WIAL are saying noise mitigation measures will never entirely satisfy residents - a position they have taken because in spite of the significant noise reduction measures put in place over recent years, complaints still continue.

#### *Discussion*

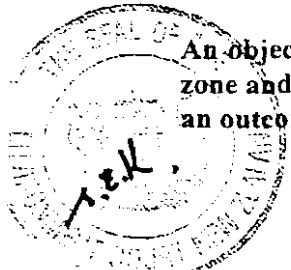
In addition to the Caltex analysis above, as stated in Nugent Consultants v Auckland City Council [1996] NZRMA 481, 484 the following are the guidelines for our inquiry:-

"... a rule in a proposed 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 and 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."

Mr Mitchell submitted that categorising new residential use as non-complying is a "tacit prohibition" of the activity. Mr Daysh endorsed this description and it is accepted as such.

In this plan's provisions there is a requirement for efficiency of use. Under General Principles of Sustainability at section 1.2 the plan requires that renewable and non-renewable resources need to be used efficiently to minimise the effects caused by their use. Under the provision for Finite Resources the plan notes that the City's natural and physical resources (in this case potential land and buildings for residential use) are in limited supply and that we need to make sound choices about how to use them. It records that "equity sustainability" means allowing people to meet their needs and achieve their aspirations now and in the future, and that equity is an essential step in achieving sustainability. And it is recorded that the term includes enabling communities to care for their environment and influence change. In section 1.3 Efficient Resource Use, the plan states that sustainable management requires the city to use its resources in a sustainable manner and the need to achieve a balance between protection and development. In addition, section 1.6 Qualities and Values states that efficiency is a measure of how resources are allocated or used. "Efficiency" is defined in the New Shorter Oxford Dictionary (1993 Edit. p787) as "the ability to accomplish what is intended" and the question may be asked what is intended by the objectives and policies and methods of the Suburban Centres zone?

An objective relates to the specific or general outcome desired by the council in relation to the zone and in relation to Wellington City in general. A policy is a generic means of achieving such an outcome. A method (rule in this case) is the means by which it is implemented.



Bearing in mind that s.5 of the Act requires the promotion of sustainable management of the City's resources, we conclude that in terms of the plan's general Objectives 1.6.3, (to promote efficient use) a non-complying activity status for new residential use would not encourage what is intended for Wellington City. Nor are we persuaded that acknowledging existing residential uses in the Suburban Centres zone but requiring new residential uses to be subject to tacit prohibition status achieves the efficiency intended. Nor does it achieve the overall sustainable management of the land inside the airnoise boundary.

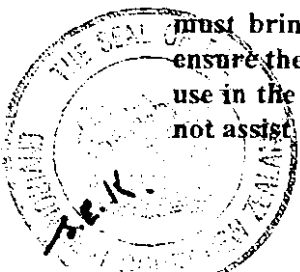
Objective 6.2.1 in the Suburban Centres zone also specifically promotes the efficient use of the land resource. To achieve this outcome, Policy 6.2.1.2 of the Suburban Centres zone provides for a wide range activities within it. It appears to have been extrapolated from Specific Issues: SI Containing Urban Development which identifies that the plan works towards general containment of city expansion and the intensification of development within the existing urban centres. A non-complying classification would reflect a negative provision for new residential opportunities and would offend this policy.

As to Policy 6.2.2.3 which requires control of the adverse effects of noise in the Suburban Centres zone, (our emphasis) BARNZ and WIAL are trying to control effects from noise which emanates outside the zone by a tacit prohibition of additions to a use which already exists within it. Policy 6.2.2.3 identifies that higher noise levels are allowed within Suburban Centres in any event, (Mr Hegley identified an L max of 75 dBA) so the council would be faced with effectively imposing a higher standard of use on new residential development in a zone which is already subjected to high noise levels. We are not at all persuaded the appellants' approach is commensurate with the provisions of sustainable (integrated) management.

As to Objective 6.2.9 of the Suburban Centres section which is to promote the development of a safe and healthy city, we note under the Qualities and Values section 1.6.1, a healthy living environment is one that creates a state of wellbeing for all people. In our opinion only consistency and integrated management of the use of land around the airport will assist in creating that state of wellbeing for WIAL, BARNZ and the residents. A tacit prohibition on new residential use will not achieve this outcome. It would send the wrong signals to other residential users within both the Suburban Centres zone and the Residential zone within the airnoise boundary. Such a provision would also create uncertainty as to its relationship with any other related provisions in the plan in respect of airport noise - e.g. Objective 2.2.2 of the Airport Precinct zone which requires protection by BARNZ and WIAL of the amenities of areas surrounding the Precinct from adverse environmental effects. The BARNZ and WIAL approach to new residential use if allowed within the Suburban Centres zone within the airnoise boundary will give residents no confidence as to what is to be achieved in respect of noise reduction, not only in the next ten years, but to the year 2020.

Nor would making new residential use a non-complying activity encourage new residential developments to take place within the existing developed parts of the city; nor would the provision (as a tacit prohibition) assist to ensure that new subdivisions were developed on suitable sites, nor would it assist in managing the actual and potential effects of noise pollution in positive terms.

Our conclusion on these issues is that the BARNZ and WIAL proposal fails to achieve the goal of integrated management of the airport's resources, of the airport's noise provisions and the activities in the zones around it. In our view integrated management envisages that the council must bring together all separate but similar parts of the plan to form a consistent whole to ensure the sustainable management of its resources. A non-complying status for new residential use in the Suburban Centres zone within the airnoise boundary would not achieve this. It does not assist in promoting most of the relevant policies and objectives of the plan; it is inconsistent



with others; it is not an efficient use of the land resource; and we concluded that with all the other noise provisions now in place as well as the existence of the noise management plan any adverse effects of residential activities on the airport use may now be adequately avoided, remedied or mitigated.

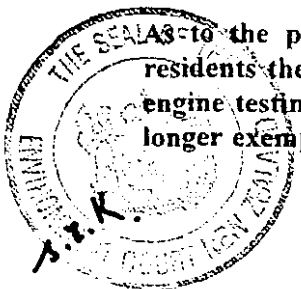
#### 7. RMA Part II Provisions

We turn to the provisions of s.5 and other relevant provisions contained in Part II of the Act which qualify s.5(a),(b), (c).

As part of his submissions on the purpose of the Act, counsel for BARNZ submitted that allowing new housing to proceed in the Suburban Centres zone inside the airnoise boundary, even with insulation, or even being content to consider new houses on their merits as discretionary activities in the area could not be seen as consistent with s.7(b) of the Act, efficient use of the airport resource. In that there is no real alternative to the use of the airport, any additional constraint on its potential would not constitute its efficient use. He submitted that it cannot be left to the market place to restrict new housing in the zone and thereby promote sustainable management of the airport, as Messrs Daysh, Styles and Kirkcaldie (for the council) appeared happy to do. On this basis there would for example be no need to retain the green belt around Christchurch International Airport. Counsel highlighted the fact that we were told by the respondent's witnesses that in recent weeks alone, 19 new units had been consented to inside the airnoise boundary and only a few years ago, 30 were built on its border 49 houses in all. BARNZ considered that such an approach to the Wellington Airport is "non-planning".

The emphasis in these appeals is about the use of potential residential land within the airnoise boundary and its compatibility with the airport itself. We are not sure on what basis the BARNZ submission on "market place" efficiency was based and we searched the evidence in vain to see if any of the BARNZ and WIAL witnesses had specifically analysed economic efficiency as such. There was some planning reference from Mr Batty and a brief comment from Mr Park. But as we understand the term, in the absence of evidence to the contrary, economic efficiency relies on market forces to encourage utilisation of resources most productively. The Court's role is not to compare the efficiency of what the resource is to be used for or compare to what it could be used for. The provision of s.5 of the Act is essentially an "enabling provision" and as such promotes the opportunity for all persons in the community, including the airport and related airport companies to protect and/or develop the area's resources. A council's role under this Act is in defining environmental standards to avoid adverse effects and not in effect allocating resources. Such an approach comes close to reverting to the "wise use" philosophy of the Town and Country Planning Act 1977. Mr Nolan himself considered, as did some of the witnesses, that if the expected growth in airport activities occurs, the land in question may be required for airport related activities, warehousing, courier departments and the like. Mr Hegley for his part stated that people are still prepared to move into the area because they will be aware that the curfew at night means there is a reasonable period when they are able to enjoy undisturbed sleep and he also deposed that some people "simply do not mind the noise". We questioned several of the witnesses about the stability of the residential neighbourhood proximate to the airport and were satisfied by the answers that there was no overt movement away from the area. Our conclusion on this aspect of economic efficiency is that there is likely to be healthy competition for sites for example those that have been identified although as noted only one of these at present (Area D) appears to be possibly suitable for residential use.

As to the provisions of s.7(c) the maintenance and enhancement of amenity values of the residents the general noise environment has improved. New residential use will be insulated, engine testing is proposed to be housed in an acoustic shield building, military aircraft are no longer exempted from the curfew except in emergency situations, and the proposed plan states



that the noise management plan will include a range of issues which can only contribute to an enhancement of the amenity values of the residents as a result of the consultations between RANAG and WIAL and BARNZ and the council. We observe that no evidence was produced by WIAL and BARNZ to indicate sleep disturbance or adverse effects on the health of residents.

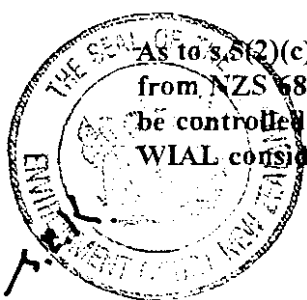
With respect to s.7(f) of the Act, the quality of the airport environment will be enhanced by the provisions of the consent orders and the ability of the parties to participate in the noise management plan. There was evidence also to the effect that the location of the airnoise boundary will shrink within a few years. In addition the discretionary activity (unrestricted) status of new residential building will allow public participation in the resource use applications, and scrutiny by BARNZ and WIAL as to whether any new units would have adverse effects on the operation of the airport. We accept Mr Mitchell's submission that the strong Assessment Criteria, namely criteria 5.4.6.3 and 5.4.6.5, to be considered in determining whether to grant consent and consideration of what conditions to impose, would assist in protecting the operational concerns of BARNZ and WIAL.

As to s.7(g) the finite characteristics of the airport resource and the economic climate which will ensure their viability, we are at all not persuaded that these are under serious threat. Referring to s.16 of the Act, counsel for BARNZ submitted that based on the package of controls now agreed to between the parties, the Court should be satisfied that the best practicable option has been adopted to ensure that emission of noise from aircraft operations at Wellington Airport will not exceed a reasonable level.

In determining what is the best practicable option, it has been found that the best practicable option "is the optimum combination of all the methods available to limit the noise damage to the residents ... to the greatest extent achievable". Auckland Kart Club v Auckland City Council A 124/92 (PT) pp 22 - 23. The noise level now produced by the airport has reduced significantly below historical levels and will remain lower for the foreseeable future. In this regard we take Mr Gordon's point that the Boeing 737:200s appear by the residents to be perceived as being a noise problem, notwithstanding that with hush-kitting they meet Chapter 3 certification requirements. And in fact, as Mr Day deposed, there has been an 8 dBA reduction in noise levels since 1988. As to the nature and locality of the environment concerned, the airport is well located, as directly north and south the aircraft operate over the water where the bulk of the noise is emitted. On the other hand, the remaining area on either side which includes a reasonably large number of houses by comparison with other airports in New Zealand, is the primary reason why the overall range of controls on airport noise at Wellington appears to be stricter than any other airport in the country. We are conscious that the capital and other investments already made in aircraft noise mitigation have been considerable and the ongoing research into noise reduction measures for aircraft worth millions of dollars identified by Mr Park is being reviewed all the time. We are satisfied that the current state of technical knowledge, particularly the fact that major advances of noise reduction have been achieved in recent times, make further significant advances in the planning period unlikely. If it were otherwise, we would not hesitate to identify and take account of them in this decision. But Chapter 3 compliant aircraft are seen as representing the relevant state of technical knowledge for the life of the proposed district plan. We are mindful (and emphasise) that in this regard the evidence indicated that Wellington is several years ahead of many other parts of the world.

From the above we find that particular regard has been had to s.7(f) and (g) provisions.

As to s.8(2)(c) matters, it is our conclusion that by adopting the concept of an airnoise boundary from NZS 6805, the council has already set up an area within which noise sensitive uses are to be controlled satisfactorily particularly in the light of consent orders reached. If BARNZ and WIAL consider the noise provisions and land controls for the Outer Residential zones (some of



which are much closer to the airport than the Suburban Centres areas identified) are now satisfactory, then it stands to reason they are satisfactory for possible future residential development in Suburban Centres areas not as close. We accept the BARNZ and WIAL's position that the council's philosophy in respect of the consistency of the district plan provisions was not strong enough to potentially allow the number of additional residential dwelling units in those areas where presently residential dwellings are not a feature, without some further control. The areas identified are not historically in residential use but are part of a wider locality where there is a history of detracting from residential amenities as a result of airport noise with potential pressure to introduce controls on the airport's operations. There is no argument that in the ideal situation there ought to be a good buffer zone as an investment around a busy airport which excludes noise sensitive issues. Mr Mitchell submitted that if the present residential owners whose constituent properties would represent such an investment are to be treated as part of a buffer zone then the provisions of Part VIII of the Act should apply. But we consider that for the Wellington circumstances such a tacit prohibition of residential use is not necessary.

We consider that by requiring new residential dwellings in the Suburban Centres zone within the airnoise boundary to be insulated and by providing for them as a discretionary activity (unrestricted) the airlines and WIAL will have ample opportunity to have input into their establishment. Mr Hegley states that an internal building design goal should be set and the sound attenuation required should depend on the exact location of any new building relative to the noise exposure from the airport. If design value is to vary it would be desirable to relate the design figure to the predicted noise  $L_{dn}$  contours. In this regard we note that the NZS 6805 is only a guide to the management of airport noise and we accept that the council's position that the proposed plan provisions have imposed alternative methods of control to those identified in the Standard. These, in certain measure, have offset the prohibited activity status recommended for new residential activity within the airnoise boundary in NZS 6805.

Will the imposition of conditions for consent be effective in mitigating or avoiding adverse effects on BARNZ or WIAL? Mr Batty identified that allowing the potential increase in housing would be likely to promote future conflict thus interfering with the process of sustainable management. He stated it would also reduce the likelihood of social well-being being achieved if the use of the airport as a resource for future generations became unsustainable.

But this case is unusual. The appellants have established an airnoise boundary which will meet the airport operational requirements long term and within which the limits of noise are now strictly controlled. There will be no spillover effect of increased noise and the precedent effects of past noise events will no longer apply. Hush-kitted planes are in the process of being phased out. Noise insulation for new buildings will be a requirement in any event. Noise levels over the next decade will initially diminish and then only rise (by 3 dBA  $L_{dn}$  or less) towards 2020 while still remaining within the airnoise boundary on Map 39. Mr Styles deposed and we accept, the projection of noise contours and airnoise boundary serves as a cap on future environmental costs. The boundary itself provides certainty for the airport and certainty for residents in which to judge for themselves any future use for their properties.

In addition residents' concerns are to be channelled through the Airnoise Management Committee. People living in dwellings without noise insulation may press for such noise reduction as they see as practicable. An unrestricted discretionary zoning for residential use within the Suburban Centres would enable the council to require various conditions and also to refuse consent if it persuaded to do so. Developers of new residential units in the zone within the airnoise boundary will be under an obligation to meet council conditions which will as a minimum require noise insulation.

S.E.K.

If there has to be a control then it should be an appropriately worded discretionary activity control. This would allow notification and an opportunity for interested parties to make submissions and lodge appeals. It would allow a clear limitation of the situations in which new residential activity might be appropriate. It would allow a clear set of mitigation measures. The cost to the property owner would be a compliance cost and a possible loss of development opportunity cost as opposed to a virtually guaranteed loss of development opportunity cost from non-complying status.

We have concluded that providing for new residential use as a non-complying activity would not provide sustainable management for a land resource which has been freed up from industrial activity. It would not represent management of that land in a way that enables people and their communities (along with the other methods the plan provides to control airnoise issues) to provide for their social and economic well-being and for their health and safety. Mr Styles for the council stated:

"Land is a scarce resource in Wellington, particularly in the Eastern Suburbs and that sustainable use of that land is important. We are concerned about keeping healthy communities. If there is perhaps some form of disinvestment by both prohibitive controls or by non-complying controls of a new investment, it wouldn't, in my view, promote the purposes of the Act. A non-complying use would not as an effective prohibition of an activity achieve the same purpose. It is the effects of the use and development which are to be managed and not the use or development itself. We have concluded that this is being satisfactory achieved by what is proposed in the discretionary use provisions and other provisions of the district plan and other methods."

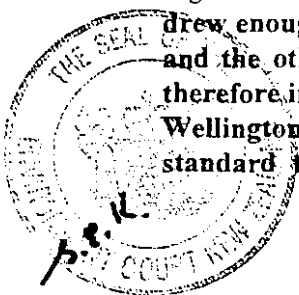
We are not persuaded that there might be adverse effects on WIAL and BARNZ which would not be sufficiently mitigated by the terms of the consent orders, the noise insulation provisions, the extensive monitoring of noise events at the airport and the proposed assessment criteria for discretionary activities now applying in the Outer Residential zone. The evidence about noise complaints from residents relates to past effects which are now being mitigated or remedied. The provision for ongoing consultation in terms of the noise management plan is not new to some of the airlines as we were told that noise management plans are being used in various other parts of the world. This will allow for greater understanding of issues.

We are satisfied that the council's compromise position on the Suburban Centres zone for all new residential use within the airnoise boundary should be adopted.

#### The Precedent Effect of the Wellington Airport Plan Provisions

We noted earlier in this decision, in terms of airport planning nationwide that counsel for BARNZ impressed on us the need for a consistency of approach to the application of NZS 6805 and the Resource Management Act 1991 throughout New Zealand. He indicated that to this end individual BARNZ members or their associated carriers are fully involved in the proposed district plan processes throughout the country. He asked that if we were to take the local Wellington circumstances into account it would be helpful for us to say so specifically in our decision so that we may not unwittingly provide precedent provisions for airports elsewhere.

From the Court's point of view, even the brief description of the other major airports given together with the evidence and cross-examination of some of the noise and planning witnesses, drew enough distinctions between the situation within which the Wellington Airport finds itself and the others cited, for the Court to realise Wellington is unique in some of its aspects and therefore in its environmental implications. The way in which NZS 6805 has been applied in the Wellington context (with no outer control boundary for example) is one such adaptation of the standard to local circumstances. As stated, the standard is a guideline only and in the




circumstances of Wellington, this is how it has been utilised. It would therefore be quite wrong for any airport planners elsewhere in New Zealand to view the conclusions we have made in this decision as necessarily having relevance to their own situations.

### Conclusion

For the reasons given above we have decided that all new residential development in Suburban Centres areas within the airnoise boundary shall be a discretionary (unrestricted) activity. We invite counsel for the council to present draft formal orders to give effect to this decision by way of any appropriate amendments to the proposed district plan. Any other party has leave to lodge with the Registrar within 7 working days of receiving a copy of the draft order a written memorandum bringing to the Court's attention any respects in which it is claimed that the draft fails to give effect to this decision, or does so inappropriately.

There will be no order as to costs in these proceedings.

DATED at WELLINGTON this 19<sup>th</sup> day of November 1997

  
S E Kenderdine  
Environment Judge

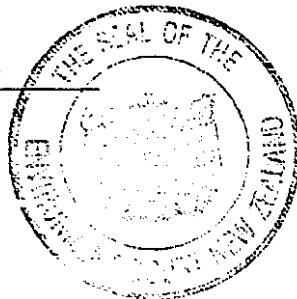




Figure 2 - Wellington Int Airport  
Noise Level at Kauri St

