

Chapter 4

Effectiveness of Aircraft Noise Management

Introduction

4.1 This chapter explores aircraft noise management at Australia's major capital city airports, General Aviation Aerodrome Procedures (GAAP) airports, and at smaller privately owned and unregulated airports. The effectiveness of the Australian Noise Exposure Forecasts (ANEF) system is also considered.

Noise sharing arrangements

4.2 During the inquiry, the committee heard that ensuring the fair and equitable distribution of noise was a primary concern for communities and residents around Australia.

4.3 A number of Perth residents suggested that in introducing new flight paths following the Western Australian Route Review Project, Airservices Australia had not pursued equitable noise sharing arrangements.¹ It was also argued that while the new flight paths may have minimised the total number of people affected by aircraft noise, a small number of residents are now subjected to a huge increase in flights and greatly increased noise disturbance.

4.4 In responding to the suggestion that noise was not being shared equitably in Perth, Mr Richard Dudley, General Manager Corporate and International Affairs, Airservices Australia, suggested that:

The perplexing issue is that everyone thinks that they are copping an unfair burden of aircraft noise, no matter what location they are in around Australia. I have been intimately close to this issue for many years. Here in Perth we have hot spots of noise to the north, south, east and west of Perth aerodrome. There are people to the south who are concerned about aircraft noise just as there are genuine concerns in the Hills district and to the north-west. There are people to the south-east as well who have concerns about aircraft overflights. People in this room will not believe me but we are equitably distributing noise as far as practicable all around the Perth Basin.²

4.5 During its Perth hearing, the committee received evidence that suggested there may be opportunities to provide greater respite to residents through civilian use of military airspace. The committee notes that the extant route structure in Perth is

1 Ms Emma Dickson, *Submission 67*, p. 1, Mr Tom McNaughton, *Submission 82*, p. 1, Mr Brett Hughes, *Submission 94*, p. 3, Mr Emmanuelle Daw, *Submission 117*, p. 1, Mr Alan and Mrs Rosemary Lonsdale, *Submission 122*, p. 2 and Mr and Mrs C and M Wilson, *Submission 138*, p. 1.

2 Mr Richard Dudley, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 104.

constrained by military airspace. The committee heard the Airservices Australia had actively and extensively consulted with military airspace and air traffic management staff to identify mutually acceptable outcomes and as a result, some minor changes to restricted airspace boundaries had been made to facilitate the Western Australia Route Review Project.³

4.6 The committee heard that unlike airports such as Williamtown in Newcastle, NSW, which is a shared military and civilian facility, there are constraints on the ability of RAAF Base Pearce (Pearce) to be used for civilian flights and the extent to which this would amount to some mitigation of current aircraft noise patterns. First the committee heard that civilian use of Pearce would raise security issues and require a significant amount of investment in terms of infrastructure, runway modifications and provision of safety services.⁴

4.7 Second, the committee noted that there was some doubt as to whether civilian aircraft taking off from Pearce would actually result in greater sharing of noise impacts. Air Vice Marshal Brown told the committee that a civilian jetliner taking off from runway 18 at Pearce would probably track over the same residential areas as similar aircraft taking off from Perth Airport.⁵ The committee noted that the particular circumstances surrounding the Pearce and Perth Airport facilities and the close proximity of the two facilities do appear to limit the opportunities for civilian use of Pearce at the current time. However, the committee considers that there is merit in undertaking a more complete investigation to determine the possible use of Pearce in the future, particularly with a view to relieving some of the pressure associated with high volumes of early morning traffic at Perth Airport.

4.8 For communities in the vicinity of Sydney Airport, noise sharing arrangements have been formalised through the Long Term Operating Plan (LTOP). The aim of the LTOP is to operate as many flights over water or non-residential areas and where this is not possible, to share the burden of aircraft noise over residential land as equitably as possible. The LTOP includes 10 runway configurations (or modes of operation) and has noise sharing targets for the amount of aircraft movements to the north, south, east and west of the airport. The plan is designed to place as many flights as possible to the south over water (55%), with the remaining spread between the north (17%), west (15%) and east (13%).

4.9 The Sydney Airport Community Forum described the LTOP and the achievement of its targets as being of critical importance to the people living around Sydney Airport:

It is the achievement of those targets that will maximise the benefit to the communities that live around Sydney airport. Unless those targets are

3 Air Vice Marshal Geoff Brown, *Committee Hansard*, 10 June 2010, p. 15.

4 Air Vice Marshal Geoff Brown, *Committee Hansard*, 10 June 2010, p. 20.

5 Air Vice Marshal Geoff Brown, *Committee Hansard*, 10 June 2010, p. 20.

achieved, there will be an unfair distribution of noise for residents who live around the airport.⁶

4.10 The committee heard differing views regarding the effectiveness of Sydney Airport's noise sharing arrangements. Whilst some submitters suggested that Sydney's LTOP, if fully implemented, would share the noise equitably, others suggested that it had not led to equitable noise sharing.⁷

4.11 The committee heard that the runway configuration targets described in the LTOP had not been met in the 13 years since their introduction. The Australian Mayoral Aviation Council suggested that the targets must be met or must be recast with effective measurable standards for which agencies can be held accountable. It was further suggested that failing to achieve the targets would lead to a loss of confidence in the plan:

Failure to ever deliver on the targets under the LTOP for Sydney leads to the conclusion that, rather than being a noise management strategy that is meant to be achieved, it may have become a meaningless strategy and a matter of public expediency.⁸

4.12 One submitter suggested that the LTOP was no longer an effective noise management plan for Sydney Airport:

The Long Term Operating Plan (LTOP) of 1997 has passed its 'use by date' due to traffic growth making noise sharing inoperative for long periods each day. LTOP, the restriction to 80 movements per hour and the ring fence around regional NSW services are no longer the most effective way to reduce noise for nearby residents or deliver regional airline services.⁹

4.13 In responding to these suggestions, Airservices Australia and Sydney Airport underscored that the LTOP runway configuration usage targets are intended to be just that, 'targets'. Mr Rodney Gilmour the General Manager of Corporate Affairs and Human Resources at Sydney Airport suggested that the overall LTOP plan had been substantially implemented:

What people focus on is a set of targets that it was suggested ought to be targets that might be achieved. That is seen as the sole part of the long-term operating plan. I think you have to see the 18 or 19 separate guidelines that are part of it.¹⁰

6 Mr Barry Cotter, Sydney Airport Community Forum, *Committee Hansard*, 28 May 2010, p. 63.

7 Mr William Allaway, *Submission 28*, p. 6.

8 Australian Mayoral Aviation Council, *Submission 92*, p. 6.

9 Decisive Consulting Pty Ltd, *Submission 142*, p. 2.

10 Mr Rodney Gilmour, Sydney Airport Corporation Ltd, *Committee Hansard*, 28 May 2010, p. 22.

4.14 The committee heard that there had been an improvement in managing LTOP over recent months. For example, the committee heard that during the recent Runway End Safety Area (RESA) project, there had been an increase in the use of Simultaneous Opposite Direction Parallel Runway Operations (SODPROPS). The Sydney Airport Community Forum noted that during this time there had been an unprecedented level of utilisation of SODPROPS. In the twelve months following the start of works, the level in every month, except November, was higher than had ever been previously recorded and indeed in the four months June to September 2009, the level exceeded 11 per cent. By comparison, in the ten years prior to RESA, the average utilisation was only 1.8 per cent.¹¹

Curfews

4.15 Although not within Airservices Australia's responsibility, the committee did receive evidence regarding the maintenance of the existing curfews at Sydney Airport and their establishment at Perth, Melbourne and Canberra.

4.16 Due to the disturbance of late night and early morning flights in Perth, a number of submitters recommended the introduction of a curfew at Perth Airport.¹² It was also suggested that a 24 hour freight hub would be inappropriate in Canberra, and submitters also recommended the introduction of a curfew for the capital.¹³

4.17 Both Perth Airport and Melbourne Airport are opposed to the introduction of curfews noting the significant operational and economic benefits that 24-hour operation provides. Melbourne Airport has quantified the economic benefit a 24-hour operation provides:

At last count, which was in 2007-08 financial year, that came out as being worth \$309 million to gross state product—just the curfew itself—as well as about \$77 million to the value of local production, and is worth somewhere in the vicinity of 1,000 jobs locally and about 4,500 state-wide.¹⁴

4.18 Perth Airport suggested that a curfew at Perth Airport was inappropriate due to the city's geographic location. It was noted that Perth Airport was the end-point on a number of international airline operations and operated domestic 'back of the clock' operations due to the distance from the east coast of Australia.¹⁵ It was further

11 Sydney Airport Community Forum, *Submission 151*, p. 2.

12 Mr Terry Morris, *Submission 32*, Ms Concetta Cinanni, *Submission 51*, Mr Charlie Iannantuoni, *Submission 63*, Mr Graham McEachran, *Submission 68*, Ms Barbara Campbell, *Submission 79*, Mr John Green, *Submission 96*, Ms Gloria Vaisey, *Submission 135*, Mr and Mrs C and M Wilson, *Submission 138*, Ms M Major, *Submission 172* and Ms Samantha Duddy, *Submission 174*.

13 Jerrabomberra Residents Association, *Submission 55* and Curfew4Canberra, *Submission 56*.

14 Ms Carly Dixon, Melbourne Airport, *Committee Hansard*, 21 May 2010, p. 14.

15 Mr Brad Geatches, Perth Airport, *Committee Hansard*, 28 April 2010, pp. 84-85.

suggested that the Sydney curfew had a bearing on aircraft operations from Perth Airport.

4.19 In Sydney, the committee heard evidence from residents in support of the retention of the curfew and aircraft movement restrictions.¹⁶ To ease aircraft noise management challenges in Sydney, it was also suggested that the development of a second Sydney airport should be progressed as a matter of urgency.

Development of a second airport is a critical long-term noise abatement action and is considered by Council to be the only 'permanent' solution to the long-standing, ongoing issue of aircraft noise in the Marrickville LGA and across Sydney.¹⁷

Committee view

4.20 The committee recommends Airservices Australia explore opportunities to more effectively explain noise sharing arrangements to local communities and develop options to address community concerns. The committee notes recent improvements in the achievement of Sydney Airport's LTOP targets and encourages Airservices Australia to build upon these gains.

Required Navigation Performance

4.21 Airservices Australia is currently working with airline operators to develop and introduce Required Navigation Performance (RNP) for arrival and departure flight paths at up to 28 major Australian airports over the next five years. These procedures will enable aircraft to fly more accurately to and from an airport and to operate with improved safety and efficiency. Airservices Australia has conducted a trial of the procedures at Brisbane Airport and is progressively testing and implementing the procedures at other Australian airports, including Sydney and Melbourne.

4.22 The procedures have the potential to significantly reduce carbon dioxide emissions. A trial of the technology and procedures at Brisbane Airport indicated that RNP has the potential to reduce carbon dioxide emissions by 122,000 tonnes and fuel usage by 39,000 tonnes per year.¹⁸

4.23 The committee heard evidence that RNP could also lead to a narrowing of flight corridors, which is of concern to those communities directly under the more accurate flight paths:

The proposed implementation of narrow flight corridors by Airservices Australia is not supported for Sydney Kingsford Smith Airport (KSA).

16 Mr Tim Aldrich, *Submission 6*, p. 2 and Mr Kevin Hill, Sydney Airport Community Forum, *Committee Hansard*, 28 May 2010, p. 69.

17 Marrickville Council, *Submission 104*, p. 1. See also Mr Tim Aldrich, *Submission 6*, p. 2 and Randwick City Council, *Submission 124*, p. 2.

18 White Paper, December 2009, p. 202.

Although there are various operational advantages, the concentration of aircraft movements over existing urban areas (as recently experienced by residents in the Sutherland Shire) places a greater and unwarranted burden on communities as well as compromising the principles of noise sharing across Sydney.¹⁹

4.24 The Chief Executive Officer of Airservices Australia, Mr Greg Russell noted that RNP is currently being characterised as a measure which will concentrate aircraft noise over communities. However, Mr Russell suggested that the technology would enable Airservices Australia to more effectively share aircraft noise.²⁰ The committee heard that RNP would provide greater flexibility in the design of flight paths:

... [RNP] enables us to do things that we have not been able to do previously, such as have curved approaches to the ends of runways. That enables us to start to look at whether flight paths can be structured more over industrial land and non-residential land, which we do not have the options for at the moment.²¹

Committee View

4.25 The evidence the committee received regarding RNP suggests there is community confusion regarding the impact RNP will have on the management of aircraft noise. In the committee's view this underscores the importance of effective community consultation and engagement. The committee notes that Airservices Australia may not have enough confidence in the RNP concept tracks currently being developed to effectively consult with the community.²² However, the committee is of the view that delaying consultation and engagement regarding RNP will lead to continued community misunderstanding.

Environmental principles and procedures for minimising the impact of aircraft noise

4.26 The committee heard significant evidence regarding Airservices Australia's *Environmental Principles and Procedures for Minimising the Impact of Aircraft Noise* (the Environmental Principles) and whether there are appropriate triggers for review under the *Environment Protection and Biodiversity Conservation Act 1999* (*EPBC Act*). The evidence received principally related to whether the flight path changes proposed under the Western Australian Route Review Project (WARRP) should have been considered significant and therefore referred to the Minister for Environment Protection, Heritage and the Arts for consideration.

19 Sutherland Shire Council, *Submission 109*, p. 2. See also, Mr John Clarke, Sydney Airport Community Forum, *Committee Hansard*, 28 May 2010, p. 65.

20 Mr Greg Russell, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 87.

21 Mr Richard Dudley, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 104.

22 Mr Greg Russell, Airservices Australia, *Committee Hansard*, 10 June 2010, p. 10.

4.27 The committee sought clarification from Airservices Australia regarding whether Environmental Principles are applied consistently to airspace changes nationally at every airport. Airservices Australia confirmed that it has applied the same approach in the case of the WARRP as it has to airspace changes elsewhere.²³ Mr Kenneth Owen, Environment Initiatives and Services Manager, Airservices Australia told the committee that:

The principles and guidance material that we use is applied nationally. It was developed with a national approach back in 1997 and revised in 2002. Since then it has been applied to wherever we do air traffic procedure or flight path changes, such as we have done in Perth. We use those underlying principles both in terms of developing the procedures and in terms of our environmental assessment.²⁴

4.28 Mr Richard Dudley, Airservices Australia, told the committee that an environmental assessment was undertaken in the case of the WARRP but that the assessment did not point to the need for review under the *EPBC Act*. Mr Dudley said:

... an environmental assessment was undertaken looking at the 12 principles that we apply. None of those principles were deemed to be significant. The significance of those are then a lead indicator to how much and what type of consultation you might undertake in terms of explaining these types of changes. The situation is that the Perth Hills, particularly around Chidlow and Mundaring Shire, is around 30 kilometres from the end of the runway threshold. It did not spark any sort of trigger in terms of the environmental assessment nor in terms of impact of noise on the community for us to be concerned about it needing further consultation through the established committee hosted by the airport.²⁵

4.29 The committee notes that there appears to be general support for the Environmental Principles. The main concerns raised went to whether or not the principles are appropriately applied during the planning and implementation of all airspace changes, and specifically whether they were applied appropriately in the case of the WARRP and that outdated criteria were applied in that case.²⁶ The committee also heard that environmental assessment reports should be made available on request.²⁷ The committee notes that in the case of the WARRP, members of the public had sought access to the initial environmental assessment over a lengthy period of time without success. Airservices Australia tabled the environmental assessment during the committee's Melbourne hearing on 21 May 2010.

23 Mr Greg Russell, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 107.

24 Mr Kenneth Owen, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 107.

25 Mr Richard Dudley, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 110.

26 Mr Tony Anderson, *Submission 26*, Mr Peter Stewart, *Supplementary Submission 15(2)*, p. 1 and Mr Peter Stewart, *Supplementary Submission 15(2)*, p. 1.

27 Mr J McPherson, *Submission 105*, p.3.

4.30 Airservices Australia is subject to paragraph 160(2)(b) of the *EPBC Act 1999* which outlines a requirement that before an authorisation for 'the adoption or implementation of a plan for aviation airspace management involving aircraft operations that have, will have, or are likely to have a significant impact on the environment'²⁸, the agency must obtain and consider advice from the Minister for the Environment.

4.31 Airservices Australia's Environmental Principles and Procedures publication, last revised in 2002, contains no mention of the *EPBC Act 1999* but sets out the process and methodology to determine whether a matter triggers its obligations under section 160 of the *EPBC Act 1999*. In his evidence to the committee, Mr Richard Dudley stated that this document 'did not spark any sort of trigger in terms of environmental assessment'.²⁹

4.32 The committee received additional information that confirms that no request for advice was submitted by Airservices Australia prior to the adoption of the WARRP. A letter of 18 December 2009 from the Hon. Peter Garrett MP to Mr Steve Irons MP states:

I have not received a referral under section 160 of the Environment Protection and Biodiversity Conservation Act 1999 from Airservices Australia to seek my advice regarding changes to Perth Airport flight paths. I have asked my Department to examine this matter and to inform you directly of the outcome of these enquiries.³⁰

4.33 The committee notes that the Environmental Principles state that a height of 5,000ft AGL is considered to be the minimum acceptable altitude for the avoidance of significant noise impact on residential populations by jet aircraft. The justification for this minimum altitude is that 'the noise at ground level from a climbing B747 at 5,000 ft AGL is about 75 dB(A)s maximum'.³¹ The committee notes that Airservices Australia applies a threshold of 70 decibels outside as an indicator of significant noise. Mr Owen explained to the committee:

The criteria we applied when we assessed the WARRP and which we still apply—and I do not deny that people feel that they are impacted—are quite valid. We apply 70 decibels because in a normal dwelling, the type of building you get around Perth, with the windows open you get 10 to 15 decibels attenuation. That brings you down to 60 decibels inside and above that noise level you start to get interference with watching television, talking on the telephone or having a conversation. So 70 decibels outside gives a level inside which should not have a serious impact on people going

28 *Environment Protection and Biodiversity Conservation Act 1999*, para. 160(2)(b).

29 Mr Richard Dudley, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 110.

30 Additional information, letter from the Hon. Peter Garrett MP to Mr Steve Irons MP (received 28 April 2010).

31 Airservices Australia, *Environmental principles and procedures for minimising the impact of aircraft noise*, 19 August 1997, Revised 21 November 2010, p. 4.

about their daily lives. The monitoring we are undertaking is to determine the actual noise levels in those locations and the number of times people experience high noise by day and by night, in order to determine whether these noise levels are at a point that would disturb people.³²

4.34 The committee received evidence that the determination of what constitutes a significant level of aircraft noise is contextual. A level of noise that might be considered insignificant in a residential area with a high background level of noise may be intrusive and significant in a residential area with a lower background level of noise. The committee heard that residents in the outer Perth suburb of Roleystone considered that aircraft noise at 46 dB(A) becomes intrusive and is significant and that WARRP over flights have been measured up to 65 dB(A) in the area.³³

Committee view

4.35 The committee notes Airservices Australia's statement that having undertaken an environmental assessment, the impact of the WARRP on the residents in the Perth Hills did not suggest a need for further consultation. However, the committee concurs with evidence received that suggests the sheer scope of the changes proposed under the WARRP should have triggered a public consultation strategy that included accessible and clear information and a comprehensive noise assessment report. The committee also notes the suggestions more broadly during this inquiry that the Environmental Principles and Procedures should be independently reviewed, particularly with a view to considering whether some flexibility can be built into the consideration of what constitutes significant noise. The committee considers that the Aircraft Noise Ombudsman could be charged with undertaking such a review.

Aircraft noise management at General Aviation Aerodrome Procedure (GAAP) airports

4.36 General Aviation Aerodrome Procedures (GAAP) airports support a diverse range of activities from recreation flying, to agricultural and fire fighting flying, to flight training and low capacity passenger carrying operations. There are six GAAP airports in Australia: Archerfield (QLD), Moorabbin (Victoria), Bankstown (NSW), Camden (NSW), Parafield (SA) and Jandakot (WA).

4.37 The noise profile at GAAP airports is different to that of Australia's larger airports. Whilst aircraft are generally quieter, there are a significantly higher number of overflights each day. Although small scale compared with Australia's domestic mainline operations, figures show that GAAP airports are among the busiest in Australia. In 2009, Jandakot Airport recorded the highest number of aircraft

32 Mr Kenneth Owen, Airservices Australia, *Committee Hansard*, 28 April 2010, p. 115.

33 Mr Peter Stewart, *Submission 15*, p. 13.

movements of any airport in Australia, followed by Bankstown, Moorabbin, Sydney and Parafield airports.³⁴

4.38 The committee heard a number of concerns regarding the management of aircraft noise at GAAP airports, including the limited extent to which Airservices Australia manages noise at such airports and the high proportion of older, noisier aircraft that tend to use them.

4.39 The committee also notes that pilot circuit training is a source of considerable concern to residents adjacent to GAAP airports, both in terms of aircraft noise and safety.³⁵ Residents expressed frustration that suggestions for variations in training flight paths appear not to be considered.³⁶ Airport representatives expressed concern that they are powerless to control aircraft once they have left the airport land, but are often left to deal with the concerns of residents who are overflown.

4.40 The Moorabbin Airport Residents' Association suggested that there was no noise management strategy conducted by Airservices Australia at Moorabbin Airport. The Association noted that aircraft movements at Moorabbin Airport were increasing:

Excessive noise of training flights by ever-increasing numbers of overseas students flying old, noisy planes, and helicopters flying low and flouting regulations with impunity have fallen on deaf ears for years.³⁷

4.41 The committee notes that there appears to be significant agreement that training flights are not appropriate over residential areas. The City of Kingston told the committee:

Kingston is particularly concerned with the noise and safety aspect of 'circuit training' which requires aircraft to move directly over residential areas as identified in Section 7.5 of the Preliminary Draft Master Plan. By contrast aircraft travelling to and from the airport have significantly less impact on residential areas. Given the increase in trainee activity, Council has consistently raised concerns on behalf of the Kingston community regarding the appropriateness of training being conducted over a densely populated urban area. Council believes that pilot training should be relocated to a non urban area.³⁸

4.42 The committee notes that Airservices Australia's ability to manage aircraft noise at GAAP airports is limited. The committee also notes that often the ability to

34 Airservices Australia website:
<http://www.airservicesaustralia.com/projectsservices/reports/movements/calytd2009.pdf>

35 Mr Graham Ellis, *Committee Hansard*, 28 April 2010, pp. 64-65 and Mr Mario Bayndrian, Bankstown Airport, *Committee Hansard*, 28 May 2010, p 39.

36 Dr David Madill, Dingle Village Community Association, *Committee Hansard*, 21 May 2010; p. 55.

37 Moorabbin Airport Residents Association Inc., *Submission 24*, p. 2.

38 City of Kingston, *Submission 71*, p. 2.

implement noise sharing arrangements is limited due to the nature of general aviation operations.

4.43 The committee explored the circumstances in which airports such as Moorabbin and Bankstown had been privatised and the relative responsibilities of the various parties under the lease arrangements.³⁹

4.44 Airservices Australia told the committee that:

We monitor very closely the number of aircraft movements at all of the major airports in Australia, not just the capital city airports. Moorabbin is an important general aviation aerodrome in Australia. We exchange information with the Civil Aviation Safety Authority and at the end of the day the question of training flights at these aerodromes is something that needs to be directed, in the first instance, to both the department and the Civil Aviation Safety Authority.⁴⁰

4.45 CASA confirmed the evidence presented to the committee regarding the high volumes of operations at the six GAAP airports in Australia. CASA told the committee that 'somewhere between 23 percent and 24 percent of the flying hours' is flying training of which a significant proportion is undertaken at airports close to cities.⁴¹ The committee notes that CASA is taking steps toward better management of the risks associated with GAAP aerodrome procedures. At a Senate Estimates hearing, Mr John McCormick advised the Rural and Regional Affairs and Transport Legislation Committee that CASA had undertaken a review of GAAP aerodrome procedures and had commissioned a further study with respect to providing a greater level of safety in relation to training activities. He said:

On 21 July we gave directions to Airservices to limit the number of aircraft in the circuit to six aeroplanes at any one time under the control of a single air traffic controller. At most of these places they have at least two runways that operate and those runways are parallel. So one operation will be taking off with a left-hand circuit and the other operation will be taking off with a right-hand circuit. Airservices, as a general principle, has two different frequencies, two different controllers in the tower controlling those two different circuits.

We allowed six in the circuit with the proviso that it could go up to 13 if there was a departure aeroplane that was not to stay in the circuit but go forward. Those directions to Airservices are on our website still. On the second page of that first direction I think you will find we said that at some stage when there are further mitigators in place we would review the cap on

39 *Committee Hansard*, Friday 21 May 2010, pp. 98-99.

40 Mr Greg Russell, *Committee Hansard*, Friday 21 May 2010, p. 94.

41 Senate Rural and Regional Affairs and Transport Legislation Committee, *Estimates Hansard*, 27 May 2010, p. 76.

the number of aeroplanes in the circuit. Our view would be to look at what we could do with the future development of GAAP.⁴²

4.46 The committee also notes Mr Mrdak's advice that in its National Aviation Policy White Paper the government has described these aerodromes as critical national assets. Mr Mrdak said:

We do need all three levels of government to be thinking of that in that way. Mr Doherty has recently undertaken the first of a series of working groups with the states and territories in relation to how we actually put in place safeguarding measures to prevent the sorts of increased risk we might see as these airports continue to grow in terms of the development outside those airport boundaries. So we have two processes in place: firstly the process that CASA is operating with the airport operator about how you increase the safety as the traffic grows, which is the fundamental role of CASA, and then you have ourselves and the state and local governments who have responsibilities in relation to off-airport planning to make sure we are taking steps to safeguard these aerodromes.⁴³

Committee view

4.47 The committee understands the significant concerns raised in relation to aircraft noise and particularly safety arising from flight training. The committee notes calls for the relocation of flight training to airfields away from residential areas. The committee also notes that flight training is a significant source of income for GAAP airports and there are certain benefits and attractions to the users of GAAP airports to be located within easy reach of population centres. The committee also notes that a number of the current GAAP airports were originally located on the edge of cities.

Aircraft noise management at small, privately owned, unlicensed airports

4.48 The committee also received a submission regarding the management of aircraft noise and property development at privately owned, unlicensed airfields. In their submission to the inquiry, the Tyabb & District Ratepayers Business and Environment Group Inc. (the Tyabb residents) suggested:

The difficulties of managing aircraft noise at major airports are magnified at privately owned, unlicensed airfields, particularly in Victoria, which mainly operate in a regulatory void and with no noise monitoring or controls.⁴⁴

4.49 The Tyabb residents expressed a number of concerns regarding the operation of the Tyabb Airport, which it described as a predominantly recreational airport, including: that a number of older and noisier aircraft, including aircraft of historical

42 Senate Rural and Regional Affairs and Transport Legislation Committee, *Estimates Hansard*, 27 May 2010, pp. 76 – 77.

43 Senate Rural and Regional Affairs and Transport Legislation Committee, *Estimates Hansard*, 27 May 2010, p. 80.

44 Tyabb & District Ratepayers, Business and Environment Group Inc, *Submission 148*, p. 1.

significance or 'warbirds', operate out of Tyabb Airport; that activity at the airport is at its greatest on weekends and that the community has been unsuccessful in engaging the cooperation of the airport operator to address issues such as these.

4.50 The Tyabb residents also expressed concern regarding the issuing of aircraft noise exemption certificates. They said:

The system for the issuing and management of aircraft noise certificates and the granting of noise exemptions certificates is ramshackle, inconsistent and without focus or strategy.⁴⁵

4.51 The Peninsular Aero Club, which operates the Tyabb airport (the Club) responded to the concerns raised by the Tyabb residents by advising the committee that the Club believes 'that local community support is vital to the future of the airport'. The Club told the committee that it has attended meetings 'with TRBEG representatives, community representatives, Council officers, and facilitators'.⁴⁶ The Club also advised that all pilots flying at Tyabb Airport are expected to abide by a Fly Neighbourly Advice. However, the Club did concede that pilots flying into Tyabb from other airports may inadvertently breach this advice on occasion. As a result, the Club has sent a copy of the advice to all flying schools and aero clubs in Victoria.⁴⁷ The Club provided the committee with details of its incident reporting and complaints handling procedures.⁴⁸

4.52 The Club also provided details of the number and type of aircraft that regularly operate out of the airport and the steps taken by the Club to inform local residents about charity events hosted at the airport. The Club also advised the committee that only a small number of aircraft operating out of the airport could be considered 'noisy'.⁴⁹ The Club also advised the committee that, while a significant proportion of the activities carried on in relation to the airfield are recreational, it is not accurate to describe the airport as a private recreational facility. The airfield supports a range of commercial and community services.⁵⁰

4.53 The committee notes that this particular situation falls outside the role and responsibility of Airservices Australia. However, the committee was interested to understand what role the Commonwealth has in respect of private airfields and what avenues are available in the event that a private airfield and a group of residents or a community fell into dispute with each other.

45 Tyabb & District Ratepayers, Business and Environment Group Inc, *Submission 148*, p. 1.

46 Peninsula Aero Club, correspondence to the committee, 9 June 2010, p. 6.

47 Peninsula Aero Club, correspondence to the committee, 9 June 2010, pp. 6-7.

48 Peninsula Aero Club, correspondence to the committee, 9 June 2010, p. 7.

49 Peninsula Aero Club, correspondence to the committee, 9 June 2010, pp. 2-4.

50 Peninsula Aero Club, correspondence to the committee, 9 June 2010, pp. 5-6.

4.54 The committee notes advice provided by the Department of Infrastructure, Transport, Regional Development and Local Government (DITRDLG) during the 2010-11 Budget Estimates that the Commonwealth does not have the same level of control over private airstrips as it does over leased Federal airports. The DITRDLG told the committee that:

The Civil Aviation Safety Authority sets the operational safety standards for aerodromes no matter what the ownership. In the case of the planning and environmental oversight of those airports, they are the responsibility of the Victorian government.⁵¹

4.55 Mr Mike Mrdak, Secretary, DDITRLG advised the committee that:

The issues you raise around Tyabb are very much caught up with various state and local government planning issues in that they are freehold land not controlled by the Commonwealth; they operate under state and local planning requirements. The environmental issues around aircraft operations in those locations are often looked at by state EPAs and the like in relation to what they are prepared to allow to occur.

The Commonwealth role, as Mr McCormick said, is around the safety of the operation of both the airfield and the aircraft involved—in terms of CASA's role, particularly the aircraft—and in relation to ensuring that the aircraft operate in accordance with the airspace requirements in that location.⁵²

Committee view

4.56 The committee notes that operations on privately owned airfields appear to fall into a difficult category. The committee can well understand the frustration felt when the relationship between residents and the operators of an airfield break down. The committee would like to think that local councils may be able to step in to facilitate some level of agreement regarding reasonable use of the airfield that is sensitive to the interests of all parties.

Australian Noise Exposure Forecasts

4.57 As the scientific measure of aircraft noise exposure levels around aerodromes and the nationally recognised system used for land use planning, the Australian Noise Exposure Forecast (ANEF) system provides a valuable and complementary tool for the management of aircraft noise. By providing long term forecasts of the likely noise exposure around aerodromes, the ANEF system provides a measure of certainty for local communities, airport lessees, developers and local planning authorities. It also provides an indication of the likely response from communities to aircraft noise.

51 Senate Rural Regional Affairs and Transport Legislation Committee, Budget Estimates 2010-11, *Estimates Hansard* 27 May 2010, p. 54.

52 Senate Rural Regional Affairs and Transport Legislation Committee, Budget Estimates 2010-11, *Estimates Hansard* 27 May 2010, p. 81.

ANEF development and endorsement process

4.58 As part of the Airport Master Plan development process, airport owner-operators are required to develop an ANEF report.⁵³ The committee heard that ANEF reports are normally prepared by specialist consultants engaged by airport owner-operators, and take into account the airport's commercial plans, intentions for development, assessment of industry developments and prospects for growth. The report also includes aircraft movement projections, runway configurations and airport operating hours.

4.59 Once developed, the draft ANEF report is provided to Airservices Australia for a review of its technical accuracy. Airservices Australia reviews and endorses the ANEF report in a manner approved by the Minister for Infrastructure, Transport, Regional Development and Local Government (the *Manner of Endorsement*)⁵⁴. In broad terms Airservices Australia must be satisfied that the type and number of aircraft are operationally suitable for the airport, and that the forecast numbers of aircraft movements, operating times and aircraft types are not greater than the physical ultimate capacity of the existing or proposed runways.

4.60 Airservices Australia's review does not consider whether the future traffic projections are appropriate or reasonable, and does not review the airport owner-operator's prospects for growth or intentions for investment.⁵⁵ Further, the Department of Infrastructure, Transport, Regional Development and Local Government does not seek to assess or substitute its own judgement on these issues.⁵⁶

Summary of specific concerns raised

4.61 Whilst generally supported as an effective planning tool and international best practice,⁵⁷ a number of submitters and witnesses raised concerns regarding the transparency and objectivity of the ANEF development and endorsement process. Specifically, submitters were concerned that there was no independent review of the appropriateness of the commercial forecasts underpinning the ANEF reports prepared by airport owner-operators.

4.62 Without independent assessment of the commercial forecasts and review of whether the future projections are reasonable, the committee heard that airport

53 ANEF charts may be updated more regularly at the discretion of the airport owner-operators.

54 The Department of Infrastructure, Transport, Regional Development and Local Government, answer to question on notice, 2 June 2010 (received 8 June 2010), Attachment A.

55 Mr John Doherty, Department of Infrastructure, Transport, Regional Development and Local Government, *Committee Hansard*, 10 June 2010, p. 50.

56 The Department of Infrastructure, Transport, Regional Development and Local Government, answer to question on notice, 2 June 2010 (received 8 June 2010), p. 1.

57 Master Builders Australia, *Submission 177*, p. 6. See also Mr Stephen Albin, Urban Development Institute of Australia (NSW), *Committee Hansard*, 28 May 2010, p. 12.

operators may overstate the forecasts at no disadvantage to themselves, but at a potential cost to local communities:

Unfortunately, under current rules, the ANEF system is open to manipulation by airport operators. The entire process of producing and endorsing an ANEF is 'in house' – airport operators are free to make misleading claims and assumptions that are not required to be tested by the approving authority, or any other outside agency.⁵⁸

4.63 This was considered of concern given the ANEF report's possible influence on the development of land in the vicinity of airports.⁵⁹ Mr Aaron Gadiel, Chief Executive Officer of Urban Taskforce Australia, suggested that the ANEF reports have the potential to sterilise property rights:

It sterilises a property right because typically if an ANEF contour for an area exceeds 25 you cannot build a residence if there is not one there already. If it is between 20 and 25 you can build a residence but it will need to be modified. If it exceeds 30 you will not be able to build business or office premises or entertainment facilities. If it is between 25 and 30 you will need to build it with modifications. If it is above 20 you cannot build a school and so forth. So that affects land value and it takes peoples' property rights away.⁶⁰

4.64 The committee heard particular concerns regarding future development around the Canberra Airport in Jerrabomberra and Tralee. It was suggested that the Canberra Airport ANEF is based on optimistic and untested assumptions about aviation growth:

For example, operators of Canberra Airport when revising their master plan made the assumption that Canberra airport will have the same ultimate aircraft movements as Sydney's Kingsford Smith Airport. Furthermore, heavier aircraft movements at noise sensitive times were factored into the assumptions. This overestimation of aircraft movements and bias to noisier aircraft at sensitive times multiplies the impacts on the ANEF charts. Essentially, unrealistic assumptions have the affect of over estimation of impact and hence land use restriction.⁶¹

4.65 It was also noted that as Australia's population increases and the rate of urbanisation intensifies, housing pressure may further amplify the tension between airport owner-operators, the community and urban developers regarding the ANEF system:

58 Ms Kai Hansen, *Submission 45*, p. 1. See also Queanbeyan City Council, *Submission 70*, p. 2 and Urban Taskforce Australia, *Submission 91*, p. 1.

59 Planning Institute of Australia, *Submission 47*, Urban Taskforce Australia, *Submission 91*, and Urban Development Institute of Australia (NSW), *Submission 143*.

60 Mr Aaron Gadiel, Urban Taskforce Australia, *Committee Hansard*, 28 May 2010, p. 9.

61 Urban Taskforce Australia, *Submission 91*, p. 2. See also Village Building Company, *Submission 121*, p. 9.

This is only going to be an increasing community concern and there needs to be an open, transparent and accountable process where these differences can be contested and properly resolved.⁶²

4.66 The committee notes that there is an obligation for airports to consult with relevant stakeholders when developing Master Plans. However concern was raised as to whether public submissions were seriously considered or acted upon:

Before endorsement there is also a process of consultation with relevant stakeholders. This is generally undertaken by the airport, and evidence of such consultation must be provided by the airport when submitting a draft ANEF chart. However, this consultation is fundamentally informative, and it is not clear on what grounds a stakeholder could object to the proposed ANEF, other than mistakes in the calculation procedures.⁶³

4.67 The committee received a number of submissions which recommended that the ANEF system be subject to a more robust development and review process where transparency, accountability and independence are the paramount considerations. In its submission, Access Economics recommended an independent expert undertake a peer review of ANEFs so as to balance non-aviation interests with aviation interests and ensure the resulting land use restrictions pass a cost-benefit test:

Rather than [Airservices Australia], an independent expert in forecasting should be tasked with peer reviewing the air traffic assumptions and business aspirations underpinning the ANEF contours. This would avoid a situation where ANEF contours impact on land use across large geographical areas, yet are based on optimistic air traffic forecasts, such as those produced by Canberra Airport. The independent expert should be given a wide brief to strive to meet a professional best practice view on future air traffic and fleet mix, rather than a narrow or technical brief.⁶⁴

4.68 Access Economics further recommended the task of assessing noise and related land use policy may be more appropriately located under a more independent department rather than the Transport Portfolio. In Access Economics' submission, the Department of Environment, Water, Heritage and the Arts or the Productivity Commission are suggested as possible alternate departments/agencies to perform the role.⁶⁵

62 Mr Wilhelm Harnisch, Master Builders Company, *Committee Hansard*, 10 June 2010, p. 59.

63 Wilkinson Murray, *Submission 40*, p. 3. See also Village Building Company, *Submission 121*, p. 7.

64 Access Economics, *Submission 41*, p. 2. See also, Australian Mayoral Aviation Council, *Submission 92*, p. 7 and The Ambidji Group, *Submission 93*, p. 5.

65 Access Economics, *Submission 41*, p. 2.

4.69 Other submitters have suggested that the Aircraft Noise Ombudsman or the Department of Infrastructure, Transport, Regional Development and Local Government, might undertake the independent review role.⁶⁶

4.70 Ms Margot Sachse, former President of the Jerrabomberra Residents Association, said that the community would have confidence in ANEF reports if there was an independent assessment process in place to review the assumptions and verify that they were appropriate.

We would feel that our concerns had been put forward and that what they were proposing was real and we would expect that, like in any consultation processes – like we have here today – we could put our concerns across.⁶⁷

4.71 In the National Aviation Policy White Paper, the government acknowledged that there was opportunity to improve the ANEF system and undertook to improve the technical processes and independence associated with the assessment and scrutiny of ANEFs.⁶⁸ However the committee did not hear of any practical measures Airservices Australia or the Department of Infrastructure, Transport, Regional Development and Local Government might be undertaking to give effect to this commitment.

4.72 Mr Mario Bayndrian, General Manager of Aviation at Bankstown Airport Ltd, suggested that the ANEF system was not a highly sophisticated tool for modelling the impact of aircraft noise in the vicinity of General Aviation Aerodrome Procedure Airports:

Even the requirements and modelling done for the ANEFs is really meant for larger jets with a smaller component of general aviation. However, when your business is predominantly general aviation the ANEF becomes a very blunt tool; therefore, the outcomes are not highly sophisticated. They are correct. They meet the modelling. They are endorsed by Airservices Australia, but I do not think they are refined enough for a general aviation application.⁶⁹

4.73 To refine the ANEF system for a general aviation application, Mr Bayndrian told the committee that the categories of light aircraft needed to be broadened and the system of developing ANEFs and master plans needed to be streamlined to ensure the currency and accuracy of the final product.

4.74 The committee also received evidence regarding the effectiveness of the ANEF system as a mechanism to inform the general public of the likely impact of airport operations. The committee heard that the ANEF system was not well understood by local communities:

66 Master Builders Australia, *Submission 177*, p. 9 and The Ambidji Group, *Submission 93*, p. 5.

67 Ms Margot Sachse, former President, Jerrabomberra Residents Association, *Committee Hansard*, 10 June 2010, p. 30.

68 White Paper, December 2009, p. 212.

69 Mr Mario Bayndrian, Bankstown Airport Ltd *Committee Hansard*, 28 May 2010, p. 42.

Notwithstanding the longevity of the system, it is not well understood by the community. For example, the ANEF contours have no direct relevance to noise levels (decibels) but instead are the average daily noise exposure taking account of anticipated volume and pattern of aircraft movements around airports.⁷⁰

4.75 The Australian Mayoral Aviation Council noted the ANEF system can be misleading as aircraft noise does not stop at the contour on a map. The Australian Mayoral Aviation Council told the committee that the ANEF system is a highly technical measure which provides imaginary lines on a map which suggest that people or properties on one side of a line are substantially more affected than those situated immediately on the other side of that imaginary line.⁷¹ Mr Peter Fitzgerald, Executive Director of the Australian Mayoral Aviation Council provided a practical example of this during a hearing in Sydney:

I, in another life, was the Mayor of Drummoyne in Sydney and we had the 20-25 ANEF line go up the middle of a street in Drummoyne, so on this side of the street there was no noise and it was all lovely. That is nonsense. That is what we have had for a long period of time. If we are going to look at a new cumulative noise measure, it has to be reducible to a single event so that people can stand there with a sound meter and say, 'That's 85; that's 95.' We all know it is an odd sort of number, but the other number is nonsense.⁷²

4.76 The committee heard that recognition was needed in the appropriate agencies that aircraft noise can be a significant problem at locations beyond the ANEF contours, particularly in elevated terrain or in areas far from the airport boundary.⁷³

4.77 The committee also heard that the ANEF system's attribution of a numerical value to the impact of noise events failed to adequately capture the subjective nature of noise and the differing individual and community reactions to noise events:

Any numerical representation of noise impacts cannot describe the subjective impacts of noise. The ANEF assessment is inadequate to describe impacts and should not be relied on for noise management.⁷⁴

4.78 This point was most clearly seen in Perth, where although the noise event was not considered significant by Airservices Australia, the committee received considerable evidence from residents and community organisations that aircraft noise was having a serious impact on their lives.

70 City of West Torrens, *Submission 49*, p. 2.

71 Australian Mayoral Aviation Council, *Submission 92*, p. 4.

72 Mr Peter Fitzgerald, Australian Mayoral Aviation Council, *Committee Hansard*, 28 May 2010, p. 81.

73 Mr Ian Davies, Fairskies, *Committee Hansard*, 28 April 2010, p. 43.

74 Mr Brett Hughes, *Submission 94*, p. 7. See also Mr Alexander Haidoussis, *Submission 167*, p. 15 and Evans Head Memorial Aerodrome Committee, *Submission 175*, p. 14.

4.79 The committee also heard requests from community members calling for a review of ANEF contours in order to more equitably share aircraft noise in their approaches and departures around Perth airport.

4.80 To improve community understanding of the impact of aircraft noise on properties in the vicinity of airports, it was suggested that the requirement for councils to place aviation overlays on titles for existing (or proposed) noise sensitive areas be formalised.⁷⁵ Due to the highly technical nature of ANEFs, it was further suggested that readily understandable information regarding aircraft noise should be developed and publicly available:

It is therefore important to recognise that community expectations in regard to aircraft noise are not necessarily best informed by contours on a map, but through the provision of accurate, targeted and easily understandable information about the impacts of aircraft noise.⁷⁶

4.81 The committee notes that as part of the White Paper, the government announced a number of measures including the development of an effective national land use planning regime, in cooperation with the states and territories. This planning regime seeks to ensure future airport operations are not constrained by incompatible development and to protect future communities from undue aircraft noise exposure.⁷⁷

4.82 Aircraft Noise Insulation Programs have been implemented in Sydney and Adelaide and funded by an industry levy. Eligibility for compensation under the Aircraft Noise Insulation Program is determined according to noise exposure indexes under the ANEF system.

4.83 Aircraft Noise Insulation Programs are identified as important measures to minimise the impact of aircraft noise on the community in the White Paper:

The Government recognises the possibility that future major civil airport operations and air traffic changes may place some residences into high noise exposure zones. The Government will develop a framework, in consultation with the industry, for an industry-funded program for civil airports that ensures future insulation projects will be assessed and delivered against world's best practice attenuation initiatives. This will be consistent with the approach taken at Sydney and Adelaide in introducing their noise insulation programs which has provided for insulation measures for public buildings in the 25 Australian Noise Exposure Index (ANEI), for houses in the 30 ANEI and for voluntary acquisition above the 40 ANEI. An improved framework would incorporate, but not be limited to, these measures.⁷⁸

75 Aircraft Owners and Pilots Association of Australia, *Submission 108*, p. 5.

76 Urban Development Institute of Australia, New South Wales, *Submission 143*, p. 3.

77 The Department of Infrastructure, Transport, Regional Development and Local Government, *Submission 160*, p. 3.

78 White Paper, December 2009, p. 215.

4.84 The government outlined its intention to expand the scheme in the White Paper, concluding that it will:

develop a framework in consultation with stakeholders for an industry funded noise amelioration program where future major civil airport operations and air traffic changes place residences into high-noise exposure zones.⁷⁹

4.85 The White Paper also acknowledged that there are a number of alternate information tools that are effective noise descriptions. It was noted that to assist local governments, planners and communities understand and take account of aircraft noise exposure patterns, it is essential to provide a package of readily understandable information regarding where, when, how often and how many aircraft fly and how loud individual events are. To meet this need, the government undertook to supplement the ANEF system with additional tools such as flight path location and activity diagrams, and single event contours based on decibels.⁸⁰ The committee also heard that the Commonwealth is leading a group of state and Commonwealth planning and transport agencies to improve the state and local government planning processes around airports.

Committee View

4.86 During the inquiry the committee focused its attention on the effectiveness of ANEF processes. The committee did not form a view on circumstances relating to specific airport ANEF reports, master plans or proposed developments.

4.87 The committee supports the retention of the ANEF system as a land planning tool and the production of ANEF contours that are reasonable and conservative. The committee noted that a conservative planning approach would both protect the amenity of future communities and ensure the realisation of the full economic benefits that airports offer. The committee notes the ongoing challenges posed by noise-sensitive development close to airports in locations such as Sydney and is of the view that where there is an opportunity to provide protection for future communities, steps should be taken to do so.

4.88 However the committee considers that there are opportunities to strengthen the processes underpinning the ANEF system. The government's commitment to improving the technical processes and the independence associated with ANEFs is acknowledged, however the committee notes that the significant community, business and industry expectation for practical measures to give effect to this commitment has not been met to date.

4.89 The committee considers that a robust evidence-based ANEF system must include the independent review, of both the technical assumptions and commercial

79 White Paper, December 2009, p. 216.

80 White Paper, December 2009, p. 212.

forecasts which have informed the development of ANEF reports. In considering strategies for independent review the committee noted one suggestion that the basis for the assumptions and forecasts should be open to public scrutiny and review.⁸¹ However, the committee recognised that some information may be considered commercially sensitive and confidential. The committee therefore considers that an independent arbiter should have overarching responsibility for the comprehensive and independent review of the technical assumptions and commercial forecasts underpinning ANEF reports. The independent reviewer would be responsible for ensuring due regard is paid to the views of all interested parties including the airport owner-operators, local communities and their representatives, and developers.

4.90 With regard to responsibility for agreeing the Airport Master Plans, the committee suggests that the role of the Minister for Infrastructure, Transport, Regional Development and Local Government might be broadened to include this independent assessment.

4.91 As part of the initiatives to improve the technical processes and independence associated with the assessment and scrutiny of ANEFs, the committee recommends Airservices Australia explore opportunities to improve the ANEF system's effectiveness for modelling the impact of aircraft noise in the vicinity of General Aviation Aerodrome Procedure Airports.

81 Mr Wilhelm Harnisch, Master Builders Australia, *Committee Hansard*, 10 June 2010, p. 58.