Mr G.P. Willans

31 January 2010

#### The Chair Senate Committee on Rural and Regional Affairs and Transport

## SENATE RRA&T COMMITTEE INQUIRY INTO AIRSERVICES AUSTRALIA'S MANAGEMENT OF AIRCRAFT NOISE POLLUTION

#### **Executive Summary**

**Complaint to the Ombudsman.** Over the course of 2009, I wrote extensively to the Minister for Infrastructure and his Department over policy and issues involving Canberra Airport including ASA's Noise and Flight Path Monitoring System Reports and siting of the Hackett noise monitor terminal (NMT). I also filed many noise complaints and occasionally exchanged views with the ASA community relations section. I became so frustrated that I referred my concerns to the Ombudsman who is investigating them. Copies of relevant documentation are attached.

**Specific Concerns.** My specific concerns with DITRDLG/ASA management of aircraft noise pollution are:

- DITRDLG/ASA procedures, processes and their application, and access to these organisations are weighted to favour airports and the aviation industry to the detriment of noise-affected residents who do not receive a fair go.
- Decision-making on aircraft noise issues is not transparent.
- The ANEF system is outdated, its sensitivity to peak noise levels and insensitivity to movement numbers facilitates the movement of significantly more aircraft if peak noise is slightly reduced with new aircraft types. It is also complex and impractical making layman' comprehension extremely difficult.
- DITRDLG/ASA are unable or unwilling to set an easily understood maximum acceptable noise dose defined in terms of maximum noise level and maximum number of noise events related to periods/time of day, despite residents' clear intolerance of frequent/virtually continuous aircraft noise events.
- The lack of responsiveness of the noise complaint system to residents' complaints and referral of noise complaints on airborne aircraft being controlled by ASA to airport managers, apparently to distance a problem area as far away from government as possible and for complaints to become 'buried'. This is akin to putting the fox in charge of security at the hen house.

- ASA's use of false/misleading 2009 Q1 and Q2 noise reports at Canberra Airport to support prior decisions to approve a freight hub, and the failure to publish a Q3 report at all despite other airports all having their Q3 report published.
- ASA's withdrawal of the Hackett noise monitor terminal apparently because of the embarrassing, misleading noise reports.
- The failure of ASA to hold airport managers to commitments made publicly to influence public opinion on developments, then allowing airport managers to drop the undertaking when convenient.
- The refusal of ASA to utilise runway 17 at night for take-offs and landings which would reduce noise for residents at both ends of Canberra Airport, probably because it would reduce the ANEF and undermine ASA's endeavours to oppose the development of Tralee.
- ASA's labelling of light aircraft as 'non noise abatable', despite their significant noise, precluding their routeing away from residential areas where practicable such as at Canberra Airport.

What Can Be Done to Better Empower and Inform Noise-affected Residents and Deliver Equitable and Defined Noise Outcomes. A system could be introduced that empowers residents sufficiently to influence and agree required noise outcomes, and informs residents of their noise burden utilising the WebTrak system already funded by taxpayers. The system would also include a monitoring system and penalties to ensure compliance. Components of such a system would be:

- a process to equitably define and set agreed maximum noise outcomes,
- presentation of the agreed noise outcomes as noise contours on WebTrak as a selectable overlay, informing residents of what aircraft noise to which they might be subjected, as well as publication of the noise outcomes on rates notices, and
- use of the WebTrak noise monitor terminals to monitor delivered noise, and heavy penalties on airports for breaches to ensure compliance.

**Recommendations.** Recommendations are that the RRA&T committee:

- finds that ASA's management of aircraft noise pollution is ineffective, inequitable and not transparent, to the significant disadvantage of aircraft noise affected residents proximate to the major airports;
- proposes a new system which equitably and simply defines maximum noise outcomes, informs residents of such noise outcomes exploiting the current WebTrak system, and utilises the noise monitor terminals and penalties to ensure compliance;
- proposes that these arrangements also apply to joint and Defence airbases where aircraft noise is also a concern for nearby residents.

#### Introduction

Both the Department of Infrastructure, Transport, Regional Development and Local Government (DITRDLG) and Airservices Australia (ASA) have elements involved in the management of aircraft noise. Because of the apparent, overlapping responsibilities, my submission will not attempt to differentiate between the two management elements. It will simply address the many shortcomings from a community perspective of past and current management of aircraft noise pollution, noting that in the future, aircraft noise may need to be managed against a backdrop of increased demand for aviation services, deriving from increased prosperity and population growth, potentially resulting in even more pollution.

I am an ex-military aviator who has been based at Canberra Airport flying jets. My residence is located over 6.5kms to the NNW of the Canberra Airport runway intersection and sited about 60m higher than the main runway; the nearest runway extended centreline is the jet runway 17/35 about 2.4kms to the east. Currently, I am subjected principally to jet departure noise day and night, and regular overflight by light aircraft at low level mainly during daytime. I expect the planned night freight flights will exacerbate the aircraft noise pollution by being sufficiently loud relative to background noise to disturb sleep at night.

The Head Offices of both DITRDLG and ASA are located in Canberra City. Bearing in mind the proximity of both Head Offices to Canberra Airport and that some staff also pilot aircraft from there, management of aircraft noise for Canberra could be expected to be exemplary. Such an expectation is not realised.

**Complaint to Ombudsman.** In 2009, the proposal for Canberra Airport to become a 24-hour freight hub and the second Sydney Airport came to a head, and DITRDLG released a badly-flawed discussion paper 'Safeguards for airports and the communities around them' for public comment. I became so frustrated with the unbalanced management of aircraft noise issues, DITRDLG/ASA's lack of real consideration of the public interest, and ASA's badly flawed, misleading noise reports at Canberra Airport used to support decision-making, I formally complained to the Commonwealth Ombudsman who is investigating the matter. Relevant documentation is attached; a summation of the documentation follows:

- Correspondence to the Minister for Infrastructure, his Department and ACT ALP representatives:
  - Document 1 submission on the 2009 Canberra Airport Preliminary Draft Master Plan dated 2 May 09,
  - Document 2 highly critical submission on the DITRDLG discussion paper 'Safeguards for airports and the communities around them' dated 29 July 09,

- Document 3 highly critical submission on the badly-flawed ASA Q1 NFPMS report preceding the Minister's decision to approve the Canberra Airport master plan dated 5 August 09,
- Document 4 further critical submission on the misleading ASA Q1 NFPMS report dated 11 August 09,
- Document 5 concern about aircraft noise readings at Hackett prior to the Minister's decision to approve the freight hub, dated 28 August 09,
- Document 6 highly critical submission regarding the Minister's decision to approve the freight hub and reject the curfew dated 23 September 09,
- Document 7 shortcomings in noise amelioration for RNP departures dated 30 September 09,
- Document 8 shortcomings in the Hackett NMT siting dated 5 October 09,
- Document 9 critical failings in noise assessment and RNP departures dated 9 November 09,
- Direct correspondence with the ASA community relations section regarding specific noise complaints:
  - Document 10 exchange regarding a specific noise complaint dated 26 August 09,
  - Document 11 exchange regarding a specific noise complaint about RNP departures dated 27 November 09,

• Document 15 - Occasional Aircraft Noise Readings at Canberra since 28 August 09.

My specific concerns with DITRDLG/ASA management of aircraft noise pollution are:

- DITRDLG/ASA procedures, processes and their application, and access to these organisations are weighted to favour airports and the aviation industry to the detriment of noise-affected residents who do not receive a fair go.
- Decision-making regarding aircraft noise matters and the number of movements is not transparent to the community.
- The ANEF system is outdated, its sensitivity to peak noise levels and insensitivity to movement numbers facilitates the movement of significantly more aircraft if peak noise is

slightly reduced with new aircraft types. It is also complex and impractical making layman' comprehension extremely difficult.

- DITRDLG/ASA are unable or unwilling to set an easily understood maximum acceptable noise dose defined in terms of maximum noise level and maximum number of noise events related to periods/time of day, despite residents' clear intolerance of frequent/virtually continuous aircraft noise events.
- The lack of responsiveness of the noise complaint system to residents' complaints and referral of noise complaints against airborne aircraft being controlled by ASA to airport managers, apparently to distance a problem area as far away from government as possible and for complaints to become 'buried'. This is akin to putting the fox in charge of security at the hen house.
- ASA's use of false/misleading 2009 Q1 and Q2 noise reports at Canberra Airport to support prior decisions to approve a freight hub, and the failure to publish a Q3 report at all despite other airports all having their Q3 report published.
- ASA's withdrawal of the Hackett noise monitor terminal apparently because of the embarrassing, misleading noise reports.
- The failure of ASA to hold airport managers to commitments made publicly to influence public opinion on developments, then allowing airport managers to drop the undertaking when convenient.
- The refusal of ASA to utilise runway 17 at night for take-offs and landings which would reduce noise for residents at both ends of Canberra Airport, probably because it would reduce the ANEF and undermine ASA's efforts to oppose the development of Tralee.
- ASA's labelling of light aircraft as 'not noise abatable', despite their significant noise, precluding their routeing away from residential areas where practicable.

Detail supporting these concerns is included in the attached documentation.

## What Can Be Done to Better Empower and Inform Noise-affected Residents and Deliver Equitable and Defined Noise Outcomes

A system could be introduced that empowers residents sufficiently to influence and agree required noise outcomes, and informs residents of their noise burden utilising the WebTrak system already funded by taxpayers. The system would also include a monitoring system and penalties to ensure compliance. Components of such a system would be:

- a process to equitably define and set agreed maximum noise outcomes,
- presentation of the agreed noise outcomes as noise contours on WebTrak as a selectable overlay, informing residents of what aircraft noise to which they might be subjected, as well as publication of the noise outcomes on rates notices, and
- use of the WebTrak noise monitor terminals to monitor delivered noise, and heavy penalties on airports for breaches to ensure compliance.

Residents' tolerance of aircraft noise relates to the dependence of their community on the airport for the community's prosperity and on the level of background noise. Residents of Cairns, heavily dependent on tourism for prosperity, could be expected to be more tolerant of night flights moving tourists than residents of say Canberra where there is limited, aircraft-borne tourism and flight activity is largely domestic. Residents from quiet neighbourhoods where background noise is lower could be expected to be less tolerant of imposed aircraft noise. A one standard fits all approach will not work; required noise outcomes will vary with background noise levels and the community's dependence on respective airports for prosperity. Additionally, aircraft noise during the sleeping hours is likely to be of considerable concern as most people do not like their sleep being disturbed. This might result in more restrictive outcomes being set for flights at night but particularly during the sleeping hours.

The working group setting noise outcomes would comprise equal representation from industry and noise-affected residents with the Chair being provided by DITRDLG/ASA or local government – the objective is to ensure outcomes are accountable particularly to noise-affected residents.

The WebTrak map can be enlarged sufficiently for residents to locate their homes and the noise contour overlay would allow them to determine what maximum aircraft noise they might receive. They can easily check this through a noise monitor terminal or by hand-held sound level meter. Additionally, each noise monitor terminal might specify the maximum aircraft noise level to which it should be subjected by aircraft performing normally so that excessive noise is readily identified. An illustration of this is that a B737 should subject the Hackett noise monitor terminal to less than 50 dBA of noise according to the Canberra Airport approved master plan, yet the noise monitor terminal recorded B737 noise to 69 dBA, roughly four times louder than forecast.

The compliance system needs to have teeth and penalties need to be heavy – polluters are penalised for pollution. Fines would not be paid into consolidated revenue but distributed equitably to schools in the area of the noise breach.

#### Recommendations

Recommendations are that the RRA&T committee:

- finds that ASA's management of aircraft noise pollution is ineffective, inequitable and not transparent to the significant disadvantage of aircraft noise affected residents proximate to the major airports;
- proposes a new system which equitably and simply defines maximum noise outcomes, informs residents of noise outcomes exploiting the current WebTrak system, and utilises the noise monitor terminals and a penalty system to ensure compliance;

• proposes that these arrangements also apply to joint and Defence airbases where aircraft noise is also a concern for nearby residents.

Geoff Willans

SOM	E COMMON SENSE REGARDING CANBERRA AIRPORT
Sat, 2	2 May, 2009 12:33:52 PM
From	:Geoffrey Willans <geoff.willans@yahoo.com.au></geoff.willans@yahoo.com.au>
	Add to Contacts
To:	Anthony Albanese <a.albanese.mp@aph.gov.au></a.albanese.mp@aph.gov.au>
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	PDMP response 020509.doc (107KB)

Dear Minister,

I forward a copy of my comments on the Canberra Airport Preliminary Draft Master Plan dated February 2009 for your information and consideration as appropriate.

Last year, you found the case against a previous iteration of this Plan sufficiently compelling to reject it in November. This iteration is even worse. There are large errors in the movements projections (also replicated in the Major Development Plan for the Western Terminal), and the growth projections are implausible - fundamental issues. A past commitment is not honoured, there are significant omissions and oversights, and a plethora of inconsistencies. Residents are misinformed and misled sufficiently that informed consideration is not feasible. Most disturbing is the way the rights of Jerrabomberra residents living under the ILS flightpath, the primary instrument approach, are to be overrun in favour of the Airport's ambition of becoming the centre of the aviation universe, at least in Australia.

Since Jerrabomberra was approved for construction over twenty years ago, quite legally I am told, any prospects of Canberra Airport becoming a true 24-hour airport disappeared as the tiled roofs mushroomed; the 'night flight' kite was shot down. The Airport might strive to circumnavigate Jerrabomberra slightly, but it only reduces aircraft noise fractionally, not all pilots can or will do it and they have a discretion, and it will never reduce noise levels sufficiently to not disturb sleep. Tralee is not the issue, it's Jerrabomberra and its thousands of existing residents. When the first B747 freighter thunders across the Jerrabomberra roofs after midnight - the B747 is 40% noisier on approach than on take-off - the outcry will be fierce. The 1960s residents around Sydney Airport surely recognised an emerging problem and cut it in the bud.

At the northern end where I live, the Airport proposes a night noise amelioration measure of aircraft taking off on runway 35 for Melbourne or western destinations making a right turn and circumnavigating Queanbeyan to the east. The proposal of such a measure effectively concedes that aircraft noise in the sleeping hours will be a problem at the northern end and offers this as a desperate sop to North Canberra residents to make the proposal more palatable. It of course, does not help for aircraft bound for northern ports and also illustrates the little that the Airport knows about aircraft noise around Canberra Airport.

For most jets including the B737-800 workhorse now flying into Canberra and the proposed B757 and B767 freighters, lateral jet noise can be around 50% louder than take-off noise

beneath the aircraft. For departing aircraft, the peak noise occurs from rolling waves of jet rumble in the rear quarter of the aircraft. Jets departing on runway 35 need to make the immediate safety height of 3,400 feet to clear Mt Majura before initiating the right turn. This will place the aircraft abeam Hackett when the climbing turn is initiated, giving us full and longer earshot of the thundering tailpipes. No sleep here while this is going on.

Minister, I respectfully suggest you have three options:

you can approve the Airport proposal and watch ALP representation wither locally,
you can introduce a curfew noting your reluctance from past statements to do so and recognising that the Airport may be able to claim compensation, or
with community advice, you could set agreed noise outcomes (number of flights, maximum noise levels, all related to time/period of day). For community support, these stipulated outcomes would need to be agreed transparently, and include an effective monitoring system backed by strong penalties for breaches. Realistically, the community is unlikely to set noise outcomes that will allow regular, large jet flights during the sleeping hours.

Some of the issues I have touched on such as the incorrect movement and growth projections may require immediate review and adjustment by BITRE and Airservices, or perhaps Access Economics, for these projections to gain public acceptance.

Minister, most people know when they are being used, and the Airport proposal surely intends to do that.

Yours sincerely

Geoff Willans

Mr G.P. Willans

2 May 2009

The Executive Chairman and Managing Director, Canberra Airport

### **RESPONSE TO THE CANBERRA AIRPORT PRELIMINARY DRAFT MASTER PLAN (PDMP) DATED FEBRUARY 09**

References:

- A. Canberra Airport Preliminary Draft Master Plan of February 2009
- B. Canberra Airport Preliminary Draft Master Plan 2008

- C. Canberra Times Report of 20 January 2006 'Runway upgrade aims to boost airport' by John Thistleton
- D. Statement of Reasons for the Minister's Rejection www.infrastructure.gov.au/aviation/airports/decisions.aspx
- E. Access Economics Review of Canberra Airport Preliminary Draft Master Plan and the 'High Noise Corridor' Concept dated 23 March 2009
- F. Access Economics Addendum dated 28 April 2009

#### Introduction

Following Ministerial rejection of the 2008 Draft Master Plan, Canberra Airport has released a revised Preliminary Draft Master Plan (PDMP) dated February 09 (reference A) and invited public comment on it.

I comment as an ex-military aviator who has flown jets and turbo-props from Canberra Airport, and as a neighbour of Canberra Airport flight paths, living 6.6 kilometres from the runway intersection to the NNW and within the Canberra Noise Abatement Area. I have also been referred to as *'the serial noise complainant from Hackett'* at Airport Noise Consultative Forums; I acknowledge that I have used the Airservices noise complaint system to make complaints.

**Aircraft Traffic Affecting Me.** The northern jet departure and arrival paths are about 2.3 kilometres to the east of my residence, and light aircraft and helicopters regularly and noisily overfly my home, or close to it, at low level tracking within and immediately adjacent to the NE boundary of the Canberra Noise Abatement Area. Jet circuit traffic also overflies my home.

**Hackett Noise Monitor Terminal.** A temporary noise monitor terminal (NMT) has been installed since 18 December 2008 in Hackett and it can be publicly monitored through WebTrak. It is located about 700m to my south-west in a location that is hill-shadowed from the jet departure and arrival flight paths and 600m further away, and lower than my location. This NMT is poorly sited for effective noise monitoring of jet and GA aircraft operating to the north and north-west of the Airport, particularly jets landing runway 17.

**Neighbour from Hell.** Canberra Airport is already a noisy, bad neighbour but the plans to significantly add to the aircraft noise burden with large, noisy jet flights in the sleeping hours will make it the neighbour from hell.

My response will generally, but not exclusively, focus on aircraft noise issues. Firstly though, I wish to discuss several, significant credibility issues in respect of the PDMP, then the Plan more generally.

#### SIGNIFICANT CREDIBILITY CONCERNS AFFECTING THE PDMP AND RESIDENTS' ABILITY TO BE PROPERLY INFORMED

There are several significant, credibility concerns where residents could be misinformed/misled. These concerns warrant immediate redress, review by BITRE and Airservices, correction of the PDMP, and its re-issue for the full public consultation period.

#### **Chapter 5 – Passenger Aircraft Movement Projections**

**Table 5.6 – Inaccurate 07/08 Actual Movements.** Paragraph 5.1.4 details 39,629 RPT movements in 07/08, but Table 5.6 states 36,629 movements, a difference of 3,000 movements. The 07/08 total movements of 88,576 are correct, suggesting that the correct RPT figure is 39,629 movements, not the 36,629 movements presented. This needs to be corrected.

**Table 5.6 Incorrect Aircraft Movement Projections.** Next, assuming a 07/08 basis of 39,629 actual RPT movements, the mid-range 2011/12 projection (Table 5.6) is based on 5.4% growth, not the claimed 3.4%. The 2011/12, 2016/17, 2021/22 and 2027/28 projections appear to have been copied from Table 5.7 in the rejected 2008 PDMP. However in that table, the mid-range figures are projected at 3.4% from a 05/06 base of 39,832 RPT movements. The mid-range domestic movement situation is summarised below:

Year	05/06 actual	07/08 actual	11/12	16/17	21/22	27/28	29/30
2008 PDMP Table 5.7	39,832 3.4% gr growth	(42,587) rowth. The had occurr	48,681 e 07/08 pi red.	57,538 rojection	68,008 would be	83,116 42,587 m	ovements if 3.4%
2009 PDMP Table 5.6	The 07/ wrong.	36,629 08 actual The table	48,681 movemer should re	57,538 nts should ead signifi	68,008 be 39,62 cantly dif	83,116 9. The sub fferent:	88,864 osequent projections are

39,629 45,300 53,542 63,285 77,343 82,692

**International and Other Aircraft Movement Projections – Probably Incorrect.** The projections for international and other movements appear to have been developed similarly (although no growth projections were referenced but should be) and probably contain identical errors.

**Implausible Mid-Range Domestic Aircraft Movement Growth Projection (3.4%).** In 1998, the actual RPT movements were 39,032 (Table 4.1 1999 PDMP). The Airport states a 20-year growth rate of 3.3% to support its current RPT movement projection of 3.4%; however, there is no supporting evidence for the 3.3% claim. Projecting from the actual movements of 39,032 in 97/98 when the Airport was bought, the 07/08 movements should have been 54,529 at 3.4% growth. However, actual movements for 2007/08 were only 39,629, a significant difference. Growth in RPT movements is flat at best despite the boom economic conditions of this period, exemplified by the flat growth lines of Figure 5.7 of the 2009 PDMP. This finding is also explained by the 1998 passengers per movement ratio rising from 46.8 (1,827,707 divided by 39,032) to 71.9 (2,850,016 divided by 39,629) in 2008, a 53.6% increase paralleling the 55.9% rise in passenger numbers. In the case of the 2030 projections, the ratio would only increase to 83 (6,860,566 divided by 82,692) (15.4% increase). Compared to the ten years from 1998 to 2008, this is very flat growth in passengers per movement for a 22 year period over which the larger B787/A350 will replace the B737 if the passenger demand eventuates. This is another major inconsistency in the aircraft movement projections that needs to be resolved.

**Domestic Aircraft Movement Projection.** As passenger demand grows, the airlines will simply exercise their flexibility to use larger aircraft as they have over the past ten years. A long-term, domestic RPT aircraft movement projection of 3.4% growth is implausible on the history of the last ten years of the Airport's private ownership -0.1% would be closer to the mark than any of the projections used by Canberra Airport over the past ten years.

The Prospect of Direct International Services by mid-2010 (paragraph 5.2). Past master plans have raised the prospect of international services beginning imminently. The still-operative 2005 master plan projected 265 international RPT movements in 07/08, but there was none despite the boom economic times. The only direct service that did begin in the past was the Air Pacific service to Fiji that quickly ceased in the midst of a Canberra winter because custom was insufficient to deliver paying load factors for a B737. The B737 and/or the A320 are the smallest aircraft that might be used for direct flights to Bali, Fiji or New Zealand and the potential passenger loads are insufficient to sustain a daily or regular service. Larger, longer-ranged aircraft such as the B767/787 and the A330/350 are required for direct flights to mainland South-East Asia, requiring very high load factors for paying flights, particularly for low-cost airlines. For 2029/30, the mid-range passengers per movement ratio is 153.4 (382,495 divided by 2493) which might suffice as a satisfactory load factor for a B737/A320, but would be unsatisfactory for a B787 or A350. When flights from Sydney to international destinations are being cut because of limited patronage in a global recession, there is little prospect of Canberra gaining regular, frequent, direct services to international ports by mid-2010 as stated (paragraph 5.2). At the same time, Brisbane Airport has deferred a significant expansion program including a parallel main runway because of falling passenger numbers.

**Implications for the PUC ANEF.** It appears that use of an implausible domestic RPT, long-term growth projection of 3.4% and the hyped-up prospects of international services to various overseas ports is being used to inflate aircraft movement projections to in turn bolster the long-challenged and unconvincing ANEF movement projections. Realistic, sustainable projections are required so that the ANEF is on a firm basis and the utilisation of land on the Airport approaches is not unnecessarily quarantined by inflated aircraft movement projections inappropriately bloating the ANEF.

Movement Projection Errors in Table 2.5 of the Preliminary Major Development Plan for the Western Terminal. The movement projection errors documented above are also replicated in this plan.

**Summary.** For residents to gain an accurate and informed appreciation of the 2009 PDMP and of the true aircraft noise position, accurate movement statistics and growth projections are fundamental. The data in the 2009 PDMP provides neither. The inaccuracies and inconsistencies in the aircraft movement projections misinform and mislead residents on a crucial, fundamental basis of the PDMP. Because the Airport is unable to deliver credible aircraft movement projections to the public, the PDMP should be withdrawn and BITRE and Airservices properly review the movement projections. For public confidence, this would need to be done transparently. Then, a new plan could be issued for the full public consultation period, allowing respondents to comment from a properly informed basis. The revised movement projections should also be developed further to inform a new ANEF. The inaccurate and incorrect movement projections at Table 5.6 are also replicated as Table 2.5 in the Preliminary Major Development Plan for the Western terminal released on 28 April.

#### **Chapter 7 – General Aviation and Military Operations**

**Parallel Runway.** Paragraph 7.1 states that '*Towards the end of the planning period of the Master Plan, a runway parallel to the main Runway 17/35 may be required to cater for growing General Aviation traffic alongside growing airline and other commercial traffic'.* Mr McCann, the Airport's Director of Planning, has stated that the requirement for a parallel runway has been included in the previous and current Plan, first at the Howard government's request and later the Rudd government. This differs with the statement in the current Plan. I also understand that the land required for the parallel runway is held by Defence who have advised an enduring requirement for this land, and also advised me that Canberra Airport had been so advised. These inconsistencies need to be resolved for informed comment on a significant issue affecting residential amenity.

#### Military Operations (paragraph 7.2). This paragraph states that:

'The basing of the RAAF 34 Squadron aircraft fleet at Canberra Airport, providing VIP transport operations for Government, provides positive impetus for increased military activity at Canberra Airport in the future. The current 34 Squadron fleet incorporates Boeing Business Jet (B737) aircraft and Challenger 604 corporate jets. It is possible that the Special Purpose Aircraft (SPA) fleet may be increased in size in the future to accommodate increased level of Government SPA operations, possibly including a larger aircraft to transport Government officials to overseas destinations. Any such increase in the SPA fleet may require additional apron, hangar and office space to be constructed at Fairbairn.

Canberra Airport would actively support any increase in military aviation at the Airport, including but not limited to flight training, helicopter operations or other aircraft operations.

It is also noted that additional RAAF squadrons or other military aircraft capabilities may be located at Canberra Airport within the planning period of this Master Plan, though the level of any such expansion (if any) is unknown at this time.'

Defence has advised me that no decision has yet been made on a replacement for the existing SPA fleet which is leased until 2014, and that Defence has no plans to base additional aircraft or squadrons at Canberra Airport. Defence also advised that it was not consulted in respect to the statements made in Chapter 7. The statements at Chapter 7 regarding military operations would appear to be kite flying without any formal basis. These misleading statements should have been checked with Defence before they were made and demonstrate the inconsistent staffing of this PDMP. The formal Defence position needs to be ascertained and incorporated into the Plan for later, informed comment by residents.

#### Chapter 9 - Relocation of the Runway 35 Threshold (paragraph 9.6)

At page 109, the PDMP states:

'It is expected that the Runway 35 threshold will be moved south by 2010 to take advantage of this extra length for landing aircraft. The movement of the threshold, expected to be by up to 450m, will likely be associated with a replacement and upgrade by Airservices Australia of the Runway 35 Instrument Landing System (ILS), in June 2010.'

**Previous Airport Commitments Regarding theRunway 35 Landing Threshold.** The Airport General Manager, then Mr Milton, responded to a letter of mine on Mr Snow's behalf on 10 June 1999 (CIA:bm) stating '*this runway extension has been included as a planning option to provide additional range for departing aircraft. As such, the landing threshold of an extended runway would remain in its present position and the height of aircraft approaching from the south is not expected to change*'. Mr Byron, the current Managing Director, made a similar statement publicly in The Canberra Times of 20 January 2006 (reference C) in relation to the runway extension.

**Expectation to Honour Commitments.** At the public meeting at the Airport on 17 March to discuss the 2009 PDMP, I advised Mr McCann, Director of Planning, that past commitments had been given to retain the 35 landing threshold in its current location. Mr McCann denied any knowledge of these past commitments. The simple fact is that unconditional commitments have been given not to relocate the runway 35 threshold as part of and prior to the runway extension being built. The Executive Chairman and Managing Director of Canberra Airport need to honour their previous, unconditional and freely-given commitments. Then, the PDMP can be amended appropriately and the ANEF constructed on the correct threshold for informed comment.

#### Chapter 14 – Aircraft Noise

'According to the International Civil Aviation Organisation (ICAO), aircraft noise is the most significant cause of adverse community reaction to the operation and expansion of airports'. Aviation Green Paper Airport Planning: Aircraft Noise Management: Maunsell AECOM, August 2008.

Specific comment on noise aspects of the proposed freight operations is provided later; these comments are directed to aircraft noise generally.

#### Airport Claims/Assertions. The Airport claims/asserts that:

- it protects Canberra and Queanbeyan residents from 55-65 dBA of noise per jet overflight (p173);
- it would appear that the impact of night time aircraft noise is low and therefore a curfew is not necessary or desirable (p176);
- [North Canberra] is subjected to single noise event levels from jet aircraft well below 65 dBA level at which Commonwealth authorities state that noise begins to become intrusive (p183); and
- land use planning must reflect the reality of Canberra Airport being a 24-hour operating airport.' PDMP, p 176.

The wording of these claims or assertions seems to have been deliberately chosen. As a North Canberra resident subjected to both jet and prop noise well in excess of 65 dBA, why are the claims/assertions limited to jets? It seems that the Airport is endeavouring to make a special case for the night freighter operation to be approved on the basis that 65 dBA of jet noise is acceptable even at night.

**Level of Noise Protection.** The defined level of so-called noise protection is vague and imprecise -65 dBA is double the noise level of 55 dBA. This is akin to the Airport saying there might be 10,000 night freighter movements or 20,000. A specific level of claim needs to be defined for informed comment.

Actual Aircraft Noise Levels Experienced. Examination of annex A shows that residents are regularly subjected to more than 65 dBA of jet noise at either end of the Airport.

**Intrusive Noise Level.** It is unclear whether the purported 65 dBA threshold for intrusive noise applies continuously or has a time limitation. Most people seem to accept 65 dBA as tolerable during daytime (7am to 7pm), but many people would regard 65 dBA in the evening and the sleeping hours between say 8pm and 7am as intrusive. External noise of 65 dBA reduces to 60 dBA indoors (windows and weather doors open, security door locked) which significantly exceeds the levels of 35-45 dBA at which World Health Organisation research indicates that sleep is disturbed with resulting health concerns. I contend that aircraft noise events at 65 dBA or louder in Canberra would most certainly be sleep disturbing, particularly when the external noise level during the sleeping hours is generally < 30 dBA. However, if aviation authorities believe that jet noise at 65 dBA is acceptable for residents during the sleeping hours, I suggest they test their belief at Sydney Airport and relax the curfew. There, airline or jet freighter take-offs and landings could be trialled over residents of

the suburbs to the north-west of Sydney Airport. These residents are also voters in the Minister for Infrastructure's electorate.

**Jerrabomberra.** The planning of Jerrabomberra was properly approved because the development of the suburb accorded with AS 2021, the then ANEF 20 contour only reaching as far as Tompsitt Drive, the current, main access into Jerrabomberra. Subsequently in 1995, the boundary lines of the Queanbeyan Noise Abatement Area were drawn in such a way as to leave residents of 600 or more homes under the runway 35 straight-in approach exposed to loud, repetitive aircraft noise, primarily between 6am and 11pm at the moment.

**High Noise Corridor.** The Airport uses the High Noise Corridor concept to discount the rights of these residents as irrelevant and proposes to subject them to loud aircraft noise in the 11pm to 6am period when they now have some respite. If the High Noise Corridor concept were utilised at Sydney Airport, hundreds of thousands of people would be significantly disadvantaged. The simple truth is that AS 2021 is the binding regulation affecting such development and the High Noise Corridor has no formal standing except in the Airport's eyes. Reference to it is used to mask the true situation and discount these residents. The High Noise Corridor needs to be totally withdrawn from the documentation.

**Discounting of Jerrabomberra Residents.** The way these Jerrabomberra residents have and are being discounted as irrelevant and their interests accorded no value because the Airport seeks to expand its operations is deeply troubling. They deserve equal consideration in the discussion over expanded flight operations, particularly during the sleeping hours.

**Airport Planning – Change of Attitude.** Airport planning needs to recognise that some residents already carry a potential 24-hour exposure to significant aircraft noise because of their location relative to the Airport. These residents cannot be ignored because it is inconvenient to the Airport's expansion plans. The Airport is named the Canberra Airport and it exists to serve the region's people, not Sydney's. The people of the region will determine the role of the Airport and just how much land will be reserved for the aviation function.

Summary. The Airport seems unaware, but should be aware that:

- residents to the north and south of the Airport are already subjected to noise events exceeding 65 dBA, contrary to its claims and
- the purported level of protection is already well breached.

Airport planning needs to recognise that it exists to serve Canberra and Queanbeyan residents largely, not Sydney's and that its functions will be determined by local residents. Additionally, the Department of Infrastructure and Airservices need to clarify whether subjecting residents to 65 dBA or more of aircraft noise is acceptable during the night hours, particularly the sleeping hours.

#### OTHER SHORTCOMINGS OF THE 2009 PDMP IN PROVIDING AN ADEQUATE OBJECTIVE BASIS FOR INFORMED PUBLIC CONSIDERATION AND COMMENT

The PDMP proposes to increase the number of scheduled movements between the 'normal' airline hours of 6 am to 11 pm and also operate large, noisy jet freighter flights in the sleeping hours between 11 pm and 6 am. In considering the PDMP from a resident's perspective, three broad issues prevail:

- the reasons for rejection of the previous iteration of the PDMP;
- the purported economic benefit to the community; and
- the noise and air quality costs of increased, continuous aircraft movements.

My detailed comments follow. Road traffic concerns from the increased volumes of traffic will be left to those holding special expertise on this aspect.

#### **Ministerial Rejection of the Previous PDMP**

**Rejection of the Previous PDMP Version.** The previous PDMP (reference B) was rejected. There is little mention of this or the reasons for the Minister's rejection (reference D). The detailed reasons for the Minister's rejection of the 2008 PDMP are crucial in providing context and background to facilitate informed consideration and comment on the current PDMP (reference A) by residents. The detailed reasons for the Minister's rejection of the previous plan need to be included and discussed at the start of the current PDMP.

**Key Oversight.** In my opinion, this key oversight makes it extremely difficult for uninformed or poorly informed residents to properly consider the PDMP, its potential affect on their residential amenity, and constitutes sufficient reason to reject the PDMP outright.

#### **Chapter 2 of the PDMP – Economic Impact**

While more than \$600M has been invested over the past 11 years, a significant amount appears to have been invested in non-aviation facilities which have taken jobs away from other areas of Canberra depriving the town centres of much-needed advancement. Most of the claimed 'new' jobs at the Airport have simply been transferred from the region, or Sydney in the case of Defence C130 maintenance.

**Costing Aviation Projects.** The essence of the PDMP lies in the proposal to introduce new flight services. For residents' appreciation of the cost/benefit of the aviation development, the costs of relevant aviation projects need to be detailed, and subsidies also identified. For example, around \$60M has been spent on two upgrades of the main runway but the Howard government subsidised this significantly with funding of \$37M (over 60% of cost). The runway upgrade would probably have founded if it had not been subsidised heavily, and the Airport had to recover costs through international passenger charges because

the domestic aircraft passengers had no need of the runway upgrade and should therefore not have to pay for it.

The terminal and road upgrades are welcomed as essential and long-overdue developments.

The overall benefit of the proposed Airport development to the region's residents is difficult to determine but seems to be small. More flight opportunities between the preferred travel period of 6am to 11pm advantage the community. However, the freight hub and proposal to become the Second Sydney Airport primarily benefits Canberra Airport and will be of little community economic advantage.

#### **Chapter 6 – Proposed Freight Operations**

The proposal being put by Canberra Airport differs significantly with the position of Sydney Airport where the current airfreight activities are based. Sydney Airport envisages the freight operations continuing to be based there and allows for growth of 2% pa in freight aircraft movements. Sydney Airport is also conducting a master planning activity and the differing issues in the respective proposals need to be resolved by the Government.

**Freight Aircraft Noise Signatures.** Paragraph 6.2.3 foreshadows the ATR42, B757F and B767F aircraft being used as well as the B737-300F for initial freight operations and goes on to state that '*aircraft such as the B757F, whilst larger, have a similar noise profile or are indeed quieter than existing B737F freighter aircraft*'. I have not been able to locate the noise signature of the B737-300F but, using the B737-800 which routinely operates into Canberra Airport as a yardstick, the ATR42, B757 and B767 all have noise characteristics noisier than the B737-800 (ICAO, Annex 16, Chapter 3 certification).

**B737-300F Noise Contour Map and Actual Readings.** Figure 6.6 shows that I should receive about 50 dBA of jet noise from a B737-300F and the current Hackett noise monitor terminal about 45 dBA. Over many months, I have been taking noise readings around Canberra and attach some recent observations taken this year (annex A). Current jet aircraft subject the Hackett NMT to noise levels as high as 76 dBA for departures and up to 60 dBA for arrivals, the Hackett NMT being particularly poorly sited to 'hear' runway 17 approaches. For Jerrabomberra, an A320 on runway 35 approach at 2 am on 31 March subjected those residents to 74 dBA at the NMT. No matter what explanation is given, there is a significant difference between actual jet noise readings and those of the noise contour model. Additionally, background noise across most of Canberra and Queanbeyan is less than 30 dBA during the sleeping hours. Jet noise of 76 dBA is over 20 times louder than background and will easily suffice to waken residents.

The statement at paragraph 6.5.2 that '*These figures* [6.6 and 6.7] *demonstrate that no residents within the ACT, and only a few within Jerrabomberra, will be exposed at any time to noise over 65dBA as part of a freight hub*' does not correlate with the NMT noise readings

nor those that I have taken. Moreover, the proposed freight aircraft would be noisier than the B737-800. As for the B747F, the ICAO Annex 16 Chapter 3 certification shows that it generates over double the noise of a B737-800 on take-off.

**Omission of the Mode of Runway Operation.** The mode of operation of runway 17/35 is not stipulated and this is crucial in determining who receives what noise and when for informed, resident' consideration of the PDMP. Will runway 17/35 be operated one way or two way? Current Airservices operational documents favour the use of runway 17 for landing and runway 35 for take-off (two-way) during the sleeping hours. This means that North Canberra and Gungahlin residents bear the brunt of the freight aircraft night noise – a situation that will be deeply disturbing for these residents. However, the freight aircraft are unlikely to have RNP approach capability and the requisite pilot training, so freight aircraft may prefer/have to land runway 35, particularly during inclement weather.

**Sydney Relief Measures from Continuous Noise.** Canberra Airport only has one runway for jet operations in contrast to Sydney's three. There will be no respite from continuous jet noise for residents living near the northern and southern approaches to the jet runway. Yet, Sydney Airport has a curfew and a rigorously-enforced system of changing the duty runway and dispersing departure paths to provide a measure of day and night relief from aircraft noise.

**Use of Reverse Thrust.** No mention has been made of the use of reverse thrust by freight aircraft landing in the sleeping hours. As evidenced by the A320 incident on 31 March at 2 am, reverse thrust at power can be heard in Hackett across the Majura-Ainslie ridgeline (annex A). Reverse thrust power needs to be limited to idle for all landings during the sleeping hours.

**Power Supply for Freight Aircraft During Turnround.** Freight aircraft normally take some time to turn round – typically about two hours for a B747F. During the turn-round, these aircraft will need power. It is unclear whether these aircraft will run noisy, aircraft auxiliary power or mobile ground power units to power the aircraft during the night, or whether they will be powered by in-apron, reticulated aircraft power. This issue is of potential importance for Pialligo, Campbell, Majura Valley, Oaks Estate and possibly Narrabundah residents who could be disturbed by the noise of several, concurrently running APUs. This oversight is another example of inadequate, prior information for residents to make an informed decision.

**Summary.** This chapter contains significant omissions, inaccuracies and inconsistencies making it unacceptable and indeed misleading for informed consideration and comment by respondents. Residents need to know exactly how many noise events they will receive during the sleeping hours and how loud, what reverse power will be used, and whether APUs will be run during the turnround. The PDMP fails residents badly on such key issues. It needs to be re-staffed properly and then re-circulated for public consideration.

#### **Chapter 7 – General Aviation**

**General Aviation Operations (paragraph 7.1).** The possible securing of a major flight training facility would be a matter of concern if training or transits to training areas will be conducted over residential areas. North Canberra and Gungahlin are subjected to considerable, noisy GA aircraft overflights now, as evidenced by annex A. The prospect of more GA overflights at low level would be opposed strongly. If new flight training activity is to be established, then both the circuit and upper air training, and transits need to be distant from residential areas.

**GA Aircraft Projections.** The possibility of securing a major flight training facility also tests the GA aircraft movement projections. In the ANEF, GA movement projections dwindle to less than 3,000, contrary to the projections in Table 5.6. These contradictions need to be resolved.

#### **CHAPTER 14 – AIRCRAFT NOISE**

Reduced to the essence, the thirty or so pages of this chapter could be summarised as Canberra Airport believes that:

- the majority of Canberra and Queanbeyan residents are protected from aircraft noise of 55-65 dBA,
- such noise levels are acceptable allowing continuous operations, and
- that, if residents complain, noise sharing would be the most likely outcome.

I have already disputed the first two points leaving the matter of Tralee/noise sharing for comment. Firstly though, I will comment on the inaccurate homily about the past foresight of planners.

#### **PDMP Homily Regarding the Foresight of Planners**

'Thanks to the far-sighted vision of early planners and regulators, the overwhelming majority of communities that surround Canberra Airport are free from the adverse impacts of aircraft noise. By the simple act of ensuring that flight paths to the north and south of the Airport were maintained free from residential development, planners and regulators have been able to ensure protection for 99.5% of the region's residents.' PDMP, p 167

**Past Jet Overflight of Residents.** This historical assertion is false and misrepresents the situation although it might advantage Canberra Airport spin to promote the High Noise Corridor that lacks any formal acceptance. Since jet services were introduced in the 1960s until 1995, arriving and departing jets swept noisily across Hackett and the other North Canberra suburbs at low level (1,000 feet) day and night. At the southern end of the main runway, jets regularly overflew the Weston Creek and Woden suburbs equally noisily at low level. Only Queanbeyan was provided some respite from aircraft noise with jets from Sydney

being requested in the early 70s to circumnavigate it, or being radar vectored accordingly. Prior to that, jets also overflew Queanbeyan at 1,000 feet. Effectively, residents were not protected from jet noise, and the PDMP-purported benefits of the planners and regulators foresight did not exist.

**Sale of Airport.** The only reason that these practices were changed was because the Keating government intended sale of Canberra Airport and it needed to complete a master plan to advantage the sale, holding the requisite public meeting for development of the master plan. The Keating government plans were disrupted by significant public complaint about aircraft noise at two meetings, sufficient for the Airport to be sold three years later in 1998 by the Howard government without an updated master plan. However, the jet arrival and departure procedures were upgraded significantly to lessen residents' aircraft noise exposure, and the Noise Abatement Areas were established with arbitrary boundaries.

**RPT Flightpath Changes Forced by Residents.** These changes had nothing to do with farsighted planners or regulators, just concerned, self-interested, vocal residents sick of being bathed in loud jet noise reacting to an opportunity presented through the intended sale of the Airport. Public pressure on the Federal Airports Corporation and the then Department of Transport delivered these changes.

**Jerrabomberra Residents Merit Consideration.** In the same period, the construction of Jerrabomberra was properly approved because the development of the suburb accorded with AS 2021, the then ANEF 20 contour only reaching as far as Tompsitt Drive, the current access into Jerrabomberra. The boundary lines of the Queanbeyan Noise Abatement Area were set, subsequent to the suburb being constructed, leaving residents of 600 or more homes under the runway 35 ILS approach, exposed. The way these people have been subsequently dismissed as irrelevant and accorded no consideration because the Airport seeks to expand operations sits most uncomfortably with me. They deserve equal consideration.

**Nothing to Do with Far-Sighted Planners.** Where were the far-sighted planners or regulators then? This misleading section needs to be completely rewritten from a factual basis, or withdrawn.

#### **Tralee and Noise Sharing**

'Further, if houses are permitted to be built in the High Noise Corridor, then it is possible that the Noise Abatement Areas could be abolished. This is because it would make no sense to continue to force the airlines to fly around the suburbs of Canberra and Queanbeyan at great cost (and increased greenhouse emissions) to protect the community from 55-65dBA of noise per jet overflight, especially when the NSW Government is seeking to develop new housing in the High Noise Corridor exposed to 65-75dBA of noise.' PDMP, p 173

The PDMP rails at length against the development of Tralee. The simple truth is that AS 2021 is the binding regulation, the High Noise Corridor has no formal standing except in the Airport's eyes, and development of Tralee accords with AS 2021 and the current, inflated ANEF. Another simple fact is that the Noise Abatement Areas do not protect residents to the north and south of the Airport from current aircraft noise up to 75 dBA (three times louder than normal conversation – see annex A). Airservices has a principle of minimising aircraft noise and is obliged to do so. Any relaxation of current aircraft noise restrictions would see the government punished at the ballot box and is quite unlikely to occur.

Firstly, Airport planning must recognise that current residents to the north and south of the Airport are already subjected to significant aircraft noise, and that the Airport exists to serve the needs of the Canberra region, not Sydney. After all, it is named the Canberra Airport. The community, not the Airport, comes first and will decide the role of the Airport and how much land will be allocated for Airport functionality.

The Airport's opposition to Tralee is rank scaremongering, lacking any shred of credibility. Figure 14.2 simply confirms that view.

#### Noise Abatement Areas

When the noise abatement areas were established in 1995, it was recognised that the Canberra north-eastern boundary did not encompass future Gungahlin suburbs, and that the noise abatement area would need to be extended at some point in the future.

The PDMP appears to bestow on the noise abatement areas the characteristics of the Great Wall of China or the Israeli Wall. The noise abatement areas are not effective in delivering satisfactory noise outcomes as is illustrated by annex A. Lateral jet noise, despite the noise abatement boundary, will bathe the suburb in sufficient noise to disrupt sleep.

#### **Revised Departure Procedure Runway 35**

**Proposed Revised Departure Procedures for Runway 35 (14.4.5).** In making this proposal, the Airport is recognising and conceding that aircraft noise will be a concern in North Canberra for freight hub departures during the sleeping hours. It is desperately trying to make the proposal more palatable. However, it seems to be unaware that jet departure noise reaches its maximum in the rear quarter, coming in rolling waves and that the right turn manoeuvre will be initiated abeam Hackett. This right turn procedure will still result in North Canberra residents being exposed to tailpipe noise levels sufficiently loud to waken/disturb sleeping residents. No matter how the Airport strives to find a compromise that might work, it simply exposes the fact that it is unaware of the true noise situation around Canberra and is grasping at straws.

#### Practical Ultimate Capacity Aircraft Noise Exposure Forecast (PUC ANEF)

The PUC ANEF is based on the movement projections contained in the Rehbein AOS Study dated 28 May 2007:

Day Night Total

		1	
RPT – international jet	10,760	14,346	25,106
RPT – domestic jet	98,555	57,351	155,906
RPT – regional non-jet	44,387	24,441	68,828
Freight – jet	606	20,574	21,180
Freight – non-jet		3,272	3,272
Military – jet and turbo-prop	1,888	888	2,776
Corporate	2,005	339	2,344
General aviation and training	2,255	<u>453</u>	2,708
Total fixed wing	160,456	121,664	282,120
Unlicoptors	2 200	620	2 020
Hencopters	2,300	<u>020</u>	<u>2,920</u>
Total all aircraft	<u>162,756</u>	<u>122,284</u>	<u>285,040</u>

**Credibility of the ANEF Movement Projections.** The credibility of the PUC ANEF movement projections can be simply tested by examination of the domestic RPT movements – jet and non-jet - which constitute 79% of the overall total movements. The ANEF projected 224,734 domestic movements being reached between 2050 and 2060. This contrasts sharply with the actual movements of about 39-40,000 pa over the past ten years, and the airlines' flexibility to tailor aircraft size to passenger demand resulting in minimal movement growth. On this test, the PUC ANEF movement projections lack credibility and appear grossly inflated.

7pm-7am

**PUC ANEF Night Movements.** Night movements of all RPT, freight and military aircraft total 120,872 – i.e. a movement every 2.2 minutes between 7 pm and 7 am. Virtually all of these movements involving up to B747 aircraft will be on runway 17/35. There will be no respite from aircraft noise to the north and south of the Airport such as Sydney residents gain from the curfew. Noise will be continuous and likely to be challenged by affected residents. Construction of the PUC ANEF not only has to be determined by the maximum number of aircraft that can be operated; but also be determined by the noise affects on residents subjected to the resultant aircraft noise, and residents' tolerance.

**PUC ANEF Aircraft Types.** The ANEF for Canberra Airport is longer than that for the main runway at Sydney. This partially results from the selection of aircraft types. Many of the designated aircraft will not be in service by 2050 and the nomination of new aircraft types such as the B787, A350 and A380 with Chapter 4 aircraft noise signatures would be more appropriate for a 2050 and beyond ANEF. This would also minimise the unnecessary quarantining of land under AS 2021. This also suggests that if the PUC ANEF is to be continued, an intermediate ANEF for say year 2030 is required.

**Location of the Runway 35 Threshold.** The PUC ANEF is based on the runway 35 threshold being relocated 450m to the south of its present position. I have already pointed out that both the Executive Chairman and Managing Director of Canberra Airport have given

unconditional assurances publicly and privately that the runway 35 threshold would not be repositioned from its current location. The PUC ANEF needs to be redrawn on the current position of the runway 35 threshold. This may reduce the maximum movement rate. A new EIS may also be required.

Canberra

Annex:

A. Pot-Pourri of Noise Readings and Complaints made to Airservices 14 Jan 09 to 25 Apr 09

#### Annex A

#### POT-POURRI OF NOISE READINGS AND COMPLAINTS MADE TO AIRSERVICES 14 JAN 09 to 25 APR 09

#### Findings

- North Canberra Departures & Arrivals. Normal jet departures from runway 35 subject Hackett and other North Canberra and Gungahlin residents to noise levels up to 76 dBA. Noise levels for B737s landing runway 17 are around 60 dBA.
- Sleep Disturbance. From the aircraft noise events during the sleeping hours, sleep disturbance occurs around 50 dBA external noise level.
- North Canberra Light Aircraft. Light aircraft and helicopters overflying Hackett or transiting just outside the NE boundary of the Canberra Noise Abatement Area also subject residents to noise levels similar to the jet departures.
- ◆ Jerrabomberra Arrivals. Jerrabomberra residents are subjected to similar noise levels by jets and turbo-props landing runway 35. This is sharply illustrated by a Tiger Airways A320 landing at 2 am on 31 March (74 dBA Jerra NMT against a background noise of < 30 dBA). Note: each of the purported freight aircraft for the proposed freight hub has noise characteristics exceeding the A320 or B737, nor would the Tiger flight have been allowed into Sydney Airport.
- Jerrabomberra Departures. For runway 17 departures, Jerrabomberra residents are currently subjected to noise up to 70 dBA.

#### **Conclusions Drawn from Noise Readings and Complaints**

- The Airport Master Plan assertion that 99.5% of Canberra and Queanbeyan residents are protected from aircraft noise is false.
- The Airport Master Plan assertion that all Canberra residents and most of Queanbeyan will be protected from aircraft noise over 65 dBA from freight hub operations is false.
- Aircraft noise levels > 50 dBA in the sleeping hours can be expected to waken residents of Canberra and Queanbeyan.
- To protect residents from sleep disturbance, either a curfew or community-set noise outcomes backed by a monitoring and stiff penalty system needs to be introduced.

#### **Colour Coding of Noise Readings:**

< 50 dBA (50 dBA - external noise level for sleep disturbance – 4 times background noise level across most of Canberra in the sleeping hours) 50 - <65 dBA (60 dBA is normal conversation level)

# 65 - < 70 dBA (louder than normal conversation)</li> 70 - < 75 dBA (loud conversation)</li> 75 and > dBA (what the hell was that!)

Date of Concern: 14-Jan-2009

Time of Concern: 6:32 AM

Comment: A noticeably noisy Qantas B737 delivered noise of **76 dBA NMT** on departure. The B737 single event noise contour tendered last year as part of the failed Canberra Airport Draft Master Plan suggests that I should receive 50-52 dBA of noise from a B737. Clearly, this contour map is seriously wrong. B737 noise at this level against a background night noise level of < 30 dBA will not only waken residents of North Canberra, it could waken occupants of the Gungahlin Cemetery. I ask that this complaint be brought to the attention of Airservices and Dept of Infrastructure representatives, and that I be provided an e-mail response.

Fri 16 Jan	7.43pm	Qantas B737	65 NMT
Sun 18 Jan	09.08am	VB E190	74 NMT
	5.14pm	Q 737	63 NMT
	8.40pm	Q 737	65 NMT

Date of Concern:19-Jan-2009Time of Concern:7:34 PM

Comment: A Qantas 737 delivered jet noise of 66 dBA NMT. Canberra Airport seeks to introduce night freight services. I point out that night noise levels are below 30 dBA and that jet noise of 66 dBA (over 12 times background noise) will disturb sleeping residents. This proposal should not be approved and a curfew should be introduced.

Thu 22 Jan	7.25pm	Q 737	63 NMT
	7.44pm	Q 737	65 NMT
	8.38pm	VB E 190	75 NMT
Sat 24 Jan	5.11pm	Q B737	65 NMT

Date of Concern:25-Jan-2009SunTime of Concern:8:09 PM

Comment: A jet(s) flew low over the suburb north to south making noise to **82 dBA NMT** level. This did not appear to involve a flypast.

Date of Concern:26-Jan-2009Australia DayTime of Concern:4:36 AMComment:A noisy prop-driven aircraft appeared to depart Canberra to the north.

Date of Concern: 3-Feb-2009

Time of Concern:1:29 AMComment:Woken by aircraft movement near suburb.

Date of Concern: 9-Feb-2009

Time of Concern: 11:55 PM

Comment: I was woken by a jet movement further illustrating why future jet movements in the sleeping hours associated with a freight hub will disturb the sleep of thousands of residents.

Date of Concern:12-Feb-2009Time of Concern:12:46 AMComment:Woken by aircraft movement.

Date of Concern: 12-Feb-2009

Time of Concern: 5:14 AM

Comment: Departing aircraft woke me - noise level 58 dBA NMT. Night flights by jets are going to be much worse if they are approved.

Date of Concern:12-Feb-2009Time of Concern:5:39 AM

Comment: Jet departure woke me. This aircraft was not visible on WebTrak so I assume that it was one of the invisible, but not unheard, military jets. Noise level 56 dBA NMT. Another example of night jet noise issues and why the proposal by Canberra Airport should not go ahead and why the WebTrak policy of not showing military aircraft is wrong.

Date of Concern:15-Feb-2009SunTime of Concern:8:53 AMComment:A Virgin jet overflew Queanbeyan apparently below the noise abatement areaceiling, infringing the NAA.

Date of Concern:15-Feb-2009SunTime of Concern:10:21 AM

Comment: Noisy Qantas jet departure (estimated mid 60s dBA) to the north). Background noise 33 dBA. During the sleeping hours, this would have sufficed to waken many people leading to the conclusion that jet operations during the sleeping hours will result in much dissatisfaction.

Date of Concern:16-Feb-2009Time of Concern:6:00 AMComment:Noisy aircraft (62 dBA NMT) departed Canberra to the north.

Date of Concern:22-Feb-2009SunTime of Concern:5:54 AM

Comment: Prop-driven aircraft departed Canberra Airport to the north waking me. Jet aircraft in the sleeping hours will be noisier, drawing the conclusion that many residents will have their sleep disturbed if the proposed freight hub eventuates.

Date of Concern:22-Feb-2009SunTime of Concern:11:12 PMNote: over at JerrabomberraComment:A landing jet delivered 72 dBA NMT of noise - background noise was lessthan 30 dBA. Jet noise pollution was more than 16 times louder than background. Jet noise atthese levels is quite unsatisfactory for the sleeping hours.

Date of Concern:24-Feb-2009Time of Concern:6:36 AM

Comment: A particularly noisy prop-driven aircraft departed Canberra tracking over North Canberra delivering 70 dBA of noise. This type of aircraft regularly flies out of Canberra Airport and may well be the same aircraft. Such flights exemplify the ineffectiveness of the noise abatement areas and how they do not protect residents from aircraft noise. Aircraft with such noise characteristics should not be allowed to overfly the Canberra or Queanbeyan residential areas or should be subjected to a noise tax.

Date of Concern:24-Feb-2009Time of Concern:10:36 AM

Comment: A prop-driven aircraft appeared to take-off on runway 30 and when first heard at Hackett was over Campbell at about 2,000 ft AGL tracking NWly and climbing. This aircraft, although about 3 kms away, still delivered noise of 65 dBA. For the residents of Campbell, the noise must have been extremely loud. This illustrates that the noise abatement area does not protect residents from significant aircraft noise events and that it is quite ineffective.

Date of Concern:1-Mar-2009SunTime of Concern:5:51 AM

Comment: I was woken by a prop-driven aircraft departing Canberra to the north. This reinforces my contention that jet operations during the sleeping hours will disturb the sleep of thousands of residents.

Date of Concern:1-Mar-2009SunTime of Concern:11:46 AM

Comment: A single-engined light aircraft delivered noise of **76 dBA** over Hackett. This is very intrusive at any time but is a bit much on a quiet Sunday. This complaint further illustrates that the Canberra Noise Abatement Area does not provide reasonable and tolerable noise outcomes for residents. This aircraft needs to circumnavigate suburban areas not overfly them.

Date of Concern:4-Mar-2009Time of Concern:10:27 PM

Comment: A prop-driven aircraft tracked east to west across the suburb - measured noise 66 dBA. I have just been reading the Airport Draft Master Plan's assertion that 99.5% of Canberra and Queanbeyan residents are protected from aircraft noise. The level of protection slipped badly in this case, just as it will if the jet freight services are allowed to start. **This aircraft appeared to have been engaged on a training flight** 

Date of Concern: 5-Mar-2009

Time of Concern: 7:03 PM

Comment: A helicopter tracking NW to SE overflew the suburb delivering 70 dBA of measured noise. This is another example of the Noise Abatement Area failing to deliver a satisfactory outcome. Again, the people of Hackett must have been in the 0.5% of Canberra and Queanbeyan residents not protected from aircraft noise.

Date of Concern: 5-Mar-2009

Time of Concern: 10:48 PM

Comment: Noisy jet departure to the north again illustrating that freighter aircraft in the sleeping hours will waken thousands of residents.

Date of Concern:6-Mar-2009Time of Concern:11:39 PM

Comment: Another aircraft departure in the sleeping hours waking me. Either a curfew is introduced, or required noise outcomes are set by the community, backed up by stiff penalties for breaches.

Date of Concern:7-Mar-2009SatTime of Concern:11:44 AM

Comment: A light aircraft overflew the suburb delivering 72.9 dBA (Hackett NMT 70 dBA). The difference in the noise readings can be explained because this aircraft overflew my home but would have passed about 500m from the NMT. Background noise was 37 dBA. The first aircraft was followed by another light aircraft at 11.49 passing just to the east of me and even further from the NMT delivering 69.6 dBA (NMT 63 dBA). A third aircraft then overflew the suburb at 11.59 delivering 67 dBA (NMT 69 dBA). This noise is at loud conversation levels and it is clear that Hackett, Watson and Gungahlin where they continued on towards must be part of the 0.5% of Canberra and Queanbeyan residents not protected from aircraft noise. Gee, that's a large 0.5%. The Noise Abatement Areas do not work.

Date of Concern: 7-Mar-2009 Sat

Time of Concern: 12:07 PM

Comment: A Qantas B737-400 departing to the north delivered noise of 64 dBA. If the freight hub were to proceed, the ATR-42, B757F, B767F and B747F all have noise characteristics louder than the B737 - the B767 is about 50% louder and the B747 double the noise level of a B737. The Airport in its master plan asserts that Canberra and Queanbeyan residents are protected to 55-65 dBA. It is palpably clear that residents are going to be

subjected to aircraft noise at loud conversation levels and that will waken many people. The freight hub proposal will clearly deliver an unsatisfactory outcome for thousands of residents.

Date of Concern:7-Mar-2009SatTime of Concern:2:28 PM

Comment: An ex-military trainer tracked NWly over the suburb delivering **75 dBA** of noise to the NMT. Another aircraft at 2.31 pm delivered **74 dBA** of noise to me but only **65** to the Hackett NMT as it passed about 100m east of me but 7-800m away from the NMT. This further illustrates that the Noise Abatement Area is no magic solution, that it is quite ineffective in reducing noise and the Airport has no idea to what noise various suburbs are being subjected. This reflects in the Draft Master Plan (2009 version) where various assertions are made.

Date of Concern:7-Mar-2009SatTime of Concern:5:41 PMComment:A light aircraft subjected the suburb to 65.2 dBA of noise (NMT reading 69dBA) again demonstrating the ineffectiveness of the Noise Abatement Area and the Airport's lack of awareness of the noise situation.

Date of Concern:8-Mar-2009SunTime of Concern:8:52 AM

Comment: A C182 subjected the suburb to 73 dBA of noise. Two single-engined light aircraft at 1040 and 1041 subjected the suburb to 74 and 73 dBA. The community needs to decide and set required noise outcomes for aircraft noise, whether jet or prop, and there needs to be stiff penalties (heavy fines and loss of points from pilot's licence) for breaches.

8 Mar (Sun)	7.11pm	Q 737-800	65 dBA NMT
	7.37pm	Q 737-800	66 dBA NMT

Date of Concern:9-Mar-2009Canberra DayTime of Concern:4:43 AM

Comment: A prop-driven aircraft departed to the north waking me. Examination of WebTrak reveals that this aircraft did not register on it. Freight jets will make more noise than this aircraft and also waken many more residents. Required noise outcomes need to be set by the community to protect its rights to undisturbed sleep.

9 Mar (PH)	10.30 am	Light	Light twin engined a/c 68.8 dBA me, 72 dBA NMT				
	10.47 am	ditto	71 dBA NMT				
Date of Conce	ern: 9-Ma	ır-2009	Canberra Day				
Time of Conce	ern: 11:13	3 PM					
Comment:	A jet made a	noisy, l	ate night departure to the north further confirming the				
disruptive pote	ential of the f	eight hu	ub proposal				

11 Mar	10.18 am	Q 737-800	66 NMT
	7.40 pm	Q 737-800	64 NMT
12 Mar	9.03 am	Q 737-800	65 NMT
Date of Conce	rn: 13-Ma	r-2009	
Time of Conce	ern: 5:34 A	M	

Comment: Woken by a prop-driven aircraft departing Canberra to the north followed by a second aircraft at 0536. Jets will be noisier and more intrusive during the sleeping hours.

Date of Concern:	13-Mar-2009
Time of Concern:	11:20 AM

Comment: A large, heavy jet (B767 or equivalent) subjected me to 66 dBA of jet noise departing to the north. This contradicts the Airport assertion that no Canberra resident will receive noise over 65 dBA from a freight hub and is indicative of the noise problems that will eventuate if the freight hub goes ahead.

14 Mar (Sat)	1012	C182	68 dBA	65 dBA NMT
	1039	C206	70 dBA	64 dBA NMT
	Aircraft p	bassed within 200r	from NMT	
	1202	light aircraft		68 dBA NMT

Date of Concern: 15-Mar-2009 (Sun)

Time of Concern: 11:37 AM

Type of Call: Complaint

Comment: A red helicopter subjected residents to **76 dBA** of loud intrusive noise. Other flights at 1040, 1055, and 1116 subjected residents to 70-72 dBA. The Noise Abatement Area is quite ineffective in achieving acceptable noise outcomes. The Airport contention that 99.5% of Canberrans are protected from aircraft noise is a falsehood.

15 Mar (Sun) 130			C182	68 dBA	66 dBA NMT
	1433		C182		68 dBA NMT
	1435		twin-engined	at over 3000 ft AGL	64 dBA NMT
	1718		Q B737-800		65 dBA NMT
16 Mar	1403		C441 (a/c ab	out 5 kms from NMT)	63 dBA NMT
17 Mar 1117			Twin-engine a/c overflew	d light aircraft <mark>67 dBA</mark> me but was about 800m	63 dBA NMT from the NMT
	2232		jet departure	to the north	
	2255	noisy prop-driven aircraft to the east of the su			of the suburb
Date of Concern:		18-Ma	r-2009		

Time of Concern: 5:07 AM

#### Type of Call: Complaint

Comment: A prop-driven aircraft woke me; any chance of going back to sleep was overtaken by another noisier prop aircraft at 5.24 am. Last night, I attended an Airport presentation on its revised master plan where the Airport strove to imply that jet operations in the sleeping hours would not be a problem. Bull!

21 Mar (Sat)	1519	C206	71 dBA NMT
Date of Conce	ern:	21-Mar-2009 Sa	t
Time of Conce	ern:	11:00 PM	
Comment:	Noisy	Falcon 2000 depar	ture to the north demonstrating that even noisier
freighter aircra	aft will	disturb thousands	of residents in the early morning.
22 Mar (Sun)	1000	C182	68 dBA NMT
	1101	C206 72 d	BA me. a/c 1.5 kms from NMT 63 dBA

Date of Concern:23-Mar-2009Time of Concern:7:28 AMComment:A twin-engined light aircraft subjected the suburb to 74 dBA of noise, flyingwithin the Noise Abatement Area.

Date of Concern: 23-Mar-2009

Time of Concern: 7:32 PM

Comment: A Qantas B737-800 subjected Hackett residents to **75 dBA** of jet noise. While this aircraft overflew the suburb, no weather was evident either on the weather radar or in the sky. The fact that weather was not an issue was confirmed by a Qantas jet 3 minutes later making a normal departure for Perth and not seeking to cut the corner overflying residences.

Date of Concern: 24-Mar-2009

Time of Concern: 12:57 PM

Comment: A large, very noisy military jet tracked over the suburb at low level subjecting residents to an estimated 75 + dBA of noise. This aircraft was reheard and reseen in the normal departure path to the north at 1.14 pm. Noise levels were less, probably around 70 dBA. This aircraft appears to have engaged in training but why air traffic controllers would route such a noisy aircraft through rather than round the Canberra Noise Abatement Area needs to be closely examined. This also illustrates why the policy of not showing military aircraft on WebTrak is wrong, particularly when there is a delay mechanism and routing need not be portrayed to maintain security.

Date of Concern: 24-Mar-2009

Time of Concern: 7:38 PM

Comment: A very noisy jet, sounded like the C17 that was around at lunchtime, tracked across the suburb at low level within the Noise Abatement Area. Why was this aircraft routed over residences?

Date of Concern: 27-Mar-2009

Time of Concern:3:50 PM

Comment: A C152 delivered **75 dBA** of noise tracking NWly over the suburb. This reinforces my contention that the Noise Abatement Area and associated practices are quite ineffective.

Date of Concern:28-Mar-2009Time of Concern:10:11 AMComment:A Dash 8 on approach delivered **75 dBA** of noise at the Jerrabomberra TennisCourts.

28 Mar (Sat)	0952	C206		67 dBA NMT
	1009	C182		65 dBA NMT
	1019	C150		67 dBA NMT
	1041	light a/c	65 dBA	
	1127	light a/c	67.9 dBA	65 dBA NMT
	1257	C182	71.0 dBA	65 dBA NMT
	1313	C206	71.2 dBA	63 dBA NMT
	1341	light a/c	72.9 dBA	68 dBA NMT
	1440	light a/c	73.9 dBA	63 dBA NMT

Date of Concern: 30-Mar-2009

Time of Concern: 10:11 PM

Comment: A B737 landing runway 17 delivered 60 dBA of jet noise. This typifies the through-the-night landing noise that could be expected if the freight hub proposal is approved.

Date of Concern:30-Mar-2009Time of Concern:10:12 PMComment:A helicopter about 3000 ft AGL tracking to the SW overflew the suburbdelivering 63 dBA of noise.

Date of Concern:31-Mar-2009Time of Concern:2:02 AMType of Call:Complaint

Comment: I was woken by a jet reversing thrust on landing and, despite the intervening Mt Ainslie Ridge and my home being sited on the reverse slope 200 ft above the Airport, the reverse thrust noise sufficed to wake me. This illustrates the likely scenario if the freight hub is approved. A check of WebTrak showed a Tiger A320 tracking over the Jerrabomberra NMT at 0200 delivering 74 dBA of jet noise to Jerra residents. This also represents the likely situation if the freight hub proposal goes ahead.

Date of Concern:31-Mar-2009Time of Concern:5:50 AMComment:Noisy prop aircraft departure to the north waking me.

Date of Concern:31-Mar-2009Time of Concern:11:07 AMComment:A jet over or near the suburb delivered 74 dBA of noise.

Date of Concern:1-Apr-2009Time of Concern:1:26 AM

Comment: Woken by noisy prop-driven aircraft again demonstrating that freight jets in the sleeping hours will be even more disruptive.

Date of Concern:2-Apr-2009Time of Concern:11:32 AMComment:A light, twin-prop aircraft tracked across the suburb at about 2000 ft AGLdelivering noise of 73 dBA. This refutes the Airport's assertion that 99.5% of Canberraresidents are protected from aircraft noise and illustrates the ineffectiveness of the noiseabatement area.

2 Apr 1616 Virgin B737 on approach 35 at **Jerra** 73 dBA NMT

Date of Concern:3-Apr-2009Time of Concern:1:15 PM

Comment: A large, noisy C-17 jet appeared to be engaged in pilot training, subjecting the suburb to an estimated 70 dBA of jet noise, and again at 1325. Canberra and Queanbeyan residents are already subjected to considerable aircraft noise from Canberra-based aircraft training activities without having to bear the jet noise of visiting aircraft. Moreover, the C-17 is based at Amberley and it is surprising that the Defence budget allows the conduct of pilot training 2 hours from home base and past other suitable military bases such as Williamtown and Richmond.

Date of Concern:8-Apr-2009Time of Concern:5:33 AMComment:A jet departure to the north woke me. Later examination of WebTrak did notshow any aircraft movement although the Hackett NMT was subjected to a noise event to 56dBA. Presumably, this was a VIP aircraft movement which is not shown by WebTrak. Thispolicy is just flummery.

Date of Concern:8-Apr-2009Time of Concern:1:59 PMType of Call:Complaint

Comment: A white helicopter flying at about 1000 ft made a series of overflights across the North Canberra suburbs to about 3.30 pm subjecting residents to noise up to **75 dBA**. This refutes the Airport assertion that the Noise Abatement Area delivers satisfactory noise outcomes. It also clearly refutes the Airport assertion that 99.5% of residents are protected from aircraft noise.

Time of Concern: 7:48 PM Comment: A Qantas B737-800 subjected residents to 68 dBA of jet noise. This again illustrates that residents are subjected to jet noise events exceeding 65 dBA. Bearing in mind that the prospective freight aircraft are noisier than the B737, residents will be subjected to significant jet noise sufficient to easily waken residents from sleep.

8-Apr-2009

Date of Concern:

9 Apr	0930	B737	64 dBA NMT
9 Apr	2248	A320	departure runway 35 – estimated 55-60 dBA
Date of Co	oncern:	10-Apr-2009	Good Friday
Time of C	oncern:	12:40 AM	
Comment:	A heli	icopter moveme	ent to the east of the suburb woke me - estimated noise
level equiv	valent to ar	n airline jet depa	arture.

		E170 overflying Jerra NMT	73 dBA NMT
25 Apr	1154	Anzac day flypast (for information purposes only)	92 dBA NMT
	2012	B737-800	65 dBA NMT
14 Apr	1040	B767	65 dBA NMT
12 Apr	0025	Helo inbound	67 dBA NMT

Document 2

National Aviation Policy - Discussion Paper on 'Safeguards for Airports and the Communities Around Them' Wed, 29 July, 2009 6:21:32 AM From: Geoffrey Willans <geoff.willans@yahoo.com.au> Add to Contacts

To: Anthony Albanese <A.Albanese.MP@aph.gov.au>; Mike Kelly <mike.kelly.mp@aph.gov.au>; Bob Brown <senator.bob.brown@aph.gov.au> response to safeguards discussion paper.doc (83KB)

Minister, Parliamentary Secretary, and Senator Brown,

I attach highly critical comment on the above discussion paper for your consideration and information. The Prime Minister's copy has been mailed yesterday as I did not have an e-mail address.

Sincerely, Geoff Willans

Mr G.P. Willans

28 July 2009

**The Prime Minister** 

The Minister for Infrastructure, Transport, Regional Development and Local Government

The Parliamentary Secretary for Defence Support

For Information:

Leader of the Greens

#### NATIONAL AVIATION POLICY – DISCUSSION PAPER ON 'SAFEGUARDS FOR AIRPORTS AND THE COMMUNITIES AROUND THEM'

The following comments are directed to the Department of Infrastructure national aviation policy discussion paper '*Safeguards for airports and the communities around them*', dated June 2009. I thank you for the opportunity to comment upon it.

I have invited the Prime Minister into this matter because of his past interest, whilst in opposition, in Brisbane Airport matters and support of a curfew there, as well as the likely, politically-sensitive effect of proposals advanced by the discussion paper. The Parliamentary Secretary for Defence Support is responsible for Defence airfields and my comments could also have implications for these airbases which sometimes support civil as well as military aviation activities, hence his involvement. **For Prime Minister Rudd – if your**
#### government's national aviation policy objective is to advantage the aviation industry at the cost of the community even more than the Howard government, you need read no further.

I comment as an ex-military aviator who has flown jets and turbo-props from Canberra Airport, and as a neighbour of over 20 years of Canberra Airport flight paths, living 6.6 kilometres from the runway intersection to the NNW, 2.3 kilometres to the west of the runway 17/35 northern departure and arrival path, and within the Canberra Noise Abatement Area.

#### **Policy Context**

**Subsidy.** Since WWII, the Australian aviation industry has benefited extensively from Government support and subsidy. While support has reduced as Qantas and the major airports passed to private ownership, subsidy has still occurred. For example, eight years after Canberra Airport was sold, the Howard government subsidised more than half the cost of a main runway upgrade – this upgrade would never have occurred if it had been subject to normal commercial decision.

**Pollution/Polluter Pays.** The aviation industry is also a significant air and noise polluter, like the coal and power generation industries. The economic downturn and heavy, international airline losses will necessitate airline mergers to cut costs, and change services. At the same time, the passing of 'peak oil' and global warming/climate change will force changes to airline services; fewer services using larger, more fuel efficient aircraft will result. Moreover, no one living near a major airport wants more or longer aircraft noise pollution.

**Promote Required Long-Term Outcomes.** The formulation of a national aviation policy provides an opportunity to facilitate and advantage those long-term aviation changes that need to occur. More of the same old policy prescriptions will fail the Australian people as they have in the past. Additionally as a principle, the cost of pollution needs to be passed back to the polluter and not be carried by the taxpayer.

# DISCUSSION PAPER 'PLANNING FOR COMPATIBLE DEVELOPMENT' – page 6

**Narrow, Unbalanced Position.** I am dismayed that such a narrow, unbalanced position could be put forward by the Department of Infrastructure as policy addressing '*compatible development*' for airports and the community. **The real thrust of the Department's position is 'enhancing the protection of airports from urban encroachment' and is much narrower than the title of the paper indicates. This is just another disguised subsidy where the Government proposes to legislate to protect airports from the normal commercial competition over utilisation of land, at the cost of the Australian taxpayer and noise-affected residents.** 

From a community perspective however, the paper begins well. It notes:

'According to the International Civil Aviation Organization (ICAO), aircraft noise is the most significant cause of adverse community reaction to the operation and expansion of airports.'

'The nature of aircraft noise patterns around airports and subsequent public expectations have changed in recent years with increased community pressure to impose operational constraints on airports or oppose airport growth. The issues of concern are the level of noise generated by individual aircraft, increasing numbers of flights and decreasing periods of respite as airports get busier. Particular concerns include increased movements during the sensitive night time period and reduced respite periods on weekends.'

This is a sound, but limited summation of the issues.

**Identified Limitations of the ANEF System.** The discussion paper (page 7) then moves on to identify the following limitations of the ANEF system:

- The system is a 'one size fits all' approach which does not take into account local circumstances large airports are treated the same as small airports; greenfield airports are treated the same as built out airports;
- Experience has shown that ANEF contours do not provide a complete picture of the areas where residents are likely to have an adverse reaction to aircraft noise;
- The contours do not easily correlate to a publicly understandable 'decibel' noise level;
- ANEFs do not capture areas under very busy flight paths used by light aircraft, such as training circuits, which can be more annoying to some individuals than a small number of loud noise events; and
- Aircraft noise does not stop at a contour line on a map.

Four of these points would be regarded as 'community' concerns, and subsequent discussion around the first point suggests that upgraded restrictions might be imposed on greenfields sites leading to a two-standard approach. This might not sit well with residents currently exposed to considerable aircraft noise who cannot see any relief from their plight. Moreover, there are additional, unidentified shortcomings of the ANEF system.

Additional Shortcomings of the ANEF System That Were Overlooked in the Discussion Paper. Other key shortcomings of the ANEF system that the discussion paper overlooks are:

• **Definition Acceptable to Residents of a Maximum Aircraft Noise Dose in Decibels.** Residents do not hear averaged, weighted ANEF levels; they hear raw aircraft noise events which degrade their residential amenity through the relative loudness and repetition, and disturb their sleep at night. Residents need to know the maximum noise levels in decibels (Lamax) to which they can be subjected, day and night. There is also a finite limit to residents' tolerance of aircraft noise which needs to be recognised. A defined maximum number of noise events, related to time/period of day and the availability of respite periods, needs to be determined. Noise events during the night and in the sleeping period are crucial elements affecting the community. The number of tolerated movements could be significantly lower than the runways and airspace will support. This is of particular significance where there is just one jet runway and the same residents are subjected to frequent, repetitive noise events without respite – e.g. Canberra Airport. If a maximum noise dose can be defined sufficiently well and with community support and acceptance, the ANEF system might be made redundant. More detailed comment on this topic is offered at annex A.

- Accuracy of Noise Claims by Airports/Attendant Penalties. The accuracy of aircraft noise claims made by airports in master plans need to be independently validated, with heavy penalties for understatement of the likely aircraft noise levels or number of noise events. To illustrate this point, the current Canberra Airport Preliminary Draft Master Plan states that no Canberra resident receives or will receive jet noise over 65 dBA (reset to 60 dBA for night in the Canberra Times of 20 July, page 4), to advance its quest to become the second Sydney Airport. However, higher jet noise readings to 70 dBA have occurred. Moreover, Jerrabomberra residents are routinely exposed to up to 82 dBA of jet noise from landing aircraft, but they are technically in NSW, not part of Canberra or the ACT (see annex B for aircraft noise readings). The Canberra Airport portrayal of the situation is inaccurate and misleading, creating divisive tensions between the communities. Single event noise contour maps are used in the same plan, also significantly understating actual noise. Heavy penalties are required for providing misleading aircraft noise positions in airport planning documentation.
- Bloated ANEFs/Inflated Aircraft Movement Projections. The use of inflated aircraft movements in the ANEF to bloat the contours can deprive the community unnecessarily of needed, convenient, economic living space. Over the ten years of private ownership of Canberra Airport, the annual number of airline aircraft movements has only risen from 39,032 in 97/8 to 39,629 in 07/8. A concurrent 55.9% increase in passenger numbers has been met by aircraft of commensurate greater seating capacity. As further passenger demand eventuates, the airlines will simply replace the B737 mainstay with B787s/A350s of increased seating capacity over the B737 to meet demand. Yet, the approved ANEF (2050-60) is based substantially on a most unlikely 224,734 annual domestic airline movements a movement every two minutes during the sleeping hours. The residents currently exposed to aircraft noise pollution would not tolerate repetitive noise events on this scale; airlines would also seek to reduce costs by using larger aircraft, rather than more aircraft. Moreover, the community is also deprived of economic, convenient living space by unnecessarily-bloated ANEFs. Aircraft numbers and aircraft types forming the basis of an airport ANEF should be subjected to full, proper and transparent public audit.
- Aircraft Noise Monitoring and Complaint System. In undertaking its role as protector of the public interest, an effective, easily-accessed, transparent noise complaint and monitoring system is needed. The noise complaint system needs to provide proper response to complainants as other government departments do, not just a fob-off acknowledgement of the complaint.
- Development of Even-handed Aviation Policy/Transparency/Unbiased Application/Empowerment of Noise-affected Residents. Noise-affected residents do not have confidence in the system because their issues are dismissed and they do not have the same access to government or influence over policy as the aviation industry interests.

All discussion and decisions on aircraft noise issues need to be conducted transparently. Further illustration of the imbalance in access to government on such issues is offered in the attached e-mail to the Minister for Infrastructure of 13 July (enclosure 1).

• Imbalance in Aircraft and Other Residential Noise Regulations. The imbalance, particularly at nighttime, between permissive aircraft noise regulations and more protective regulations for residents from other sources of noise pollution. For example, Canberra Airport considers that subjecting Queanbeyan residents to up to 82 dBA of night jet noise is quite acceptable; yet residents can only subject neighbours to 35 dBA of recreational noise at night. The irony is that a noisy party might disturb other residents within say 50-100 metres, but jets can repetitively bathe residents of four suburbs simultaneously in loud, sleep-disturbing noise without any effective recourse.

**Recommendation.** These additional deficiencies need to be included in the identified shortcomings so that a true appreciation of the many failings of the ANEF/AS 2021 system is drawn.

**Limp Policy Response to Community Concerns.** The discussion paper then hints bureaucratically:

'there is scope to act to minimise community exposure' (page 7).

From this statement and the earlier identification of the limitations of the ANEF system, residents might reasonably expect effective, decisive address of the 'community' concerns, but all the discussion paper can limply offer as a policy response to residents is some sort of information program:

'In response to community concerns, additional tools have been developed to assist individuals gain a clear understanding of aircraft noise exposure patterns - in particular the generation of information showing the location of flight paths and how often and at what times they are used. Noise information is provided in the form of descriptors based on single event contours (eg the N70 which shows how many noise events louder than 70dB(A) there are at a particular location).' (page 7)

# This insults the community. The community cries out for relief from aircraft noise; the Department of Infrastructure offers an information/education program.

Residents, particularly those exposed repeatedly to aircraft noise, are already wellequipped to judge whether noise is loud and intrusive, whether frequent or repetitive aircraft noise events are tiring and irritating, and whether aircraft noise in the sleeping hours will disturb sleep leading to fatigue and possibly health problems. It is the Department that needs an education program to understand the community perspective, balance policy objectively, and develop appropriate aircraft noise mitigation measures.

# **Discussion Paper – 'Options for Enhancement to the Current Arrangements' (page 7)**

The options proffered in the paper for enhancement of the current arrangements include:

- *Reviewing the ANEF system and clarifying whether it is solely a tool for land use planning or whether it has a role in describing noise exposure patterns around airports;*
- A full review of AS2021 as a planning guide for state and local governments;
- In addition to the ANEF, provision of comprehensible noise information, such as flight path location and activity diagrams and N70s, enabling individuals to gain a clearer understanding of aircraft noise exposure patterns around airports which enables them, for example, to factor this information into decisions about house purchase;
- Ensuring that supporting the current and future operations of airports is one of the objectives of planning, and establishing arrangements for that objective to be balanced with others in planning and development decisions;
- Developing stronger arrangements for protection of corridors under flight paths, particularly avoiding residential and other noise-sensitive development in such corridors;
- Considering more conservative criteria for noise-sensitive developments under flightpaths, particularly in relation to development of greenfield sites or where other options are available; and
- Considering special arrangements for state and local government consultation with the Commonwealth government on proposed developments around federal airports so that the impacts on airport operations can be fully assessed and taken into consideration in decision-making.

It is patently clear from these options that their objective is to further strengthen the protection of airports from urban encroachment, limiting the utilisation of land to community disadvantage while the aviation industry avoids having to pay for its noise pollution.

# Conclusions

It is obvious from the prior discussion that the ANEF/AS 2021 system neither delivers acceptable noise outcomes for residents, nor protects the airport from urban encroachment, although the discussion paper fails to say so.

The proffered options for enhancement of the current arrangements will facilitate the politically-sensitive outcome of increasing protection of airports at taxpayer not airport cost, allowing more flights particularly at night and subjecting currently-exposed residents to even more aircraft noise, while reducing available living space to the detriment of the community. If the Rudd government, facing an election next year, cannot see the risks in these options, so be it; Green candidates around the major airports will prosper. Increase in Tension. Comment is offered in the discussion paper that

'some level of tension may be inevitable' (p7).

In view of the rank imbalance in policy being proposed, tension is certain when current residents realise that they are being used for airport advantage. No one who lives near a major airport is asking for more aircraft noise pollution.

**Failure of the Paper.** Reduced to the essence, the discussion paper falls far short of an objective, balanced assessment of the ANEF/AS 2021 system and the attendant aircraft noise issues. Simply tinkering on the edges and providing more protection for airports will not provide the long-term prescriptions so necessary for national aviation policy.

### Recommendation

To foster the required, long-term outcomes, the current discussion paper needs to be withdrawn and replaced by a far more inclusive and comprehensive version. Then, a full, thorough, transparent review of the ANEF/AS 2021 system and aircraft noise matters can be undertaken in which all aspects and issues are subject to concurrent consideration to inform the national aviation policy.

I assume that, as for the national aviation policy, responses will be posted publicly on a Departmental website.

Yours sincerely

Geoff Willans

Annexes:

- A. Determination of an Acceptable Maximum Aircraft Noise Dose
- B. Occasional Noise Readings Canberra 3 May to 22 July 2009

Enclosure:

1. Copy of an e-mail to Minister Albanese dated 13 July 2009

#### DETERMINATION OF AN ACCEPTABLE MAXIMUM AIRCRAFT NOISE DOSE

I shall begin by breaking the day into three periods – day is defined as 7 am to 7 pm, evening/morning as 7 pm to 11 pm and 6 am to 7 am, and night as 11 pm to 6 am.

I also wish to note that the community's tolerance of aircraft noise relates to the community's dependence for prosperity upon the airport. Cairns' prosperity depends heavily on tourism, so residents might be more amenable to some aircraft noise during the night if it involves tourist flights. Here at Canberra, the airport is largely used for domestic travel, and residents do not appear well disposed to night flights disturbing sleep.

The situation for airports with a single main runway is more acute than for airports with multiple jet runways allowing some dispersion of departures to provide a degree of relief from noise. At Canberra Airport, the current jet departure and arrival paths are largely optimised. The alignment of the runway, relative location of suburbs and high terrain, limits options resulting in the same residents being potentially exposed to continuous noise. These issues also impinge on the maximum noise dose.

#### Day

The bulk of flying activity is undertaken during this period. Background noise is higher, and noise-affected residents are generally more tolerant of intrusive aircraft noise. Residents might reasonably tolerate aircraft noise events to 70 dBA. However, residents' tolerance does not extend to continuous aircraft noise and a maximum number of noise events needs to be determined for this period, noting the need for respite periods.

#### **Evening/Morning**

For these periods, background noise levels are generally lower than during daytime and residents are engaged in household activity. A reduction of 5 dBA in the allowable noise level seems appropriate. Additionally, the allowable frequency of noise events might be reduced.

#### Night

Night is probably the most contentious period for aircraft noise matters. World Health Organization (WHO) research indicates that for sound sleep, the background sound level should not exceed 30 dBA and that awakening occurs around noise events of 40-45 dBA. The WHO recommends that individual noise events exceeding 45 dBA (Lamax) should be avoided. As well, WHO observes that the difference between the sound levels of a noise event and background sound levels, rather than absolute noise level, may determine awakening, and the probability of being awakened increases with the number of noise events per night.

**Yardsticks.** Normal speech level is about 50 dBA. Here in Canberra and Queanbeyan, background noise during the sleeping hours is generally less than 30 dBA unless you live close to a major arterial road. In the Sydney suburb of Marrickville in the

Minister for Infrastructure's electorate, night background noise is at least 10 dBA higher. Airservices claims that houses (windows open) generally attenuate aircraft noise by 10 dBA but in trials undertaken by me, I only observed a 5 dBA drop. This suggests that the threshold for sleep awakening in Canberra would be about 40 dBA internal noise level reflecting the quiet background, equating to 45 dBA external noise level outside a bedroom window. This is higher than the allowable 35 dBA of noise for residences from other sources.

For Canberra Airport, I contend that no restriction would be placed on aircraft delivering less than 45 dBA maximum noise to affected residents. For aircraft subjecting residences to more than 45 dBA, I contend that the limit should be 50 dBA (awakening threshold), restricted to five movements or less per night. Breaches should be subject to heavy penalties paid by the Airport, unless the pilot has breached normal operating regulations. Other airports might vary their limits, depending on the noise situation for residents and the residents' acceptance of 'higher' aircraft noise events.

#### **ANEF/AS 2021 Standard for Planning**

If each community's maximum noise dose can be determined by joint negotiation between residents and the aviation industry, then it can form the basis for land planning.

# OCCASIONAL AIRCRAFT NOISE READINGS /Hackett NMT/Jerrabomberra NMT 3 MAY 09 to 22 JULY 09

- < 50 dBA (50 dBA external noise level for sleep disturbance 4 times background noise level (< 30 dBA) across most of Canberra in the sleeping hours)
- 50 <64 dBA (50 dBA is normal conversation level)
- 65 < 69 dBA (louder than normal conversation)

70 - < 74 dBA (loud conversation)

75 and > dBA (what the hell was that!)

3/5	1006	red helo tracking west	<b>72.9</b> dBA home	75 dBA NMT
0/5	1442	prop driven trainer		70 dp a NMT
9/3	1445			
	1/01	Q737		00 aba nm i
10/5	0645	Q737		63 dBA NMT
	1943	Q737		67 dBA NMT
	2050	VB E190 landing 35	(Jerra)	72 dBA NMT
	2055	Prop-driven aircraft	· · ·	65 dBA NMT
11/5	1234	Q737		62 dBA NMT
	2000	Q737		62 dBA NMT
	0.400			
12/5	0629	Q737		64 dBA NMT
13/5	0917	0767		63 dBA NMT
10/0	1117	0737		63 dBA NMT
	1948	0737		65 dBA NMT
	1953	0737		$63 dB \Delta NMT$
	1755	Q131		
14/5	0657	Q737		66 dBA NMT
	2215	prop-driven at about 4500 ft		67 dBA NMT
15/5	0646	prop-driven – 3kms NE at abo	out 4500 ft	63 dBA NMT
1/6	1676	light a/a		74 JDA NIMT
1/0	1020			74  uDA NMT
	1010	QISI		UZ UDA INIVI I
2/6	0652	Q737		69 dBA NMT
	1018	Q737		64 dBA NMT

3/6	0634	Q737		<mark>66</mark> dBA NMT
	0656	Q737		63 dBA NMT
	1712	Q737		62 dBA NMT
	1745	Q737 landing runway 35 straight in	Jerra	75 dBA NMT
	1759	Q737		65 dBA NMT
	1820	Q737		67 dBA NMT
	1840	Q737 straight in landing 35	Jerra	72 dBA NMT
	1842	Q737 offset approach 35	Jerra	66 dBA NMT
	1909	Q737		62 dBA NMT
	1938	Q737		63 dBA NMT
	2058	Q737		62 dBA NMT
		Tiger A320 straight in approach 35	Jerra	70 dBA NMT
7/6	1935	Q737		64 dBA NMT
8/6	0639	VB E190		65 dBA NMT
	1946	VB E170 straight in approach 35	Jerra	71 dBA NMT
	1947	Q737		65 dBA NMT
9/6	1953	Q737		68 dBA NMT
10/6	0004	Tiger A320 appch 35	Jerra	72 dBA NMT
	0102	woken by Tiger A320 dep		56 dBA NMT
11/6	1816	Q737 straight in appch 35	Jerra	76 dBA NMT
	1817	Q737		65 dBA NMT
	1846	Q737		68 dBA NMT
	1937	Dash 8 straight in approach 35	Jerra	74 dBA NMT
	1937	Q737		68 dBA NMT
	1948	Q737		64 dBA NMT
12/6	1409	unknown a/c probably military		63 dBA NMT
	1843	Q737 straight in approach 35	Jerra	76 dBA NMT
13/6	1132	C182 @ about 4000 ft		71 dBA NMT
	1137	C150 @ about 3500 ft		69 dBA NMT
	1313	Be76 @ about 4000 ft		69 dBA NMT
	1329	Pa44 @ about 4500 ft		69 dBA NMT
	1703	Q737		64 dBA NMT
	1723	Q737		63 dBA NMT
14/6	1054	C206 at about 4000 ft 4 kms to the north		63 dBA NMT
	1209	P28R at about 3500 ft		71 dBA NMT
	1331	BE58 at about 4500 ft		75 dBA NMT

	1943	Q737		66 dBA NMT
16/6	1507	Helo inbound at about 3300 ft		<mark>66</mark> dBA NMT
6/7	2208	Q737 straight-in approach 35	Jerra	<b>76</b> dBA NMT
7/7	0647	Q737		67 dBA NMT
8/7	0614 0649	Q737 Q737		65 dBA NMT 65 dBA NMT
10/7	1159 1337 1340	Light aircraft tracking Wly at about 4500 ft Dash 8 straight-in approach 35 Q737 dep 35 Light a/c tracking NWly at about 3500 ft	Jerra	67 dBA NMT 70 dBA NMT 64 dBA NMT 70 dBA NMT
11/7	1130	C182 at about 3500 ft		65 dBA NMT

13/7 0437 A helicopter flew NE to SW diagonally across the North Canberra suburbs at an estimated height of 5000 ft and a hand-measured noise of 72 dBA. If this helicopter was undertaking a medical transfer to Canberra Hospital, no other aircraft appeared to be near, so why did it transit across the North Canberra suburbs? With a westerly wind blowing, the aircraft could have approached the hospital from the Airport disturbing the sleep of far fewer residents. I ask for a detailed explanation of the flight path of this aircraft. This noise reading approximates what we can expect from the freight hub.

	1950	Q737		65 dBA NMT
14/7	2018	Q737		64 dBA NMT
		Q737 straight in appch 35	Jerra	74 dBA NMT
	2133	Q737		64 dBA NMT
15/7	1710	Q737		67 dBA NMT
		Q737 straight in appch 35	Jerra	75 dBA NMT
	2356	jet departure 35 est noise 50-55 dBA		
20/7	0634	VB E190		62 dBA NMT
	1112	aircraft		75 dBA NMT
	1116	light a/c tr NWly at about 3500 ft		83 dBA NMT
	1943	Q737		64 dBA NMT
21/7	1946	Q737		64 dBA NMT
	2121	Tiger A320 straight-in appch 35	Jerra	73 dBA NMT

22/7	0634	VB E190		64 dBA NMT
	0649	Q737		66 dBA NMT
	0823	Q767 straight in approach	Jerra	<b>82</b> dBA NMT
	0841	Q737 ditto	Jerra	77 dBA NMT
	1947	Q737		65 dBA NMT
	1954	Q737		65 dBA NMT

APPEARANCE OF BIAS BY THE AVIATION ELEMENT OF YOUR DEPARTMENT Geoffrey Willans AddMonday, 13 July, 2009 3:09:14 PM To:Anthony Albanese <A.Albanese.MP@aph.gov.au> Cc:Antony Sachs

#### Dear Minister,

A visiting British expert will be presenting on aircraft noise and climate change to selected invitees on 21 July under your Department's sponsorship. An objective of the presentation on noise is to 'lead into discussions about community engagement, environmental assessment etc'. Invitees include two representatives of Canberra Airport. I became aware of the presentation/discussion and informally sought an invitation as a knowledgeable, local community representative. This was refused.

At the same time, the Canberra Airport Preliminary Draft Master Plan is still to be decided and your Department has released on 24 June a policy discussion paper on 'Safeguards for airports and the communities around them' for public comment. The Departmental official with carriage of the policy discussion paper has quite properly been invited to the presentation. Any reasonable reading of the Canberra Airport Master Plan document would note that the subsequent Departmental paper appears to be promoting a Canberra Airport agenda - the similarities are significant.

In e-mails of 4 and 18 June, I outlined concerns over the Canberra Airport Preliminary Draft Master Plan and asked to meet with you. I was informed by a Departmental official on your behalf that 'It would not be appropriate for the Minister to meet with you regarding the matters you have raised or any specific comments to be made until the draft Master Plan has been assessed in accordance with the relevant provisions of the *Airports Act 1996*' (File Reference 04252-2009 dated 24 June 2009). Yet, it appears that Airport representatives can attend a presentation and discussion that could significantly influence the policy discussion paper which already promotes its position, but community representatives cannot.

The conclusion that I draw from the sequence and substance of documents and the 21 July meeting arrangements is that the Canberra Airport Preliminary Draft Master Plan has been defacto accepted because the policy paper position is designed to facilitate night movements at Canberra Airport and mute criticism, and that subsequent policy on aircraft noise and planning issues will reflect the Canberra Airport position. Your Aviation element appears to be in thrall to Canberra Airport.

During the Howard government's stewardship of the country, Ministers Anderson and Vaile consistently took a one-eyed, pro-airport approach, simply ignoring community criticism, and heavily subsidising the unnecessary, Canberra Airport runway upgrade. No one who lives near an airport thinks that the present aircraft noise situation is reasonable. When you announced a major review of national aviation policy, I thought that at last there would be some enlightenment, past policy bias might be redressed, and something like an even-handed approach develop.

I ask as a voter whether your stewardship will be any different and should I bother to comment on the policy discussion paper as it seems pre-ordained? Will your Department's responsibility to protect the public interest continue to be dismissed?

Yours sincerely, Geoff Willans

#### **CANBERRA AIRPORT - MISLEADING AIRSERVICES NOISE REPORT** Wed, 5 August, 2009 9:13:33 AM

From: Geoffrey Willans Add to Contacts

 

 To:
 Anthony Albanese <A.Albanese.MP@aph.gov.au>

 Cc:
 Mike Kelly <mike.kelly.mp@aph.gov.au>; Bob Brown <senator.bob.brown@aph.gov.au>; Jon Stanhope <stanhope@act.gov.au>; Tim Overall <tim.overall@qcc.nsw.gov.au>;

 misleading noise summary.doc (44KB)

#### Dear Minister,

I attach for your consideration a letter detailing shortcomings in the Airservices evaluation of aircraft noise at Hackett, having implications for the assessment of the Canberra Airport Draft Master Plan.

Kind regards, Geoff Willans

Mr G.P. Willans

5 August 2009

#### The Minister for Infrastructure, Transport, **Regional Development and Local Government**

For Information:

The Parliamentary Secretary for Defence Support Leader of the Greens **ACT Chief Minister** The Queanbeyan Mayor

# CONSIDERATION OF THE CANBERRA AIRPORT DRAFT MASTER PLAN -MISLEADING AIRSERVICES FINDINGS AND LACK OF IMPARTIALITY & **OBJECTIVITY**

Dear Minister,

I refer to the Canberra Quarterly Report on the Airservices Noise and Flight Path Monitoring System for January-March 2009 and challenge one of its key findings relating to the Hackett Noise Monitor Terminal.

The following statement is made at page 12 of reference D in regard to the Hackett Noise Monitor Terminal (NMT):

'Given a greater likelihood of community noise being inadvertently correlated to aircraft at the Hackett site, the 140 CNE which equalled or exceeded 70dB(A) at this NMT (see Table 1) were scrutinized. Of the 140 CNE, 72% of these were events with multiple peaks in the noise recording which are typical of community noise events. Note an aircraft noise event will have a single peak. Given this, the N70 value for the Hackett monitor presented in Table 1 should be considered an over-estimate and a more realistic statement of the N70 value is at least 0.44 per day.'

This was used by Mr Byron, Managing Director of Canberra Airport, in a statement to the Canberra Times of 20 July (page 4) to endeavour to dismiss concerns over aircraft noise at Hackett. But, is the Airservices statement a fair, objective finding?

I have taken many noise readings with a sound level meter near the Hackett NMT at 105 Mackenzie Street (and elsewhere) and the community noise events (CNE) referred to in the Airservices statement are almost invariably passing vehicles. The duration of a vehicle noise event is far shorter than the passage of an aircraft either passing overhead or transiting obliquely at a distance. Moreover, vehicle noise levels are generally lower around 50-60 dBA although a motor bike or hotted-up car being revved hard may deliver much higher, albeit briefer, noise readings. The situation is identical at Jerrabomberra where a road (Coral Drive) facilitating higher speed traffic than Mackenzie Street passes near the Jerrabomberra NMT. Yet, no similar statement was made in respect of the Jerrabomberra NMT where virtually every jet and Dash 8 straight-in approach delivers 70-80 dBA of aircraft noise pollution onto Jerrabomberra residents. Anyone standing beside the Jerrabomberra NMT as a jet passes overhead has no doubts about the source of the noise pollution.

Additionally, these CNEs are random; so, if they had corrupted noisy light aircraft readings around Hackett, they would have overwhelmed the B737 departure noise readings usually in the 60-69 dBA zone, raising them into the 70-80 band. Why has no such observation or finding been made in respect of the jet movements? Additionally, the coincidence of a noisy vehicle and aircraft passage has to coincide near perfectly to possibly deceive a skilled, experienced reader of the WebTrak system.

'Note an aircraft noise event will have a single peak' – Airservices statement. In listening to aircraft noise and taking many noise readings with a sound level meter as well as correlating them with WebTrak, it is my experience at Hackett that aircraft not directly overflying the observer as is the usual case here, generate rolling waves of noise, particularly the jets. This is readily validated aurally and with a sound level meter, just as it is observable on WebTrak. The Airservices statement is not sustained in my experience, and I also question its accuracy relating to Jerrabomberra.

I will now illustrate this contention with some typical examples from Sunday 2 August which you can validate on WebTrak:

• Qantas B737-800 at 1121-22 making a standard 35 departure (non-RNP). At its nearest point to the Hackett NMT, the aircraft is about 3-4 kms away and it takes the jet roar about 10 seconds to reach the NMT. You will note the overall duration of the noise event is about 30 seconds and three peaks – 62, a fall away then 65 rising to 68, another fall away rising to 60 dBA. There does not appear to be any vehicle corruption and I confirm the peak noise reading from my sound level meter. The Dash 8 trailing the B737 does not

corrupt the reading either because it is quieter and hill-shadowed from the NMT by the intervening Majura-Ainslie Ridge.

- A propeller-driven Beech 35 departed Canberra Airport, tracking northwesterly along the NE Canberra Noise Abatement Area at about 1,000 feet above ground, passing the Hackett NMT about 1209. You will note several peaks rising to a maximum noise level of 72 dBA (I measured 74 dBA at home but I was closer to the aircraft) and a duration of about 40 seconds. Again, there is no appearance of vehicle corruption, but you will note the probable passage of a vehicle shortly after the BE35 noise reading trails off. The duration of the vehicle passage is about 10 seconds and the noise levels substantially lower. You only have to live here to know what the primary source of noise pollution is. Yes, there are a few hoons in the suburb but their vehicle noise signatures only occasionally dominate the aircraft noise profiles.
- An arriving Qantas B737 overflew the Jerrabomberra NMT at 2207 subjecting Jerrabomberra residents to an initial peak of 74 dBA, drop off, then second peak of 75 dBA. The initial jet noise from an approaching aircraft is the engine fan noise, followed by the airframe noise and after it passes, the tailpipe roar. Variations in approach noise levels could occur from configuration or power changes near the NMT, providing more than one peak and challenging the Airservices' emphatic statement.
- At the same time of 2207, a Tiger Airways A320 departed to the north. I recorded 55 dBA with a sound level meter, but no recording was registered by the Hackett NMT, confirming its poor siting.
- This representation lacks a Dash 8, so I will use the Dash 8 currently overflying the suburb as I type as an example. The Dash 8 (4 August, 1138) tracks about 2 kms north of the Hackett NMT, tracking westerly. Multiple peaks (maximum 66 dBA) can be observed and again there appears to be no vehicle corruption of the aircraft noise signature. It should be noted that this noise event may be difficult to track because there is some malfunction of the WebTrak recording/playback system.

**I contend that the Airservices' finding is unsustainable and misleads the public.** If one of your ministerial office staff wishes to visit me at home, I will illustrate my findings to them. I also contend from having taken sound level readings on light aircraft overflying or passing near the suburb, that the WebTrak noise readings of light aircraft in the 70-80 dBA range are generally accurate.

Consequently, I recommend that:

- the Airservices statement and finding should be withdrawn while the true situation is ascertained,
- because of the publicity gained by Mr Byron, a public statement by the Head of the Aviation element acknowledging the error and retracting the report should be made, and
- a decision on the Canberra Airport Preliminary Draft Master Plan be held over until these concerns are resolved and a true appreciation of Hackett noise exposure is gained from a properly-sited NMT.

### Lack of Objectivity/Impartiality

I have already pointed out that the Jerrabomberra NMT which has been in place for some years is also subjected to CNEs. Airservices staff should have been aware of this and if CNEs were a concern, why was the Hackett NMT sited just before last Christmas near a suburban street and not in a more appropriate location? Moreover, the site at 105 Mackenzie Street is far from ideal; it is 500m further away from the northern jet departure path than my home, hence I can get higher noise readings on the jets, and on light aircraft tracking outbound along the north-eastern boundary of the Noise Abatement Area. The NMT is also sited lower and closer to the Majura-Ainslie Ridge and is thus more hill-shadowed than other residences in Hackett. Additionally, it does not have a window of 'hearing' against aircraft landing runway 17. Altogether, its siting makes it ineffective in gaining a true appreciation of the aircraft noise issues affecting Hackett and I wonder whether this is deliberate. The poor siting was pointed out to appropriate staff but they ignored the advice. Additionally, I have provided many noise readings to Departmental staff but their thoroughness in assessing the situation appears to have lacked objectivity.

Both Airservices and Canberra Airport have made much ado about Qantas B737-800s skirting round Jerrabomberra overflying Tralee, resulting in slightly less aircraft noise generally for Jerrabomberra residents. For runway 35 departures however, the RNP departure places the B737-800 some hundreds of metres closer to Hackett residents and in my opinion subjects residents to about 5 dBA more of jet noise over the standard departure. Has Airservices and the Airport said anything, or done anything about that, and how does it sit with the principle of minimising aircraft noise pollution?

Moreover, I notice that many B737-800s making a runway 35 approach opt for the straight-in overflying Jerrabomberra approach, rather than the offset, particularly at night. I understand that the freight aircraft will not be RNP fitted nor the crews appropriately trained, so this does not bode well for Jerrabomberra residents if the freight hub is to proceed. The night freight aircraft will presumably be operating uncontrolled outside Canberra Tower hours, and the captain can elect to land either runway 17 or 35. For an airport surrounded by high terrain, making a night approach using the runway 35 ILS seems a prudent safety decision.

Together, these issues and concerns suggest that the Department of Infrastructure and Airservices have not acted objectively and impartially in truly assessing the aircraft noise exposure of Hackett residents.

#### **Aircraft Noise in the Sleeping Hours**

The resetting of the bar to '*no aircraft sound louder 60 dBA at night*' by Mr Byron from Canberra Airport (Canberra Times, 20 July, page 4) and the EIS for the new parallel runway at Brisbane Airport suggests that a spin is being developed that aircraft noise of 60 dBA or less will not disturb sleep or awaken aircraft noise affected residents. Consequently, no restriction should be placed on operations meeting these criteria, nor should they be limited.

Identical jets make the same noise at Canberra or Sydney; so, if they were operable from Canberra Airport in the sleeping hours, they would also be operable from Sydney where the background noise is at least 10 dBA higher and the risks of sleep disturbance from airfreight activities would be lower than say Canberra. This would also yield a far better climate

change/greenhouse gas emissions outcome and could lead to at least the partial withdrawal of the Sydney curfew, and perhaps, the curfews at Adelaide, Coolangatta and Essendon airports.

In my experience of being regularly woken just after 6 am by the Qantas B737 to Adelaide, I would opine that a 60 dBA threshold will be far too high, at least at Canberra where background noise is less than 30 dBA. I also visit occasionally in the Brisbane suburb of Hamilton near Brisbane Airport where I am regularly woken by night take-offs on runway 02, quieter than jet noise at Hackett.

# Closure

Minister, I contend that:

- the Airservices' findings in respect of the Hackett NMT are unsustained, mislead the public, and should be withdrawn until a true appreciation of the situation is made; and
- the Department and Airservices have not acted objectively and impartially in assessing aircraft noise at Hackett and that a decision on the Canberra Airport Draft Master Plan should be held over until the true noise exposure of Hackett residents is determined from an effectively-sited noise monitor not subject to vehicle noise.

I also recommend that aircraft noise affected residents need to be consulted extensively in setting an aircraft noise outcome permitting unrestricted night movements in the sleeping hours.

Yours sincerely

Geoff Willans

# THE CANBERRA NFPMS QUARTERLY REPORT & CONCERNS OVER THE CANBERRA AIRPORT DRAFT MASTER PLAN Tue, 11 August, 2009 10:11:35 AM

From: Geoffrey Willans <geoff.willans@yahoo.com.au> Add to Contacts

To: Anthony Albanese <A.Albanese.MP@aph.gov.au>

Cc: Mike Kelly <mike.kelly.mp@aph.gov.au>; Bob Brown <senator.bob.brown@aph.gov.au>; Jon Stanhope <stanhope@act.gov.au>; Tim Overall <tim.overall@qcc.nsw.gov.au> Further comment on Airservices NFPMS report.doc (50KB)

Dear Minister,

I forward concerns over the findings in the Canberra Airport Quarterly NFPMS Report and its implications for consideration of the Canberra Airport Draft Master Plan.

Kind regards, Geoff Willans

Mr G.P. Willans

11 August 2009

The Minister for Infrastructure, Transport, Regional Development and Local Government

For Information:

The Parliamentary Secretary for Defence Support Leader of the Greens ACT Chief Minister The Queanbeyan Mayor

# THE CANBERRA AIRPORT DRAFT MASTER PLAN & NATIONAL AVIATION POLICY 'SAFEGUARDS' DISCUSSION PAPER

Dear Minister,

I refer to:

- A. Airservices NFPMS Quarterly Report for Canberra Airport January-March 2009.
- B. My letter of 5 August 2009 forwarded by e-mail of the same date.
- C. My letter of 28 July 2009 (not to all and forwarded by e-mail of 29 July).

With the benefit of a weekend to more closely analyse reference A, I would like to expand on my comments at both references B and C.

# The Incomplete Misleading Discredited Assessment of Hackett Aircraft Noise Exposure

At page 12, the Airservices report (reference A) comments that the residents living on the eastern edge of the suburb of Hackett are the closest to the main northern jet flight path into and out of Canberra Airport and that the Hackett NMT was installed to correlate aircraft noise with jet arrivals and departures north of the airport.

**Context for the Installation of the Hackett NMT.** The Hackett NMT installation followed residents' challenges on aircraft noise issues that appeared to be understated in the first Canberra Airport Preliminary Draft Master Plan which you rejected in November 2008. Presumably, the Department of Infrastructure's objective for the NMT installation was to gain an appreciation of jet noise to the north of the Airport to inform decision-making on the expected second draft of the Master Plan, in line with the expressed purpose at reference A.

**Concerns with the Airservices Report.** My concerns with the NMT and Airservices Report are:

- Siting of the NMT. For the above purpose, why was the NMT sited at 105 Mackenzie Street Hackett where it could be subjected to community noise events? At this site, the NMT has no window of audibility on jets making a normal approach to runway 17, nor does it have for jets making a flatter than normal departure to the north because of the intervening Majura-Ainslie Ridge hill-shadowing the NMT, but not residents. Location of the NMT at this site might have been of benefit in assessing light aircraft transits of Hackett or VIP jet circuit training, but not the jet traffic departing/arriving to/from the north.
- The Lack of Professionalism/Objectivity in the Airservices Findings. Firstly, the findings do not appear to relate to the expressed objective of assessing jet noise exposure of Hackett residents. Next, no finding is made on the 39 of 140 N70 noise events that apparently did not have multiple peaks. Then, of the 101 of 140 noise events with multiple peaks, virtually all would have been light aircraft events and this did not appear to arouse any curiosity of the scrutineer/s to take a look at the jet noise profiles which would have also shown multiple noise peaks. The unintelligent resort to the apparent tenet 'an aircraft noise event will have a single peak' without checking and genuine scrutiny betrays the real purpose of the assessment to discredit any high noise readings so that Hackett noise complaints can be dismissed as irrelevant.
- Conclusion. In regard to the Airservices Report, I conclude that:
  - for the expressed purpose of assessing jet noise in Hackett to inform the draft Master Plan, the Airservices NFPMS Report (reference A) is incomplete, misleading, discredited and irrelevant; and recommend that:
  - the Hackett element of the Report should be withdrawn, with public announcement of its retraction;

- the Hackett NMT needs to be resited to a more suitable location excluding community noise, if jet noise exposure is to be properly evaluated at Hackett; and
- because of the lack of professionalism and objectivity exhibited by Airservices so far, future assessment of Hackett noise readings will need to be undertaken by an independent organisation.

# Aircraft Noise Benchmarks Proclaimed by Canberra Airport

**Canberra Noise Situation.** Two aircraft noise benchmarks have been offered by Canberra Airport. In the Draft Master Plan, the Airport claims to protect residents from more than 65 dBA of jet noise. This claim is rubbish – Jerrabomberra residents have been exposed to up to 82 dBA of window-rattling B767 noise (22 July, 0823) and Hackett residents to 69 dBA of B737 jet departure noise (29 July, 1946). Both the B767 and B737 are prospective night freight aircraft types. In The Canberra Times of 20 July, Mr Byron of Canberra Airport set a new, more restrictive, night benchmark of 60 dBA. It should be noted that the 60 dBA benchmark was not referred for public discussion in the Draft Master Plan, so no opportunity for public comment has been given.

**60 dBA Application for Sydney.** The 60 dBA benchmark is apparently being drawn from the EIS for the New Parallel Runway Plan for Brisbane Airport which contends that aircraft noise of 60 dBA or less will not disturb sleep or awaken nearby residents. If that is so, then it also holds good for Sydney. Sydney Airport has an overwater approach/departure like Brisbane Airport and comparable background noise levels, perhaps even slightly higher, in the sleeping hours in nearby suburbs. So, if 60 dBA is acceptable in Brisbane for night movements, it also is acceptable for Sydney, negating the push to relocate the freight hub.

WHO Guidelines. The World Health Organization Guidelines for Community Noise state:

- individual noise events exceeding 45 dBA should be avoided for a good night's sleep;
- the difference between the sound levels of a noise event and background sound levels, rather than absolute noise level, may determine the reaction probability; and
- the probability of being awakened increases with the number of noise events per night.

**Required Night Noise Outcome for Canberra.** For Canberra and Queanbeyan, background noise in the sleeping hours is less than 30 dBA, more than 10 dBA less than suburbs near Sydney or Brisbane Airports. This suggests that for the same probability of awakening, Canberra residents should not be subjected to more than 50 dBA of aircraft noise in the sleeping hours, preserving the current night quiet treasured by residents. Normal conversation is in the 50-60 dBA range, so residents can easily appreciate whether the conduct of a normal conversation right outside their bedroom window would be sleep disturbing.

# What Does This Mean for the Key Proposal in the Canberra Airport Draft Master Plan of Becoming the National Freight Hub and Second Sydney Airport?

The lack of a satisfactory Airservices' jet noise assessment for Hackett is problematic; but, peak jet noise readings available on WebTrak for both Jerrabomberra and Hackett, despite their multiple peaks and the lack of Airservices' objectivity, are valid and many exceed the noise levels benchmarked by the Airport. Thus, significant numbers of residents are already subjected to aircraft noise in excess of the Airport's proposed benchmarks. Introduction of night freight aircraft will simply exacerbate the present situation and reduce the quiet period

(11 pm to 6 am) when relief from the many noise events between 6 am and 11 pm is available. On these grounds, the Airport Draft Master Plan should be rejected.

However if the freight hub really needs to be moved from Sydney Airport, there is no reason why aircraft that can operate under an 'awakening' noise ceiling, agreed by aircraft noise-affected residents, should not be permitted to do so. The 60 dBA night noise benchmark, while possibly suitable for Brisbane and Sydney, has not been considered by the Canberra public, nor does it accord with WHO guidelines – a ceiling of 50 dBA might be more appropriate for Canberra and Queanbeyan circumstances. Whatever the benchmark, it will need to be agreed by the residents who will have to bear the noise pollution, and possibly being woken a number of times through the night. Disgruntled residents quickly become disaffected voters.

**Monitoring/Breach Penalties.** As aircraft noise already exceeds the Airport-proclaimed benchmarks, it would seem prudent to have both an effective monitoring system and heavy penalties for breaches, payable by Canberra Airport as the proponent of the scheme. The Hackett NMT, properly sited, would need to be permanently installed and additional NMTs might be required at Jerrabomberra/Tralee, West Queanbeyan, Narrabundah, Campbell and Gungahlin. The purpose of the proposal relates to Sydney air traffic, and Sydney-like penalties should apply. The Sydney penalty for breach of the curfew is up to \$500,000 per breach; for Canberra Airport, a fine of \$100,000-500,000 per breach, scaled to the degree that the ceiling was breached, appears reasonable on the principle that noise polluters pay for their pollution.

# National Aviation Policy – 'Safeguards' Discussion Paper

**Transparency.** The *Airports Act* was drafted under the Keating government but enacted by the Howard government in 1996. Your Department has since used the airports as proxies behind which the Department hides. Could you and your Department please engage with the noise-affected residents, directly, openly and frankly, taking us into your confidence and putting all of the issues up on the table for public discussion. After all, we are also voters.

Minister, the comments I provided at reference B and these comments relate to and amplify the response I forwarded on the 'Safeguards' discussion paper. In the interests of transparency and good policy, I ask that they be appended to reference C for posting to the public website.

Could you please advise:

- why the Hackett NMT was sited at such an inappropriate location for its purpose?
- why the findings on the Hackett aspects in the Airservices NFPMS report do not address the expressed purpose of the installation of the Hackett NMT?
- Will the Hackett segment of the Airservices report be withdrawn?
- Will the Hackett NMT be relocated to a better site to monitor jet noise, where and when?
- Does the Australian government accept the WHO Guidelines for Community Noise and also accept that the relative loudness of noise events to background noise is a significant factor in sleeping residents being woken, particularly for Canberra and Queanbeyan?
- Will a 60 dBA ceiling for night movements be set for Sydney Airport as for Brisbane Airport and will that result in the freight hub being retained at Sydney Airport?

- How will jet noise issues related to Hackett and North Canberra be judged for the Canberra Airport Draft Master Plan in view of the discredited Airservices NFPMS report?
- What are the maximum aircraft noise levels that Hackett residents could be subjected to, related to time of day?
- Does your Department recognise that the introduction of RNP departures to the north penalises Hackett residents with louder aircraft noise events, contrary to the policy of minimising aircraft noise, and will the RNP departures be discontinued as alternative departures resulting in less noise are available?
- If noise benchmarks are introduced, will they be set after consultation with the public, will there be heavy penalties for breaches and an effective monitoring system to detect breaches, and will the ANEF need to be revalidated because of the significant affect the lower noise benchmarks would have on the ANEF calculations?
- For airports with a single jet runway, does your Department recognise the need for respite periods from continuing, intrusive jet noise and how long and when would those periods be?

Kind regards

Geoff Willans

#### Canberra Airport Noise Readings - Hackett Fri, 28 August, 2009 8:28:36 AM

From: Geoffrey Willans <geoff.willans@yahoo.com.au> Add to Contacts

To: Karen.Gosling@infrastructure.gov.au

Cc: Dave Southgate <dave.southgate@infrastructure.gov.au>; Antony Sachs <antony.sachs@infrastructure.gov.au>

Dear Ms Gosling,

Last night, a caller drew my attention to an article in Canberra Airport's newsletter 'The Hub' regarding the findings in the Airservices NFPMS report on Canberra Airport (Jan-Mar). I checked my occasional monitoring of the WebTrak system for August and counted at least 58 airline movements to date that exceeded 61.6 dBA at Hackett - mostly, but not exclusively, Qantas B737s making an RNP departure, the noisiest measured at 68 dBA. For light aircraft, there were at least 22 transits exceeding 66.6 dBA - the noisiest at 75 dBA. One of these light aircraft infringements at night appeared to involve one of the turbo-prop freighters departing for Melbourne, despite special arrangements between the Airport owners and the aircraft operators. Another infringement involved a light aircraft trailling at least 73 dBA of prop noise across eight North Canberra suburbs prior to 6.30 am.

My concern is that the Minister might approve the Draft Master Plan relying on the discredited Airservices NFPMS report and be subsequently embarrassed by reports of higher noise readings in the lead-in to an election.

Kind regards

Geoff Willans

# Minister Albanese' Decision to Approve the Freight Hub and Reject the Curfew Wed, 23 September, 2009 2:13:21 PM

From: Geoffrey Willans Add to Contacts

 To:
 Bob McMullan <Bob.McMullan.MP@aph.gov.au>; Mike Kelly <mike.kelly.mp@aph.gov.au>; Kate Lundy <senator.lundy@aph.gov.au>

 Cc:
 Annette Ellis <Annette.Ellis.MP@aph.gov.au>; Jon Stanhope <stanhope@act.gov.au>; Tim Overall <tim.overall@qcc.nsw.gov.au>; curfew4canberra <curfew4canberra@gmail.com>; Alan Kerlin resident@gcc.asn.au>; Margot Sachse <margot@webone.com.au>... more

 SUMMARY OF THE ISSUES SURROUNDING THE MINISTER.doc (147KB)

Dear Parliamentary Secretaries and Senator,

In recent months, Infrastructure Minister Albanese has approved master plans for Sydney, Canberra and Brisbane Airports including the development of a night freight hub at Canberra Airport and a new parallel runway at Brisbane Airport. Minister Albanese has also continued the curfew at Sydney Airport benefitting his Federal (Grayndler) and his wife's (Marrickville) NSW electorate, while rejecting curfews for Canberra and Brisbane Airports.

I contend that the Minister's decisions are inconsistent, involving policy shortcomings as well as specific judgement deficiencies on issues surrounding Canberra Airport. I have attached a paper summarising my concerns. An executive summary and way ahead follows:

- The Minister's decision to approve a night freight hub at Canberra Airport and to reject a curfew has no policy underpinnings and is inconsistent with decisions taken at Sydney and Brisbane Airports, and conflicts with WHO guidelines.
- Policy options under consideration in the Departmental 'Safeguards' policy discussion paper will facilitate the politically-sensitive outcome of increasing protection of airports at taxpayer not airport cost, allowing more flights particularly at night and subjecting currently-exposed residents to even more aircraft noise, while reducing available living space to the detriment of the community.

• Putting aside the discredited Airservices NFPMS report, it is quite clear that every past and current noise benchmark provided by Canberra Airport in planning documentation is routinely being exceeded and that night jet noise levels will be sleep disturbing irrespective of the direction of operation of the jet runway, or of the use of RNP procedures.

• Because the Minister holds the seat of Grayndler and his wife the NSW seat of Marrickville adjoining Sydney Airport, the only way he could change his decision is to introduce curfews at Brisbane and Canberra Airports. This seems unlikely, having just made the decision irrespective of its merit.

• The only way ahead that could deliver acceptable noise outcomes for the Canberra and Queanbeyan communities is for the Minister, in conjunction with community

representatives affected by aircraft noise, to set required noise limits enforced by an effective noise monitoring system and heavy penalties for breaches.

• I ask that Parliamentary Secretaries McMullan and Kelly, and Senator Lundy jointly approach the Minister and ask for a summit meeting with community representatives and local government representatives to resolve these concerns over Canberra Airport with the intention of setting required noise outcomes and a breach/penalty system. I have specifically excluded the Airport from being invited. The problem is inflight not on-airport noise and that is controlled by the Department of Infrastructure/Airservices who have the authority to resolve the problem. Additionally, the Airport will have requested meetings with each of you to advance the master plan; no consideration was extended to the community representatives then.

• If you are unconvinced or opposed to the meeting, please let me know. The Minister's poor, inconsistent decisions on curfews and the likely course of future policy hold implications for communities surrounding every major airport in Australia. If the ALP wishes to go to the polls advancing the interests of airports to the detriment of surrounding residents and voters, the Liberals may not oppose such a position but other political parties will. I feel equally sure that some media interests will be prepared to run the issue.

• I ask for your support for such a meeting or your advice that you do not support it.

Information addressees include the presidents of Curfew 4 Canberra, the Gungahlin and North Canberra Community Councils, and the Jerrabomberra Residents Association.

For Parliamentary Secretary McMullan. I responded to your invitation to Hackett residents to meet with you but I believe that this approach offers a better way forward.

Yours sincerely

Geoff Willans

# SUMMARY OF THE ISSUES SURROUNDING THE MINISTER'S DECISION ON THE CANBERRA AND OTHER AIRPORT MASTER PLANS AND REJECTION OF NEW CURFEWS

In recent months, Infrastructure Minister Albanese has approved master plans for Sydney, Canberra and Brisbane Airports including the development of a night freight hub at Canberra Airport and a new parallel runway at Brisbane Airport. Minister Albanese has also continued the curfew at Sydney Airport benefitting his Federal (Grayndler) and his wife's (Marrickville) NSW electorate, while rejecting curfews for Canberra and Brisbane Airports.

I contend that the Minister's decisions are inconsistent, involving policy shortcomings as well as specific judgement deficiencies on issues surrounding Canberra Airport.

# **Shortcomings in Policy on Airport Curfews**

**Lack of Curfew Guidelines.** While Departmental guidelines exist for the relaxation of a curfew, there are no guidelines or determining criteria for the establishment of a new or continuation of an existing curfew – this was checked with the Department of Infrastructure guru on aircraft noise. Nor are any intended.

**Curfew Guidelines Not Intended in the Future.** In June, the Department of Infrastructure issued for public discussion as part of the Minister's endeavour to formulate a national aviation policy a discussion paper '*Safeguards for airports and the communities around them*'. There is no reference at all to curfews and only a passing reference to respite periods despite the discussion paper stating:

'The issues of concern are the level of noise generated by individual aircraft, increasing numbers of flights and decreasing periods of respite as airports get busier. Particular concerns include increased movements during the sensitive night time period and reduced respite periods on weekends.'

This omission is too gross to be just an oversight bearing in mind four Australian airports have curfews; the inference can be drawn that the Department of Infrastructure is opposed to the establishment of any more curfews at Australian airports whatever the circumstances, although no statement to that effect has been made.

**World Health Organisation (WHO) Guidelines.** The World Health Organization Guidelines for Community Noise state:

- for a good night's sleep, background sound levels should not exceed 30 dBA and individual noise events exceeding 45 dBA should be avoided;
- the difference between the sound levels of a noise event and background sound levels, rather than absolute noise level, may determine the reaction probability; and
- the probability of being awakened increases with the number of noise events per night.

Night background noise levels in the suburbs surrounding Sydney and Brisbane Airports are comparable and both airports have an overwater approach/departure lane facilitating night movements. However, the night background noise in Jerrabomberra, West Queanbeyan and eastern Canberra is at least 10 dBA below that of suburbs adjoining Sydney and Brisbane Airports increasing the likelihood of residents being woken.

So how did the Minister decide without any policy underpinning to reject curfews for Canberra Airport despite the master plan proposing new jet movements during the sensitive night time period and for Brisbane Airport where the Prime Minister (as Member for Griffith) has championed previously the introduction of a curfew and opposed the new parallel runway, while continuing the curfew at Sydney Airport? The Minister's decisions on curfews are inconsistent, not backed by any policy underpinning, and lack a logical explanation.

#### **Proposed Policy Changes Advantaging Airport Encroachment on Communities**

The policy discussion paper 'Safeguards for airports and the communities around them' mentioned previously also proposes strengthening urban encroachment protection for airports to permit more flights over longer airport operating periods. This proposal will degrade residential amenity for residents currently affected by aircraft noise and also deprive the community of land providing convenient, economic living space. This point is well illustrated by events at Canberra Airport and Tralee.

The community is not being consulted properly or fully on this as airports seek to establish a policy outcome advantageous to them, but discriminating against residents. The proposed measures are in effect a subsidy of the aviation industry as it seeks to use government regulation to save it from having to compete commercially over the use of land.

More detailed analysis of the 'Safeguards' policy discussion paper is included at enclosure 1.

# **Issues and Concerns Relating to Canberra Airport**

The Minister might have allowed the night freight hub and rejected the curfew on advice of his Department that jet noise would not be a concern. My position on jet noise follows.

Airservices Australia Noise and Flight Path Monitoring System (NFPMS) Report for Canberra Airport. I have already discredited the NFPMS report which might have been used to suggest that jet noise at night might not be a concern for Canberra and Queanbeyan residents – see enclosures 2 and 3. The incompetence of Airservices Australia in publishing this NFPMS report is breathtaking.

**Canberra Airport Noise Situation.** Canberra Airport has stated over a number of years and again in its Draft Master Plan that Canberra residents were not subjected to jet noise over 65 dBA. This claim is rubbish – Jerrabomberra residents have been exposed to up to 82 dBA of window-rattling B767 noise (22 July, 0823) and Hackett residents to 69 dBA of B737 jet departure noise (29 July, 1946). Both the B767 and B737 are prospective night freight aircraft types. In The Canberra Times of 20 July, Mr Byron, Managing Director of Canberra Airport, set a new, more restrictive, night benchmark of 60 dBA - '*no aircraft* 

*sound louder than 60 dBA at night*'. It should be noted that the 60 dBA benchmark was not referred for public discussion in the Draft Master Plan, so no opportunity for public comment on the appropriateness of this noise level has been given (WHO guidelines would suggest that 60 dBA is too high and will be sleep-disturbing). The August edition of the Canberra Airport newsletter 'The Hub' stated that 'the loudest reading for a jet aircraft using the main runway was just 61.6 dBA at Hackett'. On the day (28 August) that the Minister for Infrastructure approved the master plan and 24-hour freight hub, eleven airline jets exceeded the purported Hackett maximum of 61.6 dBA. On that same day, Jerrabomberra residents were subjected to sixty three airline and one turbo-prop freight aircraft early morning (0117) movement of 65 dBA and over (see enclosure 4).

**Recent Noise Readings.** A summation of occasional, recent noise readings exceeding Mr Byron's noise parameters is included at enclosure 4. It is patently clear that even the noise benchmarks proffered by the Airport are being exceeded. If night noise benchmarks were set using the WHO guidelines, current aircraft noise levels would grossly exceed those benchmarks, drawing the conclusion that residents' sleep will be disturbed.

**Minister's Sop for Residents.** In regard to the Canberra Airport decision, the Minister for Infrastructure stated on ABC radio that an '*Airservices' review will be conducted in 2010 and will consider options to concentrate aircraft noise away from existing residential areas, especially at night. It will examine the application of air navigation technology to minimise the impact of aircraft noise'. Canberra Airport has a single jet runway. The alignment of the runway and relative location of high terrain and suburbs means that jet flight paths are largely optimised and there are no options to direct aircraft noise away from current residents. If there were, why hasn't it been done already? Additionally, RNP procedures were recently introduced at Canberra Airport in 2007. Qantas B737-800 aircraft, the mainstay of the 737 fleet for the next 15 years, making an RNP departure on runway 35 subject North Canberra residents to about 50% more noise than the non-RNP departures and this procedure needs to be rescinded. Another review, after the recent, discredited effort by Airservices to assess Hackett jet noise, is just an affront to noise-affected residents already well aware whether loud, intrusive aircraft noise at night will be sleep-disturbing.* 

What Else Could be Done. Runway 35 is the runway primarily favoured for jet operations. At night when wind conditions are normally calmer, the direction of movement could be reversed (runway 17). This would reduce noise levels for North Canberra, and departure noise levels over Jerrabomberra residents would be about 10 dBA lower than approach traffic overflying the suburb. Nevertheless, departure noise levels for Jerrabomberra residents would still be sleep-disturbing, albeit quieter. However, freight aircraft are normally older aircraft unable to employ RNP systems and pilots would probably prefer to make an ILS arrival to runway 35 bearing in mind the terrain around Canberra Airport. The ANEF system is highly sensitive to peak noise levels. Utilisation of runway 17 would shrink the ANEF to the south of the Airport releasing land for residential use.

#### Summary and A Way Ahead

- The Minister's decision to approve a night freight hub at Canberra Airport and to reject a curfew has no policy underpinnings and is inconsistent with decisions taken at Sydney and Brisbane Airports, and conflicts with WHO guidelines.
- Policy options under consideration in the Departmental 'Safeguards' policy discussion paper will facilitate the politically-sensitive outcome of increasing protection of airports at taxpayer not airport cost, allowing more flights particularly at night and subjecting currently-exposed residents to even more aircraft noise, while reducing available living space to the detriment of the community.
- Putting aside the discredited Airservices NFPMS report, it is quite clear that every past and current noise benchmark provided by Canberra Airport in planning documentation is routinely being exceeded and that night jet noise levels will be sleep disturbing irrespective of the direction of operation of the jet runway, or of the use of RNP procedures.
- Because the Minister holds the seat of Grayndler and his wife the NSW seat of Marrickville adjoining Sydney Airport, the only way he could change his decision is to introduce curfews at Brisbane and Canberra Airports. This seems unlikely, having just made the decision irrespective of its merit.
- The only way ahead that could deliver acceptable noise outcomes for the Canberra and Queanbeyan communities is for the Minister, in conjunction with community representatives affected by aircraft noise, to set required noise limits enforced by an effective noise monitoring system and heavy penalties for breaches.
- I ask that Parliamentary Secretaries McMullan and Kelly, and Senator Lundy jointly approach the Minister and ask for a summit meeting with community representatives and local government representatives to resolve these concerns over Canberra Airport with the intention of setting required noise outcomes and a breach/penalty system. I have specifically excluded the Airport from being invited. The problem is inflight not on-airport noise and that is controlled by the Department of Infrastructure/Airservices who have the authority to resolve the problem. Additionally, the Airport will have requested meetings with each of you to advance the master plan; no consideration was extended to community representatives then.
- If you are unconvinced or opposed to the meeting, please let me know. The Minister's poor, inconsistent decisions on curfews and the likely course of future policy hold implications for communities surrounding every major airport in Australia. If the ALP wishes to go to the polls advancing the interests of airports to the detriment of surrounding residents and voters, the Liberals may not oppose such a position but other

political parties will. I feel equally sure that some media interests will be prepared to run the issue either nationally or locally.

• I ask for your support for such a meeting or your advice that you do not support it.

# Geoff Willans

# Enclosures:

- 1. See Document 2
- 2. See Document 3
- 3. See Document 4
- 4. See Document 15

# Minister Albanese' Decision to Approve the Freight Hub and Reject the Curfew Wed, 30 September, 2009 8:43:59 AM

From: Geoffrey Willans <geoff.willans@yahoo.com.au> Add to Contacts

To: Bob McMullan-Bob.McMullan.MP@aph.gov.au>; Mike Kelly <mike.kelly.mp@aph.gov.au>; Kate Lundy <senator.lundy@aph.gov.au>
 Cc: Annette Ellis <a href="mailto:Annette.Ellis.MP@aph.gov.au>; Jon Stanhope <stanhope@act.gov.au>; Tim Overall <ti>tim.overall@qcc.nsw.gov.au>; curfew4canberra</a>
 <a href="mailto:com\_au>:curfew4canberra@gmail.com>; Alan Kerlin resident@gcc.asn.au>; Margot Sachse <margot@webone.com.au>... more</a>
 <a href="mailto:SUMMARY">SUMMARY OF THE ISSUES SURROUNDING THE MINISTER.doc (147KB)</a>

Dear Parliamentary Secretaries and Senator,

This morning, I submitted the following comment on a noise complaint to Airservices Australia on a Qantas B737 at 7.45 pm last night:

'Higher than the purported jet maximum of 61.6 dBA referenced by Canberra Airport's newsletter 'The Hub' August edition, higher than the 65 dBA to which no Canberra resident will be subjected in the Preliminary Draft Master Plan, a Qantas B737-800 making a RNP departure roared 68 dBA on the Hackett NMT. Thankfully, residents had been prepared for this, an identical prior flight at 1936 had roared 67 dBA on the same monitor. It is patently obvious that the RNP departure procedure results in a significant increase in jet noise for Hackett residents. What does it take for authorities to realise the obvious and immediately rescind the procedure because it increases jet noise? I ask that this complaint be drawn to the attention of the Departmental officer having responsibility for Canberra Airport.'

The Hackett noise monitor terminal was sited there just before last Christmas. These readings are not unique, they have been consistently delivered by Qantas B737-800 aircraft making RNP departures. Such technological advances as RNP are not going to be the saviour promised by Minister Albanese; instead they are the cause of angst.

The Department of Infrastructure is not going to do anything to improve the aircraft noise situation at Canberra Airport unless you show an interest. Are you prepared to wait until the freight flights start and residents begin complaining as they realise what is in store for them, or are you prepared to be proactive and nip a coming problem in the bud, and promote an Infrastructure meeting with the community to deliver noise outcomes? Kind regards Geoff Willans

# Minister Albanese' Decision to Approve the Freight Hub and Reject the Curfew Mon, 5 October, 2009 9:39:32 AM

From: Geoffrey Willans> Add to Contacts

To: Bob McMullan <Bob.McMullan.MP@aph.gov.au>; Mike Kelly <mike.kelly.mp@aph.gov.au>; Kate Lundy <senator.lundy@aph.gov.au> Cc:

SUMMARY OF THE ISSUES SURROUNDING THE MINISTER.doc (147KB)

Dear Parliamentary Secretaries and Senator,

In the attached and other e-mail, I have described some of the deficiencies of the Department of Infrastructure/Airservices efforts to assess jet noise at Hackett following community complaint and provision of noise readings. I would now like to illustrate shortcomings of the siting of the Hackett Noise Monitor Terminal (NMT) to monitor aircraft arriving from the north. My concern is not just what the Hackett NMT 'hears', but what it does not 'hear', but should.

Between 8 pm and 7 am, aviation regulations specify runway 17 as the preferred runway and it is expected that this would apply to the proposed freight aircraft operations. On Grand Final Sunday, runway 17 was in operation because of weather factors and I monitored airline aircraft landing into the south from 8 am to around 2 pm when the WebTrak system appeared to fail. In this 6 hour period, 17 airline aircraft from B737s down tracked past the Hackett NMT.

The noise signature of these aircraft on approach is noisier than on departure and they are closer to the NMT on approach than on departure. Despite this, not one registered on the NMT. Its poor siting places a noise barrier of several million tonnes of rock and soil called the Mt Majura-Ainslie Ridge between it and aircraft making an approach to runway 17. However, residents of Hackett are not as fortunate and every one of these aircraft was audible. In the quiet of the sleeping hours, the freight aircraft will be even more noticeable.

Let's face it, the Department of Infrastructure and Airservices have badly botched the assessment of jet noise in Hackett, and this is a crucial factor in determining the implications of the proposed freight operation.

I again ask the local parliamentarians to facilitate a meeting between the Minister, his Department and community representatives and local government to resolve community noise concerns over Canberra Airport. Yours sincerely Geoff Willans Critical Shortcomings in Approving the Canberra Airport Freight Hub & Rejecting a Curfew Mon, 9 November, 2009 8:53:25 AM

From: Geoffrey Willans Add to Contacts To: Anthony Albanese <A.Albanese.MP@aph.gov.au> Cc:

Dear Minister,

In an earlier e-mail of 2 November, I documented numerous shortcomings in consideration of the decision to approve the 24-hour freight hub and reject a curfew, but particularly deficiencies in the Airservices assessment of aircraft noise. The Airservices Australia NFPMS report for the third quarter will be due out shortly and it will be interesting to see how high noise readings such as the military jet to 96 dBA, the light aircraft overflight to 83 dBA, the B767 arrival over Jerrabomberra to 82 dBA, and airline jet departures to the north to 69 dBA in this quarter will be treated, and whether that constitutes significant adverse aircraft noise. Nevertheless in this e-mail, I wish to expand on previous comments on the runway 35 RNP departure.

In announcing your decision to approve the freight hub and reject the curfew on 28 August, you stated that '[an Airservices' review in 2010] will examine the application of air navigation technology to minimise the impact of aircraft noise'. I take this to mean GPS technology such as the RNP procedure, but this also has shortcomings.

The Airservices report (Implementation of RNP Operations at Canberra Airport - Noise Monitoring Report dated 11 July 2007), despite its title, did not monitor the changes in noise levels for Hackett although the RNP departure to the north tracked the Qantas B737-800s nearly a kilometre closer to the suburb than the non-RNP departure (see Figure 4 of the report). B737-800s will be the mainstay of B737 operations into Canberra Airport probably for the next 15 years or so.

The noise impacts of RNP/non-RNP departures are well illustrated by two B737-800 movements at 1706 and 1708 on Saturday afternoon. The Virgin jet at 1706 made a normal (non-RNP) departure delivering 55 dBA to the Hackett NMT; the Qantas jet two minutes later making a RNP departure ran up 68 dBA on the Hackett NMT. Now before Airservices starts shouting 'multiple peaks, there must have been community noise' - I visually observed and monitored both flights from home with a hand-held sound level meter and registered 56.9 and 69.7 dBA respectively.

This leads to several points:

• Firstly, the high-handedness of Airservices in instituting a new procedure which clearly had the potential to increase noise levels without any consultation with affected residents is disturbing. Airservices' failure to determine what the noise effects actually were at Hackett for the implementation report is equally disturbing.

- Next, in conducting a review in 2010, Airservices is not the appropriate organisation. Its introduction of RNP procedures that exacerbated noise outcomes, coupled with its efforts to 'fudge' the two quarterly NFPMS reports, means that Airservices is significantly compromised. An increasing population with more discretionary income will lead to greater demand for flights. Noise affected residents around the major airports will contest this you will be aware of Marrickville Council asking for the curfew at Sydney Airport to be expanded and the aircraft movement rate to be reduced. Transparency and trust between the community and decision makers will need to be at an all-time high if this is to be achieved without voter dissent. For these reasons, the review of aircraft noise at Canberra will need to be undertaken publicly, transparently, by an organisation independent of Airservices.
- Jerrabomberra experienced a similar insensitivity with the runway 17 RNP departure when the RNP procedure was introduced. In the Jerrabomberra case, the RNP departure was moved further to the west to reflect the non-RNP departure (approved master plan, paragraph 14.2.11). I ask that the runway 35 RNP departure be relocated east to track the non-RNP departure to provide similar noise reduction to that afforded for Jerrabomberra residents.

Yours sincerely, Geoff Willans

----- Forwarded Messag **Yew Text** From: Geoffrey Willans <u>debilitey</u> will<u>ens@yahoo.com</u>> To: SY\_CCR <<u>community.relations@AirservicesAustralia.com</u>> Sent: Wednesday, 26 August, 2009 1:30:56 PM Subject: Re: Ref: 222435

Hi lona, and thanks for the prompt response. I would just like to point out that 16 minutes prior to the aircraft in question taking off from runway 30 and trailing loud, intrusive noise across eight Canberra suburbs prior to 6.30 am, an aircraft of identical type took off using runway 35, bound for Sydney. My point is that the aviation industry is a significant noise polluter and, until it exercises a requisite degree of circumspection and prevents such noisy flights occurring, it will always be subject to public criticism. Let's face it, over 70 dBA of prop noise - more than three times the jet noise that morning - is pretty sleep-disturbing even on a windy Canberra morning.

I ask that you draw this e-mail to the attention of the Airservices and Dept of Infrastructure Head Offices.

Kind regards Geoff Willans

----- Original Message ----From: SY\_CCR <<u>community.relations@AirservicesAustralia.com</u>> To: <u>geoffrey\_willans@yahoo.com</u> Sent: Wednesday, 26 August, 2009 10:31:00 AM Subject: Ref: 222435

Mr Willans

I have copied the ATIS for Canberra on 25/8/09 at 0600, below, and from that I would suggest the aircraft departed on Runway 30 due to the weather ie the pilot may have requested R 30 due to the cross-wind component on R 35.

ATIS YSCB A 241959 + APCH: EXP ILS APCH RWY: 35 FOR ARRIVALS AND DEPARTURES + SFC COND: WET OPR INFO: TAXIWAY C CLOSED BETWEEN TAXIWAY K AND H DUE WORKS + WND: 270/15-25 XW MAX 25 KTS VIS: GT 10 KM + WX: SH IN AREA + CLD: FEW018, FEW025, SCT040 + TMP: 6 + QNH: 1003 + SIGWX: EXP TURB OVER RWY 35, S OF RWY INT. SIGMET CURRENT FOR SEV TURB FCST BLW 10000 FEET

NNNN

If you wish to discuss this further please don't hesitate to call this office on our free call number 1800 802 584. The office is manned from 9am - 5pm Monday to Friday. There is also an answering machine for recording messages outside these hours.

Regards,

lona

Noise Enquiry Unit Environment & Climate Change Safety & Environment Airservices Australia

E-mail: Community.Relations@airservicesaustralia.com

Airservices Australia Ph 1800 802 584(within Australia) Fax +61 2 9556 6641 www.airservicesaustralia.com
## Document 11

Re: Noise complaint

## Fri, 27 November, 2009 11:35:19 AM

From: Geoffrey Willans <geoff.willans@yahoo.com.au> Add to Contacts To: SY\_CCR <community.relations@AirservicesAustralia.com>

Viv, thank you for your prompt response.

I suggest that you examine the detail of the 35 departures from Canberra. The standard SID tracks aircraft to the east of the extended centreline, the RNP departure initially to the west of the extended centreline and thus closer to Canberra suburbs. I might add that the RNP arrival for runway 17 tracks the aircraft on the eastern side of the extended centreline as well.

Abeam Hackett, the standard 35 SID tracks aircraft over vacant/rural land between Majura Rd and Defence's Majura Firing Range over the Emergency Services complex and Peacekeeping Training Facility with just a few rural residences who may well live in town in any case, so I guess if it comes to who has the most votes, I think Hackett will win. As the standard 35 SID has existed for about 40 years, I guess that the required climb gradients, while steep, can be met and are acceptable.

The majority of departures to the north are to SYD/BNE and I suggest that the standard 35 SID reduces the track miles to these destinations fractionally over the RNP track.

You may claim that the RNP departure provides the best solution but I challenge that because little weighting is being provided to the noise issues. B737-800s making an RNP departure are consistently the noisiest jets passing Hackett on departure by about 5 dBA.

I note that a Senate committee is to review ASA's management of aircraft noise next year. I intend making an extensive submission and will include the 35 RNP departure as an example of poor management of noise. This is not done to embarrass you personally, but to bring to light the lack of circumspection in ASA's management of aircraft noise. Bear in mind that the B737-800s, using RNP procedures, will be the mainstay of services into Canberra for the next 15 years or so. If Virgin Blue adopts RNP procedures as well and the RNP departure track is maintained, the noise situation in North Canberra will have been disadvantaged significantly. That is unacceptable, and I suggest that the Senate committee will agree with me. You may wish to draw this to the attention of Head Office and if they want to contact me about it, I'm quite prepared to discuss it.

Kind regards, Geoff Willans

From: SY\_CCR < community.relations@AirservicesAustralia.com>
To: geoff.willans@yahoo.com.au
Sent: Fri, 27 November, 2009 9:47:55 AM
Subject: Noise complaint

Mr Willans

Re your complaint No 229732 - A QANTAS B737-800 MAKING A RNP DEPARTURE DELIVERED JET NOISE OF 68 DBA MEASURED AT THE HACKETT NMT TO THE SUBURB (I MEASURED 69.5 DBA AT HOME). IT IS PATENTLY CLEAR THAT RNP DEPARTURES TRACK THE AIRCRAFT CLOSER TO HACKETT THAN THE STANDARD DEPARTURE. WHY IS THE RNP DEPARTURE NOT ALIGNED WITH THE STANDARD DEPARTURE RESULTING IN LESS NOISE?

The design of the RNP departure considers the usual factors of terrain clearance, traffic management issues, and in addition to addressing the environmental issue of noise also endeavours to provide for a reduction in aircraft emissions. The RNP departure provides the best solution in addressing all of the issues. Generally speaking a variation between the SID and the RNP tracks also addresses the community preference for spreading the noise.

Viv

Noise Enquiry Unit Environment & Climate Change Safety & Environment Airservices Australia Ph: 1800 802 584 (within Australia ) Fax: +61 2 9556 6641

E-mail: Community.Relations@airservicesaustralia.com

Web: www.airservicesaustralia.com.au

## AIRCRAFT NOISE READINGS Hackett NMT/Jerrabomberra NMT Jet & Night (1900-0700) Flights > 61.6 dBA – Day prop > 66.6 dBA

Note: The above noise thresholds were set as the benchmark because the Airservices 2009 Q1 Noise Monitoring Report used to support the Minister's decision to deny a curfew and approve the freight hub claimed these noise levels as the maximum received at the Hackett NMT.

< 50 dBA (50 dBA - external noise level for sleep disturbance – 4 times background noise level (< 30 dBA) across most of Canberra in the sleeping hours) – also purported noise level at Hackett NMT for B737-800, according to Airport noise footprint modelling.

50 - <64 dBA (50 dBA is normal conversation level)

65 - < 69 dBA (louder than normal conversation)

70 - < 74 dBA (loud conversation)

75 and > dBA (what the hell was that!)

28/8	Date that the Minister approves Canberra Airport master plan and rejects curfew						
	0117	SW4 probably night freight flight returning from MEL	Jerra	66			
	0648	Q737-800 RNP dep	Hack	64			
	0722	E170 norm dep	Н				
	0727	DH8D arr 35	J	68			
	0757	QB737-400 arr 35	J	76			
	0810	QB737-400 arr 35	J	75			
	0813	QB737-400 arr 35	J	74			
	0815	E190 arr 35	J	73			
	0817	E170 arr 35	J	71			
	0819	DH8D arr 35	J	69			
	0822	E170 arr 35	J	72			
	0829	QB737-800 norm arr 35	J	74			
	0910	QB737-400 arr 35	J	74			
	0917	ditto	J	75			
	0920	E170 arr 35	J	71			
	0927	E190 arr 35	J	73			
	0935	DH8D arr 35	J	71			
	0937	Q737-800 RNP dep	Η	62			
	1005	Q737-400	Н	62			
	1012	Q737-800 RNP arr 35	J	65			
	1026	DH8D arr 35	J	72			
	1038	DH8C arr	J	67			
	1104	E190 arr	J	72			
	1112	QB737-800 RNP dep	Н	<b>6</b> 4			
	1132	DH8D arr	J	73			

1135	QB737-400 arr	J	76
1153	E170 arr	J	71
1158	E170 arr	J	74
1223	QB737-800 RNP arr	J	65
1245	E190 arr	J	73
1310	E170 arr	J	70
1327	QB737-800 RNP dep	Н	<b>6</b> 4
1339	DH8D arr	J	69
1410	QB737-400 arr	J	76
1419	DH8D arr	J	70
1448	E170 arr	J	71
1511	QB737-400 arr	J	76
1517	DH8D arr	J	72
1525	A320 arr	J	73
1528	QB737-800 arr	J	74
1557	E190 arr	J	72
1609	QB737-400 arr	J	77
1613	VBB737 arr	J	72
1617	QB737-400 arr	J	75
1635	QB737-800 RNP arr	J	65
1644	E170 arr	J	71
1653	E190 arr	J	72
1658	DH8D arr	J	68
1708	QB737-800 RNP arr	J	65
1722	QB737-400 dep	Н	62
1727	QB737-400 arr	J	73
1736	QB737-400 arr	J	75
1738	QB737-800 RNP dep	Н	<b>6</b> 4
1756	QB737-400 arr	J	74
1806	QB737-800 RNP dep	Н	66
1813	QB737-400 arr	J	73
1824	E170 arr	J	71
1843	VBB737-700 arr	J	73
1848	QB737-800 arr	J	73
1855	QB737-400 arr	J	73
1900	QB737-400 dep	Н	62
1902	DH8D arr	J	72
1914	E170 arr	J	69
1930	DH8D arr	J	69
1949	QB737-800 RNP dep	Н	
2003	QB737-400 arr	J	76
2008	Brinda SW4 arr	J	67
2012	QB737-800 RNP arr	J	62
2018	E190 arr	J	72

	2032	VBB737-700 arr			J	72
	2048	QB737-400 arr			J	76
	2053	QB737-800 RNP arr			J	62
	2107	E190 arr			J	71
	2118	A320 arr			J	73
	2122	E170 arr			J	71
	2143	QB737-400 arr			J	75
	2209	A320 dep			J	
Sumn	nary 28/	(8:				
	Hacke	ett departures – 11 jets	> 61.6 dBA	Jerra – 65 arrivals, 1	depar	ture
		E170	1x63 dBA	11x69-74 dB	A	
		E190		8x71-73 dBA	ł	
		B737-400	3x62 dBA	18x73-77 dB	A	
		VB 737-700		3x72-73 dBA	ł	
		B737-800		3x73-74 dBA	ł	
		B737-800 RNP	7x62-66 dBA	6x62-65 dBA	ł	
		A320		2x73 dBA		
		DH8C		1x67 dBA		
		DH8D		11x68-73 dB	A	
		SW4		2x66-67 dBA	A	
		A320 dep 17		1x63 dBA		
29/8	1323	Unknown, invisible j	et, prob military – A	ADFA?	Н	96
31/8	0729	Unknown, invisible j	et, prob military – A	ADFA?	Н	75
	1909	QB737-800 RNP dep	)		Н	
	1944	ditto			Η	67
1/9	0642	ditto			Н	
	1935	ditto			Н	67
2/9	1924	BE24 dep			Н	71
	1944	QB737-800 RNP dep	)		Η	65
	1947	BE20 dep			Η	66
3/9	1712	OB737-800 RNP der	)		Н	
0, 2	1807	ditto	-		Н	
	1941	ditto			Н	64
	1948	ditto			Н	62
4/9	1854	ditto			Η	66
	2002	ditto			Η	65
5/9	1439	C182 at about 4000 f	t tr NWly		Н	69

	1708	QB737-800 RNP dep		Н	64	
6/9	1137	C182 at about 3500 ft tr NWly	me 67.8	Н	66	
	1509	QB737-800 RNP dep	(at home)	Н		
	1848	QB737-800 RNP dep		Н	62	
	1939	ditto		Η		
7/9	0655	QB737-400 dep		Н	65	
8/9	0627	QB737-800 RNP dep		Н	62	
9/9	1938	QB737-800 RNP dep		Н		
	1941	ditto		Η	65	
10/9	0610	QB737-800 RNP dep		Н	62	
	0644	ditto		Н	65	
	0825	BE58 tr Wly		Η	69	
	1936	QB737-800 RNP dep		Η	66	
	1939	ditto		Η	62	
20/9	1940	QB737-800 RNP dep		Н	65	
	2132	BE24 tr NWly at about 3000 ft		Н	66	
21/9	1527	P28A tr NWly at about 3500 ft		Н	69	
	2013	QB737-800 RNP dep		Н	66	
	2217	Tiger A320 norm dep	me <u>60</u>	Н	nil	
		Comment: I have commented in the past that the Hackett NMT was poorly				

Comment: I have commented in the past that the Hackett NMT was poorly sited to monitor jet traffic arriving/departing to the north. This is just another confirmation of my point about the NMT being hill-shadowed.

22/9 0624 A Qantas B737 subjected Hackett residents to 69 dBA of jet noise which is about 70% louder than the purported maximum jet noise of 61.6 dBA claimed by Canberra Airport in the August edition of its newsletter 'The Hub'. It is also nearly double the night (1900-0700) jet noise benchmark of 60 dBA set by Mr Byron of Canberra Airport in The Canberra Times of 20 July. Current noise mitigation measures are not effective for present operations; they will also be ineffective for night freight flights resulting in significant numbers of residents being woken.

1608	VBE170 unusual dep	Н	
1725	QB737-400 wx avoid	Н	72
1727	VB jet wx avoid	Н	67
1733	QB737-400 wx avoid	Н	<mark>6</mark> 1
2013	QB737-400 wx avoid	Н	73

- 23/9 0617 Another Qantas B737-800 making a RNP departure exceeding the maximum stipulated by Canberra Airport and subjecting Hackett residents to 65 dBA of jet noise
- 24/9 0703 A Qantas B737-800 making an RNP departure subjected residents to 66 dBA of jet noise. Prior to that, a B737-400 making a normal departure subjected residents to 60 dBA of jet noise. I am not aware of the noise characteristics of the -400 but I doubt that the -800 is inherently 6 dBA louder than an earlier model aircraft. The difference seems to be the RNP departure which tracks the aircraft closer to the residential area, resulting in higher noise levels. I ask what has happened to the principle of minimising aircraft noise pollution. I also ask that this complaint is drawn to the attention of Dept of Infrastructure officers responsible for Canberra Airport.

26/9	0745	QB737-800 RNP dep	Н	65
28/9	0958	QB767 norm dep	Н	62
	1003	QB737-800 RNP dep	Η	62
	1939	QB737-800 norm dep	Н	
29/9	1843	QB737-800 RNP dep	Н	
	1936	QB737-800 RNP dep	Н	67
	1945	Higher than the purported jet maximum of 61.6 dBA referenced b	y Canbo	erra

Airport's newsletter 'The Hub' August edition, higher than the 65 dBA to which no Canberra resident will be subjected in the Preliminary Draft Master Plan, a Qantas B737-800 making a RNP departure roared 68 dBA on the Hackett NMT. Thankfully, residents had been prepared for this, an identical prior flight at 1936 had roared 67 dBA on the same monitor. It is patently obvious that the RNP departure procedure results in a significant increase in jet noise for Hackett residents. What does it take for authorities to realise the obvious and immediately rescind the procedure because it increases jet noise? I ask that this complaint be drawn to the attention of the Departmental officer having responsibility for Canberra Airport.

30/9	1949	QB737-800 RNP dep	Н	62
1/10	1513	QB737-800 RNP dep	Н	62

- 2/10 0621 Higher than 'no aircraft sound louder than 60 dBA at night' benchmarked by the Managing Director of Canberra Airport in comment to The Canberra Times of 20 July, a Qantas B737-800 jet-roared a 65 dBA reveille for North Canberra residents, making a RNP departure. When will the authorities give effect to the principle of minimising aircraft noise and rescind this noise enhancing practice?
  1810 QB737-800 RNP dep multi peaks H 64
- 6/10 0520 This BE58 took off on runway 35 bound for Moruya. It made a left turn out to depart over the airfield. It appeared to enter the Canberra Noise Abatement Area at

Hackett below 5000 feet. North Canberra residents from about 8 suburbs were subjected to up to 69 dBA of early morning aircraft noise measured at the Hackett NMT. I ask that the Departmental officer responsible for Canberra Airport be informed of this complaint.

8/10	0925	red helo		Н	72			
	0949	ditto		Н	75			
10/10	0613	QB737-400 norm dep		Н	64			
	0634	ditto		Н	65			
	0641	GA8		Н	<mark>6</mark> 4			
	0647	QB737-400 norm dep		Н	62			
	0653	QB737-800 RNP dep		Н	62			
11/10	0650	QB737-800 RNP dep	me 63.7	Н	62			
	1245	a/c		Η	62			
12/10	0615	QB737-400 norm dep		Н				
	1908	ditto		Н	61			
	1944	QB737-800 RNP dep		Н	65			
	1946	E190		Н	62			
	1948	QB737-400 norm dep		Н				
	1950	ditto		Н				
	2044	ditto		Н	62			
	2153	SW4 freight flight to MEL		Н	62			
		Such freight flights are the subject of special arrangements between the						
		Airport and the carrier, yet they still deliver loud no	oise. Jet freight	ters will				
		be even noisier and more noticeable in the sleeping	g hours.					
13/10	0127	woken by prop aircraft (BE 20)		Н	nil			
	0614	QB737-400 norm dep	me <u>60.2</u>	Н	nil			
		(another example of the poor siting of the NMT)						
	0619	E190 norm dep	me 58.5	Н				
	0627	QB737-800 RNP dep	me <mark>65.6</mark>	Н	64			
	0655	ditto	me <u>63</u>	Н	62			
	2026	ditto		Н				
	2222	SW4 freight flight to MEL		Н	66			
14/10	0205	SW4 freight flight return from MEL		J	70			
	0639	QB737-800 RNP dep		Н	<b>6</b> 1			
	2008	ditto		Н	65			
15/10	0650	ditto		Н	64			
	1915	QB737-400 norm dep		Н	<u>6</u> 4			

	1938	QB737-800 RNP dep		Η	66
	1946	VB B737-700 norm dep		Н	64
	1954	QB737-400 norm dep		Н	nil
	2056	QB737-400		Н	nil
16/10	0612	QB737-400 norm dep		Н	
	0619	E170 norm dep		Н	<mark>6</mark> 1
	0650	QB737-800 RNP dep		Н	67
	1031	light aircraft	me <u>66</u>	Н	84
		(NMT reading probably corru	pted by garbage collection truck)		
	1119	P28A		Н	68
	1134	P28A		Н	
	1944	QB737-800 RNP dep		Η	68
	1947	E170 norm dep		Η	nil
	1949	QB737-800 RNP dep		Η	65
	1952	QB737-400 norm dep	me 61	Η	nil
17/10	0630	QB737-400 norm dep	me 64	Н	
	1100	light aircraft		Η	70
	1354	C182 multiple peaks	me 67.2	Η	71
	1438	P28A	me 67.2	Η	<b>`</b> 61
	1458	E170 norm dep		Η	nil
	1529	C182	me 70.2	Η	67
	1658	C182		Η	67
	1704	QB737-800 RNP dep		Η	
	1708	VB737-800 norm dep	me <u>60</u>	Η	nil
	1719	QB737-400 norm dep		Η	58
18/10	1010	C182	me 67.4	Н	72
	1115	E190 norm dep	me 57	Η	nil
	1138	P28A	me 63.4	Η	69
	1146	unknown	me 62.8	Η	66
	1203	C182	me 67.2	Η	70
	1409	C206		Η	71
	1414	E170 norm dep		Η	nil
	1551	C206		Η	69
	1720	QB737-800 RNP dep		Η	61
	1731	E190		Η	nil
	1736	E190		Η	nil
	2148	BE24	me <mark>65</mark>	Η	61
19/10	1303	QB737-400 norm dep		Н	nil
	1403	QB767		Н	61
	1930	VB B737-800 norm dep		Η	67

	1952	QB737-400 norm dep me 60.	1 H	
	1958	ditto	Н	nil
	2151	SW4 freight aircraft	Н	
20/10	0537	woken by C404 dep	Н	nil
	0613	QB737-400 norm dep me 58.	4 H	
	0621	E170 me 55.	4 H	nil
	0934	QB767	Н	62
	1214	QB737-800 RNP dep	Н	68
	1741	E190	Н	nil
	1753	QB737-800 RNP dep	Н	66
	1904	E170	Н	nil
	1909	QB737-800 RNP dep	Н	61
	1937	ditto	Н	64
	1947	QB737-400 norm dep	Н	nil
	1950	ditto	Н	nil
21/10	1732	helo A109	Н	64
	1816	QB737-400 norm dep (corrupted reading)	Н	77
	1829	QB737-400 norm dep	Н	nil
	1839	ditto	Н	nil
	1919	ditto	Н	nil
	1944	QB737-800 norm dep	Н	nil
	1947	QB737-400	Н	nil
22/10	0613	QB737-400 dep	Н	nil
	0617	E170 dep	Н	nil
	1347	GA8 me <b>76</b> .	.3 Н	74
	1818	QB737-400 dep	Н	nil
	1824	QB737-400 dep	Н	62
	1943	C172	Н	66
	1950	QB737-400 dep	Н	nil
	1956	QB737-800 dep	Н	nil
	2053	QB737-800 RNP dep	Н	
	2341	E170 woke me making an approach (17) and go round.	Н	nil
		Another illustration of the poor siting of the Hackett NMT.		
23/10	1705	VB B737-700 dep	Н	nil
	1706	QB737-400 dep	Н	nil
	1707	QB737-400 arr	J	77
	1724	ditto	J	75
	1806	QB737-400 dep	Н	nil
	1817	ditto	Н	nil
	1828	ditto	Н	

	1845	ditto		Η	nil
	1940	QB737-800 RNP dep		Η	65
	1945	QB737-400 dep		Н	
24/10	1302	C182		Н	69
	1341	DH8D		Η	
	1349	C206		Η	68
	1503	E170		Η	nil
	1710	E170 arr		Н	nil
	1819	QB737-400		Н	nil
25/10	1831	QB737-400 dep		Н	62
	2004	VB B737-800 dep		Η	66
	2015	QB737-800 dep 17 passing the Jerra NMT > 1500	m	J	nil
	2115	QB737-400 dep 17 passing the Jerra NMT > 1600	m	J	nil
26/10	0607	PA31 appeared to overshoot the approach to 17 overflying 2 suburbs		Н	70
27/10	1703	QB737-400		h	nil
	1706	VB B737-700		h	nil
	1715	QB737-400		h	
	1805	ditto		h	
	1820	ditto		h	
	1919	VB B737-700		h	nil
	1940	QB737-400		h	62
	1952	QB737-800 RNP dep		h	64
28/10	0659	C210		h	71
30/10	1007	QB737-400		h	nil
	1037	T154	me <u>62</u>	h	nil
	1108	PA31		h	68
	1238	QB737-400	me 64	h	62
	1350	VB E190	me 55.9	h	nil
	1528	C206		h	
	1611	QB737-400		h	nil
	1705	ditto		h	
	1723	ditto		h	
	1814	ditto		h	
	1843	ditto		h	
	1925	VB B737-700	me 56.8	h	nil
	1946	QB737-800 RNP	me 64.8	h	64

31/10	0926	B747-400	me 64.5	h	62
	0936	2 x Kiowa?	me 59	h	
	0949	P32R		h	65
	0959	C206		h	71
	1003	C182		h	65
	1015	BE20	me 73.5	h	
	1016	E170	me 56.5	h	nil
	1017	E190	me 58.3	h	nil
	1018	QB737-400	me 64.8	h	62
	1022	invisible Rudd jet	me 60.1	h	nil
	1024	QB737-400	me 64.6	h	
	1054	C150	me 66.3	h	
	1057	SR22	me 72.1	h	74
	1218	QB737-400		h	nil
	1258	E190		h	nil
	1305	C182	me 69.4	h	65
	1331	A320	me 60.0	h	
	1512	QB737-400		h	nil
	1558	Helo x 2	me 74.6	h	70
	1609	C182	me 67.1	h	66
	1706	QB737-800 RNP	me 65.2	h	62
	1719	QB737-400		h	nil
	1731	E190	me 59.6	h	nil
	1921	BE58		h	nil
1/11	0832	C182		h	66
	1806	QB737-800		h	62
0/11	2129	hale (and the self terms of an WebTeels)		1.	70
2/11	2128	neio (probably mintary as not on web mak)		11	70
3/11	1938	QB737-800 RNP	me <u>62.4</u>	h	
4/11	0611	QB737-400	me 59	h	nil
	0622	E190	me 57.3	h	
	0630	QB737-400	me 60.1	h	
	0638	E190	me 57	h	
	0648	QB737-400	me 62.3	h	61
	1320	ditto	me <u>60</u>	h	
	1500	C150	me 63	h	
	1704	VB B737-800	me <u>60</u>	h	nil
	1706	QB737-400	me 58.4	h	nil
	1937	QB737-800 RNP	me 63.1	h	
5/11	1708	BE20		h	

	1712	E190		h	
	1927	VB 737-700	me 60.2	h	
	1943	QB737-400	me 60.6	h	
	2005	QB737-800 RNP	me 66.4	h	65
6/11	0635	QB737-800 RNP	me 64.8	h	
	0643	QB737-400	me 61.8	h	
	0937	QB737-400		h	62
	1709				
	1711				
	1718	QB737-400		h	
	1733	E190		h	nil
	1743	E190		h	nil
	1751	QB737-400		h	64
	1801	A320		h	nil
	1932	QB737-800 RNP	me 65.4	h	64
	1937	ditto		h	66
7/11	1402	beacon 1200		h	70
	1407	C206		h	68
	1705	VB 737	me 56.9	h	
	1707	QB737-800 RNP	me 69.7	h	68
	1753	QB737-400		h	
	1855	VB 737-800		h	nil
`	1901	QB737-400		h	nil
8/11	1654	beacon 0550		h	71
	1818	QB737-400		h	nil
	1909	QB737-800 RNP		h	61
	1931	VB 737-800	me 56.8	h	nil
	1935	QB737-800 RNP	me 69.7	h	
10/11	1918	VB B737-700	me 58.4	h	nil
	1935	QB737-800 RNP	me 64.3	h	61
	2152	PA44 (at about 6000 ft)		h	69
11/11	1939	QB737-400	me 58.7	h	nil
	1949	QB737-800 RNP	me 64.3	h	61
12/11	0933	C441 at about 4500 ft		h	65
	1949	QB737-800 RNP		h	
	1951	E170		h	nil
	2010	QB737-800 RNP		h	
	2015	QB737-400		h	nil

	2025	ditto		h	nil
	2122	A320		h	nil
	2123	QB737-400		h	
13/11	0933	C172		h	64
	1227	P28A at less than 700 ft AGL		h	nil
	1939	QB737-800 RNP	me 69.0	h	68
14/11	0829	C182		h	67
	1000	C172	me 66.3	h	60
	1001	C182	me 67.4	h	60
	1005	QB737-400	me 61.1	h	nil
	1137	C182	me 67.6	h	65
	1218	unknown C206?	me 72.7	h	67
	1317	C182	me 67.4		nil
	1440	C182	me <mark>66.4</mark>	h	68
	1502	C150		h	61
	1510	QB737-800 RNP	60.1	h	
	1516	C206	76.9	h	67
	1609	C182	68.6	h	
	1613	P28A	65.7	h	65
	1650	unknown	74.4	h	68
	1708	VB B737-700		h	nil
	1713	QB737-800 RNP	63.2	h	62
15/11	1801	QB737-400		h	nil
	1805	QB737-400		h	nil
	1909	QB737-800 RNP		h	
	1914	QB737-800 RNP		h	61
	1933	VB 737-800		h	54
	1959	QB737-800 RNP	69.0	h	67
16/11	0841	QB737-800 RNP		h	61
17/11	0613	QB737-400		h	
	0647	QB737-800 RNP		h	
	1821	QB737-400		h	
	1843	QB737-400		h	nil
	1850	RAAF B737-700		h	
	1940	QB737-800 RNP	66.2	h	65
18/11	0614	QB737-400	61.2	h	
	0631	E190		h	nil
	0647	E170	54.0	h	nil

	0732	PA31	73.5	h	72
	0845	QB737-400		h	nil
	0921	QB767	62.4	h	61
	1004	QB737-400	62.1	h	61
19/11	0827	BE58		h	
	1141	green helo (poss mil)	65.5	h	nil
	1205	C150 regn VHVFR	67.6	h	nil
	1423	PA44	65.2	h	nil
	1944	QB737-800 RNP		h	nil
	1951	ditto		h	nil
20/11	0617	QB737-400		h	nil
	0624	E170	52.0	h	nil
	0635	QB737-800 RNP		h	nil
	0638	E190	52.1	h	nil
	0654	QB737-400		h	nil
	0725	beacon 0100	67.1	h	nil
	1751	P28R	63.4	h	63
	1943			h	
	2000			h	
22/11	1027	C182	66.2	h	
	2000	QB737-800 RNP		h	61
	2109	QB737-400		h	nil
25/11	1844	QB737-800 RNP		h	61
26/11	1936	C337		h	67
	1955	QB737-800 RNP dep	69.5	h	68
	2008	QB737-400		h	62
27/11	three i hub.	months after the Minister's decision to reject the cur	few and appro	ove the	freight

0132	SW4 freight flight	j	64
0618	QB737-800 RNP	h	68
0716	E170	h	64
0735	DH8D	j	67
0752	E170	j	71
0756	QB737-400	j	77
0808	E190	j	71
0818	QB737-400	j	77
0821	QB737-800	j	74
0824	DH8D	j	69

0829	E170	j	73
0834	QB737-400	j	75
0917	ditto	j	74
0919	ditto	j	74
0925	E170	j	72
0942	DH8D	j	69
1019	QB737-400	h	66
1027	E190	j	73
1038	DH8D	j	71
1118	QB737-400	j	75
1126	DH8D	j	72
1129	QB737-400	j	73
1157	E190	j	73
1200	E170	j	71
1226	QB737-400	j	76
1240	DH8D	j	72
1251	E190	j	75
1259	E170	j	72
1319	E170	j	71
1339	DH8D	j	69
1411	QB737-800 RNP appch	j	65
1421	DH8D	j	69
1440	E170	j	72
1517	QB737-400	j	74
1518	QB737-800 RNP	j	65
1521	VB737-700	j	75
1524	DH8D	j	74
1527	C182	h	67
1554	QB737-400	j	75
1612	ditto	j	74
1622	E170	j	74
1640	E190	j	71
1652	QB737-400	j	75
1709	ditto	j	72
1713	A320	j	73
1717	DH8D	j	72
1719	QB737-400	j	77
1722	ditto	j	75
1729	Brinda JS41 departure	j	67
1736	E190	j	72
1744	QB737-800 RNP	j	75
1752	BE76	j	72
1806	QB737-800 RNP	j	<mark>6</mark> 4
1812	E170	j	72

1820	QB737-400			j	73
1835	VB737-700			j	72
1841	QB737-800 RNP			j	
1854	QB737-400			j	76
1900	DH8D			j	73
1912	E170			j	71
1917	QB737-800 RNP			h	65
1922	ditto			h	62
1927	DH8D			j	71
1928	QB737-400			h	63
1954	ditto			j	73
1959	QB737-800 departu	ire		j	68
2002	QB737-400			h	64
2020	VB737-700			j	72
2023	QB737-400			j	75
2025	ditto			j	73
2114	E170			j	71
2119	E190			j	72
2209	QB737-400			j	75
Summary 27/	11:				
Hacke	tt departures – 7 jets	> 61.6 dBA	Jerra – 62 arrivals	, 2 depar	tures
	E170	1x64 dBA	11x71-74	dBA	
	E190		7x71-75 dl	BA	
	B737-400	3x63-66 dBA	20x72-77	dBA	
	VB 737-700		4x72-75 d	BA	
	B737-800		2x74-75 d	BA	
	B737-800 RNP	3x62-68 dBA	4x63-65 dl	BA	
	A320		1x73 dBA		
	DH8D		12x67-74	dBA	
	SW4		1x64 dBA		
	QB737-800 dep			1x6	8 dBA
	Brinda JS41 dep			1x6′	7 dBA
	C182	1x67 dBA			

28/11	0812	C206

70.6 h 72

20/12 0506 A BE20 aircraft made a runway 35 departure waking me. h 55 My wakening by this flight illustrates that aircraft noise pollution will have to be much less than 55 dBA (Hackett NMT) in the sleeping hours if residents sleep is not to be disturbed.