

Submission to Australian Senate Standing Committee on Rural and Regional Affairs and Transport

Response to the Inquiry into Airservices Australia's Management of Aircraft Noise

2 February 2010



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### 1 EXECUTIVE SUMMARY

### Introduction and Background

On 25 November 2009, Senator Chris Back, Liberal Senator for Western Australia, moved that a Senate Inquiry be initiated into Airservices Australia's management of aircraft noise. The inquiry will examine the following matter:

An assessment of the effectiveness of Airservices Australia's management of aircraft noise under its responsibilities to provide air traffic services and protect the environment from the effects associated with the operation of aircraft for which it has legislative jurisdiction.

As the operator of Perth Airport, Westralia Airports Corporation (WAC) is a key stakeholder in the outcomes of this inquiry.

### Response to the Inquiry

Parliamentary attention was recently focused on Airservices Australia's (ASA) handling of flight path changes over Perth due to the West Australian Route Review Project.

Perth Airport's submission to the Senate's inquiry addresses:

- Importance of Perth Airport;
- Aircraft noise management at Perth Airport;
- The Western Australian Route Review Project.

### Importance of Perth Airport

Perth Airport is one of the most significant elements of public infrastructure in Western Australia. A 2008 economic impact study estimated that Perth Airport's direct and indirect contribution to Gross State Product was nearly \$3 billion. 9.7 million passengers passed through the airport in 2008-09. Perth Airport is a critical part of the resource sector supply chain with over 1.6 million Fly-In, Fly-Out passengers travelling to a range of resource sector work sites passing through the airport in 2008-09.

Perth's geographic isolation and multicultural population means that residents are highly dependent on air travel for business, leisure, health, family and education. Perth is an end point on most airlines' networks and the geographic location and 24 hour operations allow airlines to optimise their aircraft utilisation and meet schedules out of their hubs with "back of the clock" services. These features are key to maximising the range of commercial air services available to Western Australians and to minimising their cost.



### Aircraft Noise Management at Perth Airport

Aircraft noise is an externality of aircraft operations that needs to be carefully managed to mitigate its impact on communities.

The current regulatory and administrative regimes for the operation and management of airports, air services and air space reflect that effective aircraft noise management depends on collaboration between airport operating companies, airlines, Airservices Australia (ASA) and all tiers of government.

Given that the manner in which airspace is managed and operated has a great impact on aircraft noise exposure, ASA plays a critical role.

Airports too play an important role, noting that operations on the airfield, such as engine ground running and airfield maintenance and construction works also influence aircraft noise exposure. The 2009 Perth Airport Master Plan includes information about current and future projected aircraft noise exposure and a description of the approach taken at Perth Airport to manage aircraft noise impact.

Governments also have an important role to play. By regulating land use Governments directly impact the extent to which land uses sensitive to aircraft noise are able to occur in locations exposed to aircraft noise. There is evidence that historically governments have contributed to the aircraft noise exposure through ineffective regulation of land use in the vicinity of airports. The recently released National Aviation Policy White paper contains statements of policy intent that recognise the need to improve land use regulation having regard to aircraft noise exposure.

A cornerstone to effective aircraft noise management is engagement with the communities that are affected. Both Perth Airport and ASA have applied significant resources to community engagement on aircraft noise.

Two important elements of the aircraft noise management approach at Perth Airport are the Noise Management Consultative Committee and the Aircraft Noise Management Strategy. These have been in existence for over a decade and their operation continually adjusted to deliver required outcomes.

At Perth Airport there have been two recent specific examples of material developments impacting aircraft noise exposure. In our opinion the first example, involving the Western Australian Route Review Project (WARRP), was marked by ineffective community engagement. The second example, involving the nine week main runway overlay programme, has, to date included effective community engagement.

In relation to the inadequate consultation about the WARRP changes, ASA has agreed to work with Perth Airport to ensure that future changes to airspace management that may affect noise exposures will involve more comprehensive engagement with communities and their elected representatives.



### **National Aviation Policy White Paper**

The recently released National Aviation Policy White Paper contains statements of government policy intent that are aimed at improving the management of aircraft noise impact. These proposals target minimising exposure to aircraft noise through more effective land use planning, and more effective community engagement. Perth Airport considers these proposals to be suitable and sufficient enhancements that will assist to minimise the prospects of community engagement failures such as those that occurred with the WARRP.

Although Perth Airport is not in a sufficiently informed position to offer a conclusive view on the proposal to establish a "noise information and complaints ombudsman" within the administration of ASA, we believe that this step should assist to improve ASA effectiveness and provide further confidence to the public that concerns over aircraft noise impacts are properly addressed.

The National Aviation Policy White Paper also includes proposals that seek to achieve more effective engagement between airports and their surrounding communities. The White Paper states that the Government intends to "formalise and enhance existing consultation activities, within a framework that encourages adoption of best practice standards" (White Paper page 60). Consistent with the policy intent of Government Perth Airport will review our approach to community engagement consistent with any guidance promulgated by the Government to seek to improve community consultation, including in relation to aircraft noise.

### 2 IMPORTANCE OF PERTH AIRPORT

### **Background**

Perth Airport is an important public infrastructure asset that plays a central role for Perth and the whole of Western Australia's cultural, social and economic activities. Western Australians rely on air transport more than other Australians due to the geography and demography of our state; alternative modes for timely long-haul transport do not exist.

### **Employment at Perth Airport**

Tenants and service providers located on the Perth Airport Estate directly employ over 8,500 people. The combined direct and indirect contribution to employment in Western Australia during 2007-08 was estimated at 18,700.

### **Economic Impact**

An economic impact study undertaken in 2008 shows that the estimated direct contribution of the activities at Perth Airport to Western Australia's Gross State Product (GSP) is \$1,360 million, or 0.87 per cent. Direct and indirect contribution to GSP is approximately \$2.921 million<sup>1</sup>.

<sup>1</sup> Acil Tasman, The Impact of Perth Airport on Western Australia, 2009



### **Passenger Growth**

Perth Airport is Australia's fourth busiest capital city airport. Despite uncertain global economic conditions in 2008/09, Perth Airport experienced the highest growing passenger growth rates of any Australia capital city airport, reporting a 6.1 per cent increase in passenger numbers for the 2008/09 financial year. In 10 years, passenger numbers rose 103 per cent from 4.80 million in 1998/99 to 9.73 million in 2008/09. This growth has been stimulated by the needs of the resources sector and the relatively strong Western Australian economy.

### **Redevelopment Plans**

Perth Airport has been able to fully support the growth of air services; however it has been recognised that the customer experience has suffered in our peak operating periods due to congestion.

WAC continues to make substantial investments to increase capacity and improve customer service. Redevelopment plans remain on track, with approximately \$140 million invested in aviation infrastructure during the 2008/09 financial year (including Perth Airport's investment and that of Qantas in the Qantas domestic terminal) and a further investment of \$190 million planned for 2010. Works are underway at both the International and Domestic Terminals to improve access, ease traffic congestion and provide a safer road network for all users.

Design and development of a new domestic terminal (Terminal WA) has also commenced with a 26 hectare aircraft parking apron now complete and construction of the terminal scheduled to commence in September 2010. Planning for a significant expansion of the international terminal is also well advanced.

### **Unique Features of Perth Airport**

Perth's geographic location means that it is an end point on airline networks, rather than a hub. This means that Perth depends on operations from major hub locations and airline schedules at Perth are to a large extent determined by the schedule at the hub. Perth Airport's 24 hour a day operation allows airlines to optimise their schedules and provide more air services to Western Australia. Cathay Pacific provides a recent example of how airlines adjust their schedules according to flights at hubs.

Up until October 2007, Cathay Pacific operated 4 times per week from Hong Kong to Perth arriving into Perth at 0735 and departing back to Hong Kong at 1220. In late October 2007, Cathay revised its schedule to 5/week, arriving into Perth at 2345 and departing at 0055. This revised schedule better meets a wave of services out of Hong Kong from both Cathay Pacific and its wholly owned subsidiary, Dragonair. The result was much better connectivity with a range of services, particularly into China. This schedule was increased to a daily service in October 2008, highlighting the success of the schedule change.

Aircraft utilisation (the number of hours the aircraft operates in a day) is critical to airline economics. The availability of 24 hour operations at Perth and Perth's geography allows airlines to operate what is referred to as "back of the clock" services. Back of the clock services help airlines increase aircraft utilisation by offering a flight in time that the aircraft might otherwise be parked. Back of the clock services are used by both international and domestic airlines.



A good example of back of the clock services from an international perspective is Singapore Airlines. One of Singapore Airline's services departs Singapore at 1935 and arrives in Perth at 0040. The aircraft then departs Perth at 0155 to arrive back in Singapore at 0710. This allows the aircraft to be positioned in Singapore for the morning wave of departures. This service is made possible both by the availability of 24 hour operations at Perth and the fact that Perth is close enough to Singapore to allow a return flight over night. Perth's proximity to South East Asia means that this type of service is possible to a number of current and potential markets.

The back of the clock flights also assists domestic airlines to increase aircraft utilisation by leaving the east coast in the late evening, arriving in Perth around 2300 and departing close to midnight to arrive back on the east coast early in the early morning. As with the international services, this allows the aircraft to be positioned in the east coast centres for a morning departure while operating through the night and maximises the use of the aircraft.

Western Australia is a multicultural state, with 35 per cent of Perth residents born outside of Australia compared to the national average of 29%<sup>2</sup>. This demography is a key driver of international air travel as Western Australians visit family and friends overseas. Western Australians also tend to travel more than other Australian's with 37 per cent of the Western Australia population travelling overseas in 2008-09, well above the national average of 28% and the highest rate in the nation<sup>3</sup>.

Perth Airport also has a much higher proportion of Fly-In, Fly-Out (FIFO) traffic serving the resource sector than any other state. The FIFO traffic is driven by the resource company needs and has a wave of departures in the early morning, with return flights in the afternoon. The FIFO services allow the resource sector to source sufficient skilled workers to expand and operate this vital element of the WA and national economy in often remote locations. In 2008-09, over 1.6 million passengers through the airport were FIFO workers.

There has been a significant increase in air freight at Perth Airport in recent years. In 2005, 37,300 tonnes of freight was handled. This almost doubled to 65,600 tonnes handled in 2008<sup>4</sup>. The composition of freight volumes between inbound and outbound freight has also changed in the last decade, with inbound freight (imports) exceeding outbound freight (exports). This freight includes time-sensitive items essential to Western Australian communities and businesses.

<sup>4</sup> Bureau of Infrastructure, Transport and Regional Economics

<sup>&</sup>lt;sup>2</sup> Australian Bureau of Statistics, *Census*, 2006

<sup>&</sup>lt;sup>3</sup> Department of Immigration and Citizenship (DIAC), Resident arrivals and departures, 2008-09



### 3 AIRCRAFT NOISE MANAGEMENT AT PERTH AIRPORT

Perth Airport is committed to working with community, airlines, ASA and relevant government agencies to manage aircraft noise impact. A central element of the overall aircraft noise management process is the Perth Airport Noise Management Consultative Committee, with representatives from the following organisations invited to participate:

- Perth Airport
- Airservices Australia
- Bellevue Action Group
- Cannington Community Representative
- City of Bayswater
- City of Belmont
- City of Canning
- City of Gosnells
- City of South Perth
- City of Swan
- Department of Environment & Conservation
- Department of Infrastructure, Transport, Regional Development and Local Government
- WA Department of Transport
- Federal Member for Hasluck
- Federal Member for Swan
- Qantas Airways Limited
- Shire of Kalamunda
- Shire of Mundaring
- The Guildford Association
- Virgin Blue Airlines

The Committee has contributed to the development of the Noise Management Strategy for Perth Airport which seeks to balance the interests of those who use the airport's services with the interests of the communities which are affected by the airport's growing operations.

Since its inception the Committee has, with limited exception, met quarterly to implement and monitor the Aircraft Noise Management Strategy. The Committee's purpose has evolved into a monitoring and consultative role.

The current operation of the Committee includes reviewing aircraft noise monitoring data; reviewing the number, location and reason for aircraft noise complaints; and reviewing implementation of the Perth Airport Noise Management Strategy. At meetings consideration is given to a number of key areas including aircraft noise complaints, aircraft engine ground running, aircraft noise and flight path monitoring and aircraft noise information. Meetings are well attended, and minutes outlining outcomes are circulated amongst members following meetings, including those members that were unable to attend.



In 2003, a protocol document was developed by the Committee. The intent of this document was to reiterate the group's terms of reference, and clearly articulate each member's responsibility and their input into the Committee. Each member at the time outlined the extent of their participation and their organisation's participation on the Committee, and then each member signed off on these responsibilities to show the commitment to support the committee in a number of ways.

In 2009/10 the committee will review its terms of reference, membership and the commitment of each organisation to the committee.

Actions listed for the Committee during 2009/10 include:

- Work with Airservices Australia to enhance community understanding of the WARRP;
- Work with Airservices Australia to explore opportunities for reduction in community noise impact of the WARRP;
- Review the terms of reference of the Committee;
- Review the location of Airservices Australia noise monitoring stations; and
- Undertake measurements of the noise impacts of engine ground runs and use this data to further reduce their impact.

ASA plays a vital role in the management of aircraft noise impact at Perth Airport. Perth Airport and impacted communities rely on ASA to effectively communicate information in relation to aircraft movements, including investigation and advice on issues of interest/concern in relation to airspace management relating to noise exposure.

ASA manages aircraft flight paths to and from Perth and custodian of most of the information that is relevant to understanding aircraft noise impact.

A challenge for ASA is to provide information on aircraft movements and airspace management in a form that is useful to Perth Airport and community members and their representatives, noting that airspace management is an inherently complex subject matter.

Perth Airport therefore depends on ASA's effective participation in the Perth Airport Noise Management Consultative Committee and ASA's effectiveness in promulgating information to community, including when dealing with complaints.

Perth Airport also recognises that we must work effectively with ASA to ensure that community awareness and consultation on aircraft noise is effective. That is, we do not consider the matter to be ASA's exclusive responsibility; Perth Airport also has an important role to play, including working with ASA to facilitate effective community engagement.

### Western Australian Route Review Project

The Western Australian Route Review Project (WARRP) was undertaken by ASA in mid 2006 and resulted in material changes to approach and departure routes for Perth Airport from late 2009.

While ASA provided information to the Perth Airport Aircraft Noise Management Consultative Committee during the review, the subsequent significant disquiet from many communities and their representatives is evidence that the nature of community engagement on the WARRP was manifestly inadequate.



Appendix 1 contains a summary of the nature and extent of ASA's interaction with Perth Airport and the Perth Noise Management Consultative Committee, including extracts from minutes of the Committee meetings at which the WARPP was discussed.

With the benefit of hindsight it is apparent that the information provided by ASA was not of a form that would allow Perth Airport or surrounding communities to properly understand the nature and extent of community impact that would result from the WARRP.

The failure to adequately inform elected representatives of communities from Local Government and State and Federal Parliament about the WARPP changes is also considered by Perth Airport to have been a material deficiency in the process undertaken by ASA.

Perth Airport will be undertaking closer scrutiny of future proposed changes to aircraft flight paths and ensuring we work with ASA to see that effective community engagement is undertaken.

### 4 FURTHER INFORMATION

For further information on any aspect of this submission, please contact:

Annabel Hart Corporate Governance and Policy Officer Perth Airport

Mail: PO Box 6 Cloverdale WA 6985

Telephone: 08 9478 8417

Email: <u>Annabel.Hart@wac.com.au</u>



### **APPENDIX 1**

### **WESTERN AUSTRALIAN ROUTE REVIEW PROJECT**

### Background

Perth Airport's involvement with the Western Australia Route Review Project (WARRP) was through the Perth Airport Aircraft Noise Management Consultative Committee. ASA formally notified the Committee on 26 July 2006 which is attached.

### Correspondence

Further correspondence was received by Perth Airport and individual committee members separately via email and through the Airservices Australia Website. This correspondence advised progress regarding the project and requesting comments or questions during late 2006 and early 2007. The dates of this correspondence (which is attached) were:

- 11 August 2006
- 8 September 2006
- 15 September 2006
- 22 September 2006
- 13 October 2006
- 10 November 2006
- 27 November 2006

### **Discussion at Committee Meetings**

Further to this, ASA presented and discussed the WARRP at Committee meetings held on 4 October 2006, 21 February 2007 and 18 May 2007 (extracts from meeting minutes are attached).

### **Presentation of Changes**

A presentation was made by Airservices to the Committee on 22 April 2009. This presentation outlined the WARRP Route Changes. A copy of this presentation is attached.



Business Centre: Air Traffic Control

Address: PO Box 1093, Tullamarine Vic 3043 Business Centre Phone: 03 9339 2455 Business Centre Fax: 03 9339 2450

ABN 59 698 720 886

File No: 2004/7144

To: Perth Airport Noise Management Strategy Committee

Subject: Western Australia Route Review Project (WARRP)

Airservices Australia has established the Western Australia Route Review Project to implement safety and systemic improvements to the entire West Australian air route structure.

Stage 1 of the project deals with the high priority systemic safety issues identified in the route structure and Standard Instrument Departure (SID) / Standard Terminal Arrival Route (STAR) package for operations in the Perth Terminal area. Once this component is completed Stage 2 will address route structure issues to more remote destinations in Western Australia.

### Scope of Stage 1

To design and implement a route structure & integrated SID/STAR package for Western Australia that:

- provides for increasing traffic in the Perth terminal area by significantly improving systemic safety and reducing complexity.
- complies with:
  - Air Traffic Management Design Manual standards
  - Environmental requirements and
  - Industry preferred options where possible

As part of the consultation that will be undertaken during the project a website has been developed to encourage awareness and understanding of proposed changes and also provide opportunity for feedback and suggestion. The site is accessed from the RAPAC page on Airservices Australia website and may be accessed directly via the URL below.

### http://www.airservicesaustralia.com/waroutereview/default.asp

The proposed timeline for stage 1 aims for implementation of designs in June 2007. In order to achieve this goal, designs will need to be developed, assessed for safety/environmental issues, validated and finalised by the start of January 2007. Work on the project will advance independent of the NMSC meeting schedule therefore please take the opportunity to visit the site regularly, review items as they are posted and provide any feedback or questions you feel may be appropriate.

Yours Sincerely,

Ken Hodge

Project Manager Melbourne Centre

E-mail: ken.hodge@airservicesaustralia.com

26<sup>th</sup> July 2006

From:
Sent: Friday, 11 August 2006 5:19 PM

To:

Subject: Western Australia Route Review Project (WARRP) - Website updated

All,

The WARRP website has been updated, direct link below.

http://www.airservicesaustralia.com/waroutereview/default.asp

Please advise if you wish to be removed from the email distribution list.

Regards

Pam Kern
¬roject Coordinator
Vestern Australia Route Review

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### Pilot Information

- Feedback/Questions
- WA RAPAC Minutes
- Route Structure Issues (updated 19 July 2006)
- Route Structure Strategies (updated 11 August 2006)



Home > Western Australia Route Review Project (WARRP)

### Western Australia Route Review Project (WARRP)

### Background

During work on the Perth Route Review Project it was identified that, with changes to navigation and separation capabilities, systemic improvements can be extended beyond the Perth terminal area to include the entire Western Australia route structure. The project was therefore re-scoped and renamed accordingly.

Stage 1 of the Western Australia Route Review Project has been initiated to deal with the high priority systemic safety issues identified in the route structure and SID/STAR package for operations in the Perth Terminal area. Once this component is completed Stage 2 will address route structure issues to more remote destinations in Western Australia.

As part of the consultation that will be undertaken during the project this website has been developed to encourage awareness and understanding of proposed changes and also provide opportunity for feedback and suggestion. The site will be updated as developments to designs progress.

The proposed timeline for changes aims for implementation of designs in June 2007. In order to achieve this goal, designs will be developed over the next 6 months and finalised by the start of January 2007. Initial advice on route structure issues and options will be posted for comment by mid July.

### Scope of Stage 1

To design and implement a route structure & integrated SID/STAR package that:

- provides for continued traffic growth in the Perth terminal area by
  - significant increasing systemic safety and
  - · reducing complexity.
- complies with:
  - Air Traffic Management Design Manual standards
  - · Environmental requirements and
  - · Industry preferred options where possible.

### Comments and or Feedback:

Please take the opportunity to review items as they are posted and provide any feedback or questions you feel may be appropriate.

Last Updated August 11, 2006



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### Home > Western Australia Route Review > Route Structure Issues

Western Australia Route Review - Route Structure Issues

Below are some of the issues that must be taken into account when considering a terminal area route structure for Perth.

- Perth geographical position resulting in significant traffic flows from the East and North. (see Figure 1)
- example operations transiting RAAF Pearce restricted Impact of restricted airspace in the Perth area. For airspace to be FL160 and above. 7
- North and Class G to South (approx 100 degrees BIU -PIY tracks), in which to process the majority of aircraft. Limited Class C airspace, between RAAF airspace to 3
- with existing routes that need to merge into an orderly Large number of diverse destinations (mine sites etc) and consistent Perth entry/exit structure.
- standards with opposite direction inbound traffic. This Current route structure and radar coverage limitations be processed using restrictive time based separation means many outbound aircraft are often only able to restricts outbound aircraft climb to preferred levels. 5
- route structure. This may also present opportunities to required until alternate navigation capabilities are the options for the inbound/outbound issue mentioned in norm and therefore should be utilised as part of any Some navaids have been identified by industry as establish some less restrictive lateral separation 9
- crossovers are achieved either in the cruise phase of flight or within 30nm of Perth using a segregated SID/STAR package. The need to ensure where possible that route 7

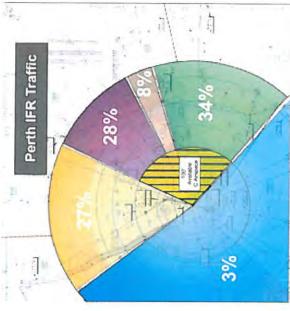


Figure 1

These issues together with external/internal feedback are forming the basis of current background work being undertaken to develop route structure options.

14/08/2006

Western Australia Route Review - Route Structure Issues

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Home > Western Australia Route Review > Route Structure Strategies

Western Australia Route Review - Route Structure Strategies

### Static Route Structure <u>.</u>

Establish inbound and outbound routes that remain fixed regardless of runway in use at Perth. This will enable consistent flight planning and tracking.

### Route crossovers 2

flight whilst making maximum use of the limited 100 deg arc of Class 90nm Perth. SID/STAR package to resolve crossovers close to the Enable route crossovers close to the field or in the cruise phase of C airspace to the east of Perth. Utilise three inbound streams and two outbound corridors with tracks merging/diverging at around aerodrome.

### Integrated SID/STAR package 3

Develop an integrated SID/STAR package that provides tracking and VNAV requirements between the threshold and the route.

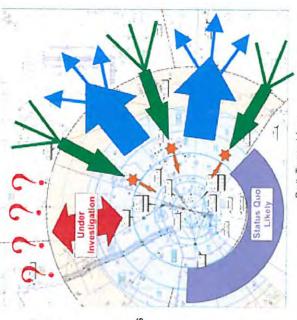
STARs commence. VNAV requirements on STARs to provide for Inbound streams to track to Gates at around 40nm Perth where constant descent approaches where safety permits.

safety management of highly varied climb/speed profiles during the Outbound corridors with segregated Prop/Jet SIDs to enhance the departure phase. The need to vector off track in faster following traffic scenarios should be reduced.

### Flow to Gate 4

collaborating to get aircraft to gates at a predetermined time to Introduce "Flow to Gate" methodology with ATC and Pilots

14/08/2006



Current entry/exit model under consideration Perth Terminal Area

14/08/2006

Western Australia Route Review - Route Structure Strategies

acriteve trie seque a randing time. Entable absorption or uerays in cruise phase of flight where possible and safer, more efficient traffic management in the terminal area.

Inbound sequenced streams

STAR commencement at a FLOW GATE

Outbound corridors





These issues together with external/internal feedback are forming the basis of current background work being undertaken to develop route structure options.

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### Home > Western Australia Route Review > Route Structure Proposal 1

## Western Australia Route Review - Route Structure Proposal 1

Please remember that this structure will apply regardless of the runway in use at Perth. This proposal has evolved over a number of iterations that were subjected to internal scrutiny to ensure that the key goals of increased systemic safety and provision for traffic The graphic accessed from the link below displays a proposed static route structure based on the strategies described previously. growth are met. Evaluation in Airservices Australia's ATC simulator has confirmed that systemic safety, traffic separation and management processes in the enroute environment are an improvement on today's situation and provide for future growth. Work is now commencing to determine that a safe and acceptable integrated SID/STAR package can be developed to support the proposal within the important Approach/Departures airspace.

Although still subject to internal discussion, the proposal is presented for external feedback and comment. Further background information on tracking and mileage for various destinations is currently being gathered and will be made available next week.

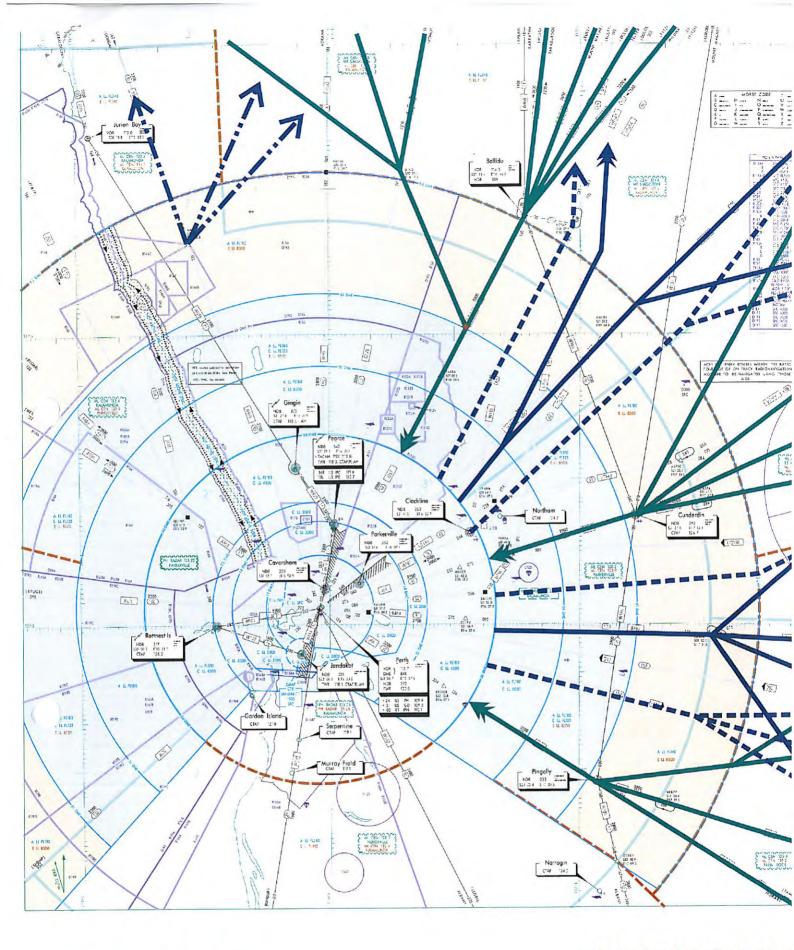
Route Structure Proposal graphic

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Home > Western Australia Route Review > Route Structure Proposal 2

## Western Australia Route Review - Route Structure Proposal 2

As a result of work undertaken in Perth this week to determine a safe and acceptable SID/STAR package to support the proposed structure it has become clear that a revision to the south west corridor is required. The necessity for change stems from a combination of factors including runway 21 operations, the impact of restricted airspace to the immediate north, the number of route crossovers and profile altitude requirements for arrivals. The graphic accessed from the link below displays the revised route structure.

Graphics of the SID/STAR package for various runway operations will be prepared and made available shortly.

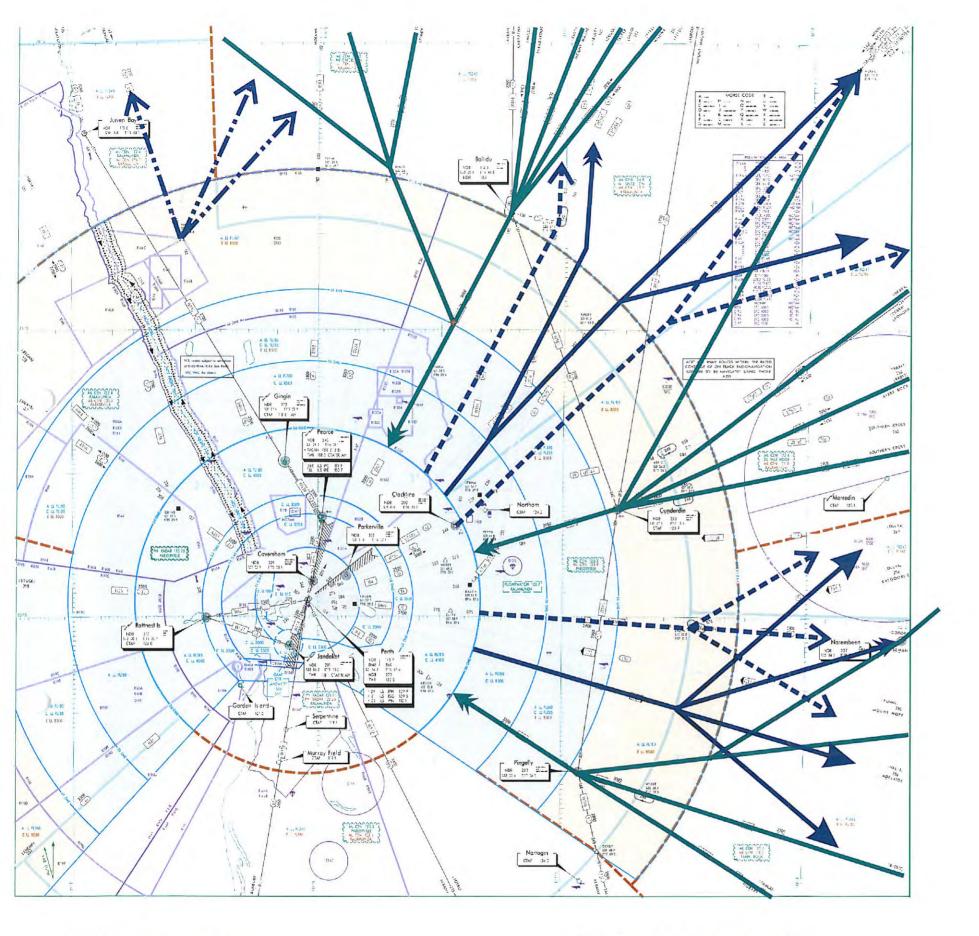
Route Structure Proposal 2 graphic

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Home > Western Australia Route Review > Frequently Asked Questions

### SID/STAR RWY 21 Operations - Proposal 1

The presentation accessed from the link below displays an animation of proposed SID & STAR for Perth runway 21 operations. This is not a complete picture of traffic management processes, rather an indication of the major ones linking into the proposed route structure. This will allow us to more accurately determine tracking distances to various points (mentioned previously).

Tracking distances to various points and a similar presentation for proposed runway 03 operations will be available shortly.

SID/STAR RWY 21 Operations Presentation

Please Note: SID/STAR proposals are subject to outcomes of ATC simulator validation, which is scheduled during November. This information is provided in advance of the validation to enable understanding and feedback on the direction being taken.

Last Updated: September 22, 2006

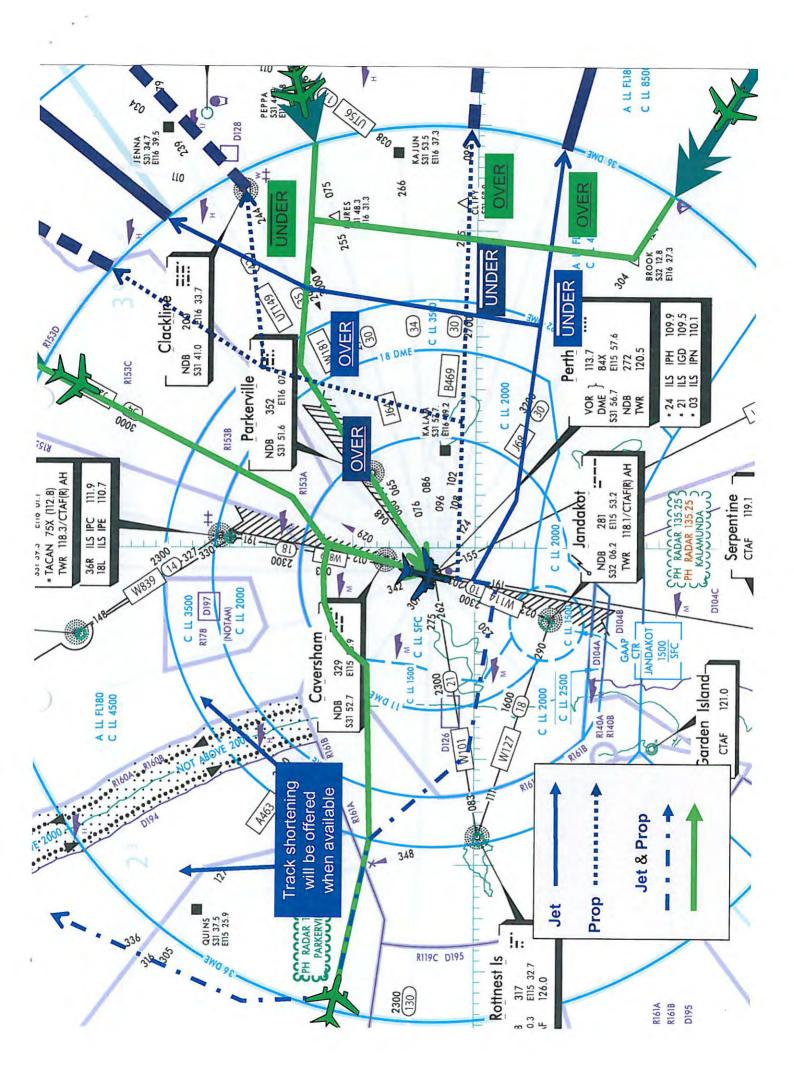


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## Perth Runway 21 Operations

Please do not mouse click or push enter, the slideshow is animated and will proceed automatically. from the ground up



From:
Sent: Friday, 13 October 2006 3:07 PM

To:

Subject: Western Australia Route Review Project - Significant Update

All,

The WARRP website has been updated and the changes are significant, please use the direct link below.

http://www.airservicesaustralia.com/waroutereview/default.asp

Please advise if you wish to be removed from the email distribution list.

Regards

Pam Kem Project Coordinator Western Australia Route Review

## Home > Western Australia Route Review > Route Structure Proposal 3

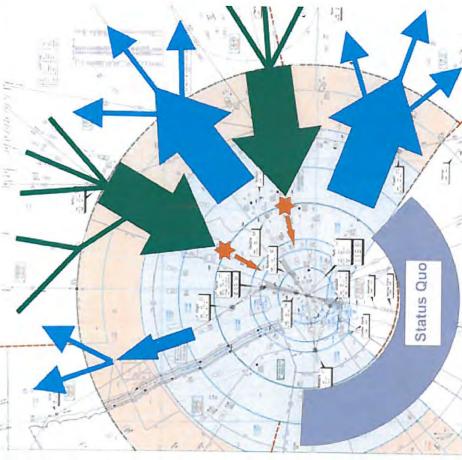
Western Australia Route Review - Route Structure Proposal 3

its ability to deliver the sought-after safety and operational benefits terminal area, in the busy south east departure corridor, warranted improvements compared to current practice, as mentioned earlier. concerns arose regarding some aspects of the total package and the amount of off-track vectoring required for sequencing on the Following further internal review of the second route structure three inbound routes and the restrictions on climb inside the proposal, and the SID/STAR package required to support it, for industry. Whilst the proposal showed some genuine further consideration.

segregation techniques used in the busy Sydney basin area. The results identified significant further improvements to the proposal corridors, rather than combined routes, for inbound aircraft whilst The proposal was reassessed by staff experienced in the traffic by merging a fully segregated (jet/prop - inbound and outbound) route structure with the general principles of the current runway 21/24 traffic management plan. This provides separate major still maintaining separate major corridors for outbound traffic. dramatically reduce the need for vectoring for sequencing, Segregating jet and prop traffic on separate routes will potential climb restrictions and allow full and effective implementation of the flow to gate methodology.

level and consistency of service provision, particularly in the arrival departing aircraft, compared to the second proposal. For ATC this foreseeable traffic growth and significantly assist in improving the standardisation in tracking and procedures for both arriving and revised proposal will further increase safety margins to enable For industry this will translate into an even greater level of and sequencing phase of flight.

confirm the anticipated safety and systemic benefits. Some minor proposal are scheduled for early November and are expected to fine tuning may follow industry feedback and ATC trials however feedback. Enroute and TCU simulator validation of the revised Work will progress quickly to adjust the SID/STAR package to support the revised proposal and present this for industry



16/10/2006

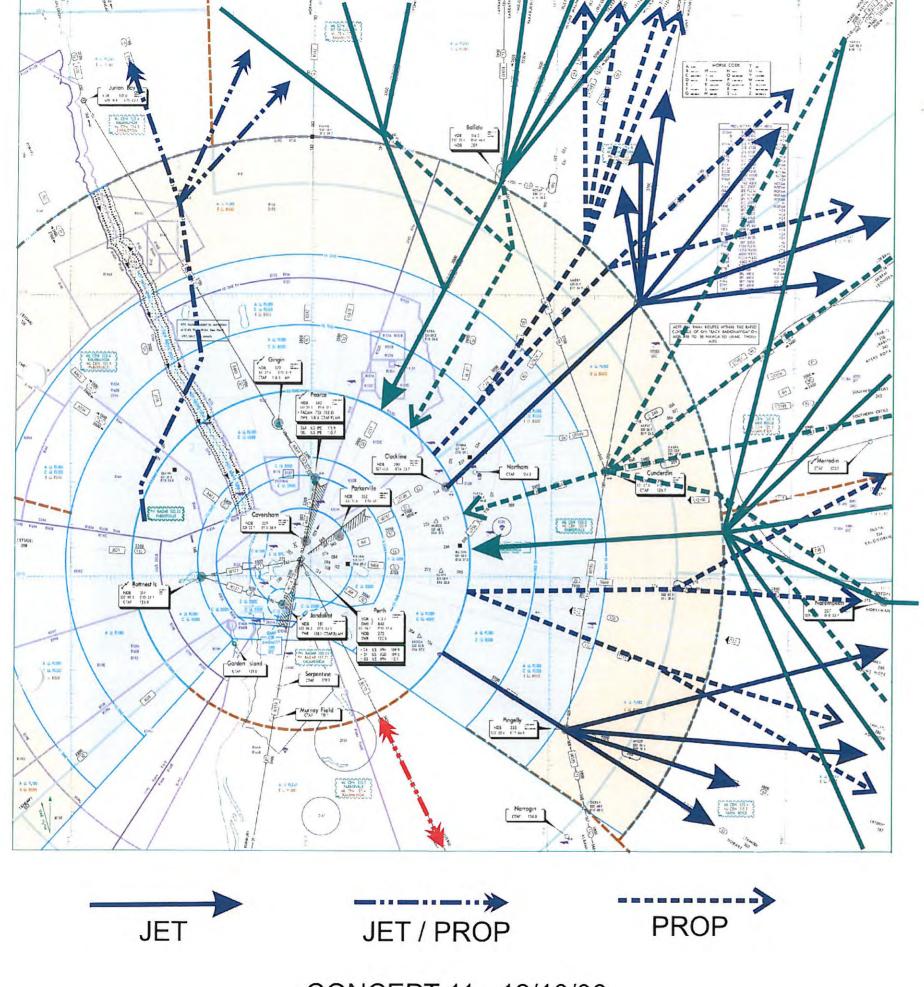
given the extensive dev. , ment and review process undertaken it is not expected to uncover any further need for major change to this third proposal. Western Australia Route Review - Route Structure Proposal 3

The graphic accessed from the link below provides more detail on the structure being used as the basis for simulator validation.

■ Route Structure Proposal 3 graphic

Last Updated: October 13, 2006

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CONCEPT 11 - 12/10/06

http://www.airservicesaustralia.com/waroutereview/images/proposal3\_2.jpg

From: Friday, 10 November 2006 7:48 PM Sent:

Subject: Western Australia Route Review Project (WARRP) - Website updated

All,

To:

The WARRP website has been updated, direct link below.

http://www.airservicesaustralia.com/waroutereview/default.asp

Please advise if you wish to be removed from the email distribution list.

Regards

Pam Kern roject Coordinator Vestern Australia Route Review Contact us | Recent Updates | Site Map

O O

SEARCH

Home > Western Australia Route Review > Route Structure Proposal 3A

# Western Australia Route Review - ATC SIM Trials - Route Structure Proposal 3A

En route simulator trials of the revised proposal were undertaken in Melbourne last week and confirmed further improvements in safety and systemic ben.

Some fine tuning of proposal 3 resulted in minor changes to achieve more manageable crossovers between inbound and outbound traffic around the 90 € N, ⋈ Perth region.

The graphic accessed from the link below displays the revised 3A structure from simulator trials.

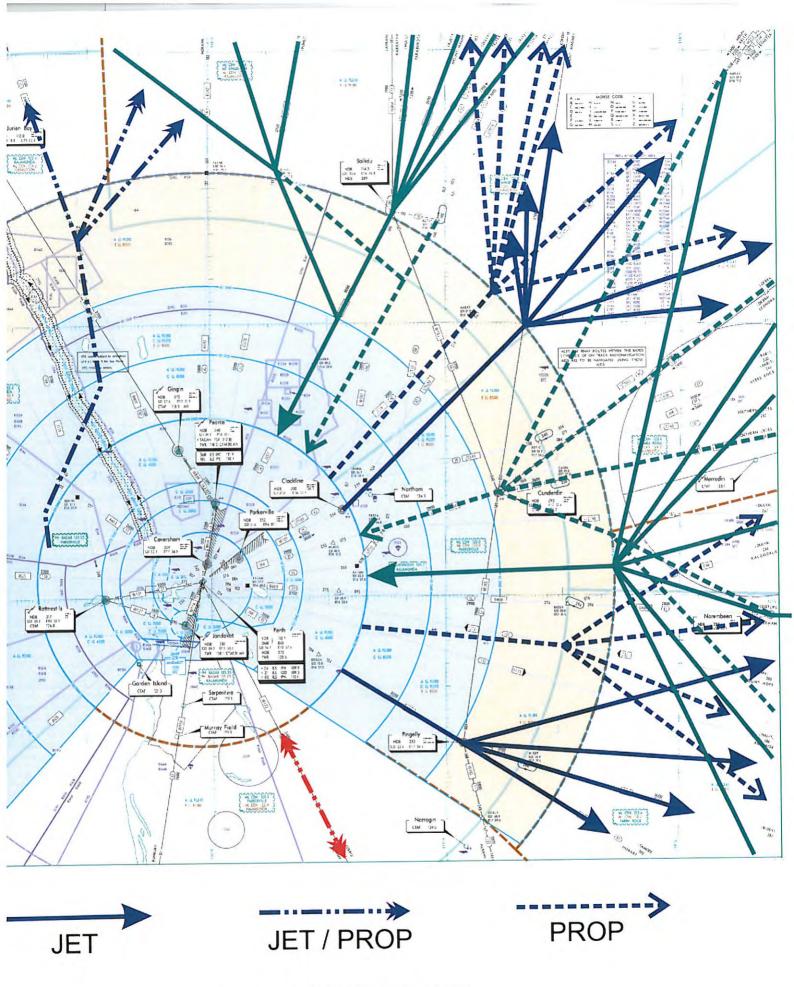
The Perth Terminal Control Unit will shortly conduct simulator trials of a couple of SID/STAR options to support the 3A route structure. Information on the preferred option will be posted on the website following the trials.

Route Structure Proposal 3A graphic

Last Updated: November 10, 2006

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Proposal 3A - 6/11/06

om watoutereview images proposal3a in

		How Sarah	3//8/07
From:			
Sent:	Monday, 27 November 2006 6:36 AM		
To:			

Subject: Western Australia Route Review Project - MAJOR Update

All,

The WARRP website has been updated and the changes are significant, please use the direct link below.

http://www.airservicesaustralia.com/waroutereview/default.asp

Please advise if you wish to be removed from the email distribution list.

Regards

Pam Kern Project Coordinator Western Australia Route Review

November 24, 2006

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Home > Western Australia Route Review > Route Structure Proposal 1

## Western Australia Route Review - Perth SID/STAR Simulator Trials

Over the weekend of the 10th to 12th November, Perth ATC conducted a simulator trial of SID/STAR options to support the proposed 3A route structure. The trial plainly displayed the difficulties in developing SID/STAR for Perth given the constraints mentioned previously on this site (100deg usable airspace to east, mix of prop and jet traffic, geographic location of Perth on Australian continent, environmental factors etc).

The reality is that no design can satisfy all competing interests, it must therefore of necessity be a compromise of various factors with safety clearly ruling as the paramount concern.

The information and graphics in the document accessed from the link below detail the issues and options that will be evaluated further. Following the next trial animated PowerPoint graphics of the final SID/STAR package will be made available.

Please Note: Not all traffic management routing is shown, only major Jet/Prop tracking.

Perth SID/STAR Simulator Trials 图 (697Kb)



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Last Updated: November 24, 2006

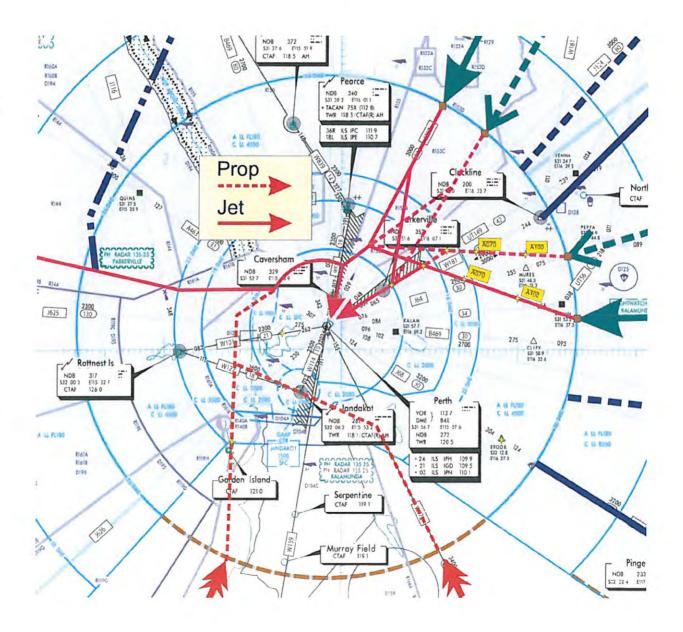
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### Runway 21/24 Operations

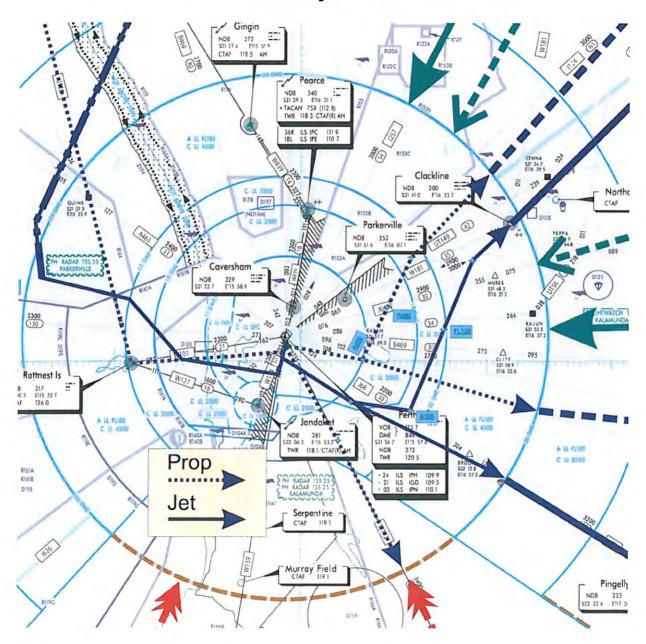
The proposed 3A route structure approximates the existing runway 21/24 traffic management model and moderate traffic scenarios during the trial indicated the proposed SID/STAR package was suitable for 21/24 operations. A further trial, to be held shortly, with heavy traffic scenarios is expected to confirm this initial assessment.

### **Runway 21 STAR**





### **Runway 21 SID**





## Runway 03/06 Operations

This is the most difficult mode of operation in Perth today. The trial confirmed this and highlighted a number of factors that in combination significantly impact operations.

- The strong N/W and N/E wind patterns prevalent during 03/06 operations
- The close proximity of base legs for instrument approaches to the edge of CTA
- The variation in VNAV and speed profiles for RPT prop and jet traffic into Perth
- The importance of available airspace, when needed, to safely vector aircraft to achieve a landing sequence

These factors, together with observations from the trial and historic experience, highlighted core principles that are fundamental to safe and effective traffic management of runway 03 operations.

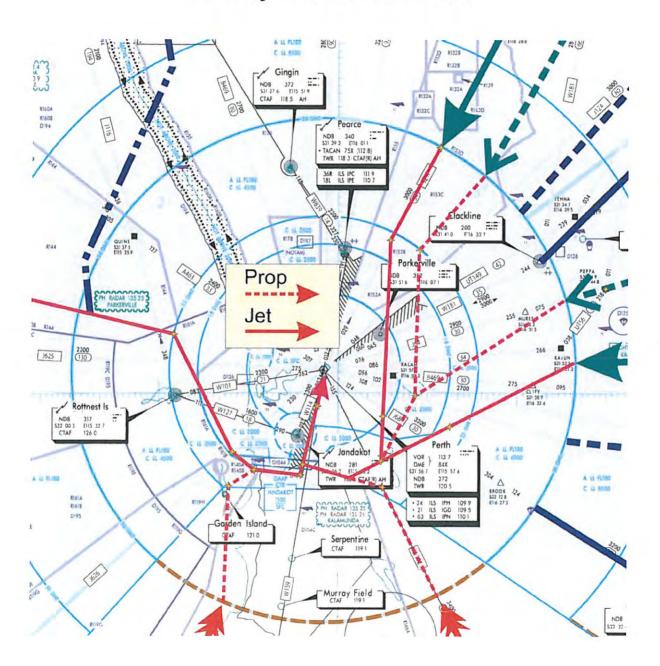
- 1. All inbound traffic from east of the runway centreline should track to a common right base for final
- 2. Inbound prop and jet traffic should remain segregated until merged in the latter part of the STAR
- 3. Whenever possible the base leg should be as far from the CTA boundary as possible to allow vectoring, when required, for sequencing
- 4. Departing aircraft to the south east must be managed in a way that provides appropriate sanitised airspace for inbound vectoring and sequencing and also allows inbound traffic to maintain constant descent approaches

The options trialled were based on instrument STAR scenarios. It became clear however that factors peculiar to 03 operations require both visual and instrument STARs. To rely solely on instrument STAR tracking, whilst maintaining the safety of the sequence, would result in a reduction of acceptance rates with an increase in holding. The outcome was that visual STAR options were identified and will be evaluated in the next trial.

Processing of outbound jet traffic via PIY proved particularly difficult given the VNAV and tracking requirements of inbound traffic from the east, particularly for visual STARs. Many options were considered and rejected due to increased safety risks and departing traffic having to maintain unacceptably low levels until around 30nm PH. After much deliberation it was determined that the only safe and acceptable option is to remove south east jet departures from the stream of inbound traffic. This is achieved by south east jet traffic departing initially on a left turn to the west then around south to return to outbound track. Compared to various alternatives this is a significant safety improvement that removes a number of potential conflicts and provides unrestricted climb allowing the extra distance incurred to be absorbed as cruise phase miles.

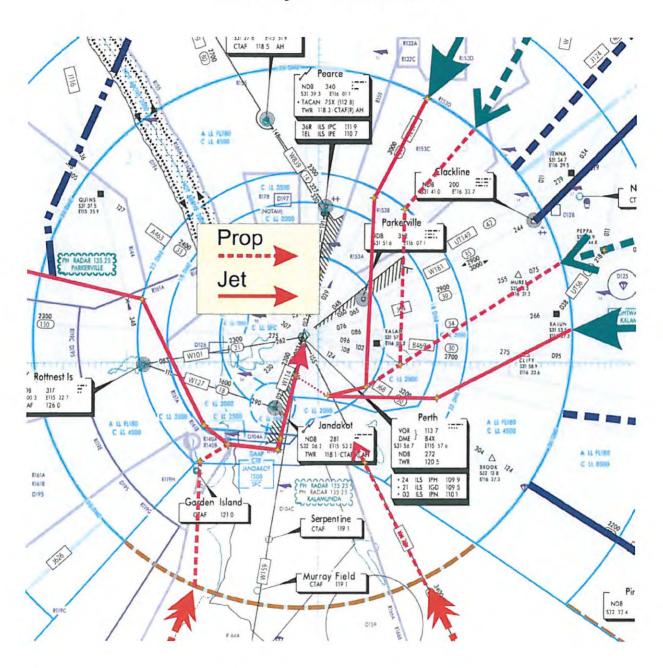


## **Runway 03 Instrument STAR**



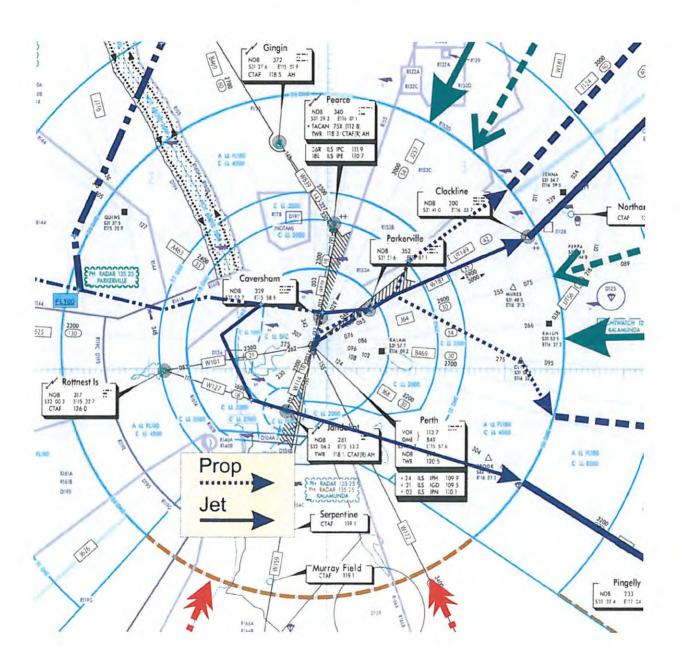


## Runway 03 Visual STAR





## Runway 03 SID





# PERTH AIRPORT NOISE MANAGEMENT STRATEGY COMMITTEE FINAL MINUTES OF MEETING – WEDNESDAY 4 OCTOBER 2006

### **PRESENT**

Chairman

Petersen, Torben Perth Airport

## Members or Member's Representative

Atkinson, Geoff Perth Airport Scott, Sam Member for Pearce Bennett, Gavan Airservices Australia Sellick, Andrew Qantas Airways Burrows, Sue Shire of Kalamunda Tan, Steven City of Swan

**Observers** 

Miller, lain

Devenish, Stuart

DiLollo, Arnica

City of Canning

Airservices Australia

Perth Airport

Cake, Michael DEC

Collins, John
Cuccaro, Tony
Shire of Mundaring

Dale, Lance Airservices Australia
Delle Donne, Joe City of Canning

Kennedy, Michael DPI

Leclezio, Raymond The Guildford Association Lipple, Phil Canning Community Rep

The meeting opened at 10:05 am.

## 1. APOLOGIES

Apologies were received from:

Gates, Richard Perth Airport Wells, Ross City of Gosnells
Gaynor, Drew DPI White, David Virgin Blue
Lekias, Michael City of Canning Wilkie, Kim Member for Swan
Moylan, Judi Member for Pearce

Prior to Agenda Item 2, Mr Petersen presented an overview of the current situation of the WAC business which included:-

- General aviation and domestic traffic is growing.
- International traffic is well below forecasts.
- Qantas are adding B747 flights to the east.
- Looking at moving Qantas from domestic to international. Should have an understanding of the implications and issues early next year.
- Car parking space is still an issue. Do we move to multi-story parking. Will depend on the Qantas move.
- BAA has been taken over by Ferrovial, a Spanish building group. Ferrovial may sell their Australian interests which includes shares in Perth Airport.
- WAC board members are changing to include more WA based people.
- WAC will have a new CEO early next year.

## Action Required



- WAC's organization structure is currently being revamped.
- WAC is in a strong financial position and is undertaking refinancing to fund the expected capital infrastructure programs.

### 2. MINUTES OF PREVIOUS MEETING - 28 JUNE 2006

2.1 The minutes were accepted as a true and correct record of the meeting.

### 3. MATTERS ARISING FROM THE MINUTES

3.1 All matters arising were agenda items. (see below)

#### 4. CORRESPONDENCE

7.

4.1 There were no comments regarding correspondence

### 5. PRESENTATION – AIRSERVICES AUSTRALIA – WA ROUTE REVIEW

- 5.1 Presented by Lance Dale with assistance from Iain Miller and Gavan Bennett. Refer to information posted at www.airservicesaustralia.com/waroutereview/default.asp
- 5.2 Responding to a question by Mr Collins, Mr Dale and Mr Miller explained the aircraft distribution to the 03 approach track over the swan river and the tracks further south.
- 5.3 Mr Bennett explained that Airservices have a process of environmental assessment for proposed changes to flight tracks. Every effort is made to locate a proposed track to an environmentally insignificant location. If significant, Airservices refer the proposal to the Department of Environment and Heritage for assessment. The DEH decide what level of environmental assessment is required prior to making a decision.
- 5.4 Environmental assessment includes noise levels, population numbers effected and engine emissions.
- 5.5 Mr Devenish requested that the environmental assessment reports be made available to committee members, in time to make comment, prior to track changes being adopted.
- 5.6 Although not normally public documents, Airservices may release them to committee members if the committee formally request them. WAC will write to Airservices.

Mr Petersen

Mr Petersen

## 6. FUTURE ROLE OF NOISE MANAGEMENT STRATEGY COMMITTEE

- 6.1 The draft Terms of Reference and the new name of Aircraft Noise Management Consultative Committee were accepted by the committee.
- 6.2 The working group will now develop strategies and action plans.

## POPULATION ANALYSIS, APPROACHES FROM THE WEST TO RUNWAY 03

7.1 This issue of various tracks and numbers of people effected (refer to minutes dated 27 October 2004 for details) has been superseded by the current WA Route Review. Item 5 above.



7.2 Using the TNIPs program, Mr Petersen presented ground noise levels for various aircraft on different tracks as comparisons, indicating differences due to altitude. The WA Route Review environmental assessments take altitude into account.

Mr Collins and Ms Burrows excused themselves and left the meeting at 11.45am

Before leaving, Ms Burrows announced that she has resigned from the Shire of Kalamunda and consequently will no longer be a member of our committee.

Mr Petersen thanked Ms Burrows for her valued contribution over the last 8 years and on behalf of the committee wished her all the very best for her future.

## 8. INTERSECTION AND FULL LENGTH DEPARTURES FOR RUNWAY 03

- 8.1 Mr Petersen gave an overview of the Runway 03 departure data previously posted to members.
- 8.2 Mr Petersen presented a table of results from the TNIPs program of the various noise levels at Queens Road and James Street, for full length and intersection departures of various aircraft types.
- 8.3 The largest difference in noise level between full length and intersection departures is 3 dB(A) at Queens Road. It is questionable as to whether this is discernable.
- 8.4 It was explained that for full length departures pilots select a lower thrust setting compared to higher thrust settings for intersection departures. These thrust settings effect the height of aircraft over communities.
- 8.5 Mr Sellick offered to provide more detailed information on aircraft take-off profiles for discussion at the next meeting of the committee.

Mr Sellick

## 9. ENGINE GROUND RUN REPORT – MAY TO AUG 2006

- 9.1 There were 2 engine ground run complaints that were related to actual events.
- 9.2 The report was accepted by the committee.

# 10. NOISE AND FLIGHT PATH MONITORING REPORTS (PH06Q1) JAN. TO MAR. 2006 & (PH06Q2) APR. TO JUN. 2006

- 10.1 Airservices are currently reviewing the format and content of these reports. They may include previous data for 1 or 2 years for comparison purposes.
- 10.2 Committee members are invited to make suggestions to Mr Bennett regarding content.
- 10.3 Airservices are considering whether or not to change the current night hours of 2300 to 0600.
- 10.4 Mr Petersen said it would be a good idea to amend the current time criteria for the engine ground running rules to coincide with the night hours adopted by Airservices.



## 11. MONTHLY AIRCRAFT NOISE COMPLAINTS DATA - MAY TO AUG. 2006

- 11.1 There was an increase in noise complaints for the month of August with most of the increase occurring on the 14<sup>th</sup> and to a lesser extent on the 15<sup>th</sup>.
- 11.2 At that time Perth Airport was experiencing very strong cross winds on the main runway which necessitated aircraft departures on runway 24 and making left turns over Queens Park and Cannington. It was difficult weather and there were also some go rounds for runway 03 arrivals.
- 11.3 The complainants are all registered as new complainants with sequential ID numbers indicating they have not called before and made these calls at or around the same time.
- 11.4 Mr Bennett agreed to report on what is meant by "Other" on the spread sheets.
- 11.5 Mr Bennett indicated that Airservices are currently reviewing how this data is recorded and presented.

## Mr Bennett

## 12. OTHER BUSINESS

12.1 A Chapter 2 Gulfstream 3 (corporate jet) recently landed at Perth Airport without approval from DOTARS. It took 3 days to obtain approval. Classed as an Angolan military charter.

The next meeting will be held on 7 February 2007 (tentative)

The meeting closed at 12.15 am.

## PERTH AIRPORT AIRCRAFT NOISE MANAGEMENT CONSULTATIVE COMMITTEE

## FINAL MINUTES OF MEETING - WEDNESDAY 21 FEBRUARY 2007

### **PRESENT**

Chairman

Petersen, Torben

Perth Airport

### Members or Member's Representative

Atkinson, Geoff Cuccaro, Tony

Dale, Lance Delle Donne, Joe Di Lollo, Arnica

Dundas, Barbara Heidl, Nick

Kennedy, Michael Lipple, Phil

Macpherson, John

Perth Airport

Shire of Mundaring Airservices Australia City of Canning

Perth Airport The Guildford Association

Bellevue Action Group

DPI

Canning Community Rep

DEC

Maddaford, Barry

Marks, Phil Tan. Steven Tomlinson, David

Wells, Ross

City of South Perth City of Belmont City of Swan

Shire of Kalamunda City of Gosnells

Observers

Miller, lain

Airservices Australia

The meeting opened at 10:05 am.

#### 1. **APOLOGIES**

Apologies were received from:

Bennett, Gavan Collins, John Devenish, Stuart Gates, Richard

Gaynor, Drew

Airservices Australia City of South Perth City of Canning Perth Airport

DPI

Leclezio, Raymond Moylan, Judi Sellick, Andrew White, David

Member for Pearce Qantas Airways Virgin Blue

The Guildford Association

Prior to Agenda Item 2, Mr Petersen presented an overview of the current situation of the WAC business which included:- (Refer to Power Point slide prints for details of the presentation).

- Purpose "To enable responsible and profitable growth of the Airport franchise".
- Vision "A growing, safe, secure, environmentally responsible and customer focused business that our stakeholders, neighbours and the Commonwealth can be proud of."
- Objective "To be the most successful Airport franchise in Australia".
- This is further broken down in to Goals, Strategies, and Measures.
- For the first time, passenger numbers have exceeded 7 million for the year.

**Action** Required



WAC

- In 2006, for general aviation traffic, Perth Airport has exceeded the Master Plan aircraft movement forecast for 2024.
- In 2006, for total traffic, Perth Airport has reached the Master Plan aircraft movement forecast for 2019.
- WAC will produce a table showing actual growth compared with forecast growth shown in the Master Plan.
- Significant increase in the domestic passengers is due to the resource industry.
- International passenger numbers are higher than in previous years, but not markedly.
- The ANEF plan will not change. This plan was not based on forecast growth linked to a future year but rather on 350,000 movements per year to give some certainty for town planners.
- The next 5 yearly Master Plan review is due to commence early next year with a draft to the Minister by mid 2009.
- Modelling shows that the parallel runway will not be needed until the current runway system reaches capacity which is 205,000 movements per year. Currently at about 100,000.
- Extension to the 06/24 runway as shown as an option in the Master Plan is not planned at this stage. The new A380 aircraft will be able to land on this runway at its current length. The B747-400 aircraft cannot land on this runway at its maximum allowable landing weight.
- Extension to the 03/21 runway as shown as an option in the Master Plan is not planned at this stage as new aircraft coming on stream will not need it.
- WAC are currently analysing the possibility of transferring Qantas domestic operations to the international side of the airport. This move is possibly about 4 years away.

## 2. MINUTES OF PREVIOUS MEETING - 4 October 2006

2.1 The minutes were accepted as a true and accurate record of the meeting.

## 3. MATTERS ARISING FROM THE MINUTES

3.1 <u>Clause 5.6</u> Gavan Bennett has agreed to provide the committee with the environment assessment reports associated with the WA Route Review. The environment assessment process is due to commence in early April 2007.

Airservices

## 4. CORRESPONDENCE

4.1 In response to the letter from WAC, Airservices have agreed to amend the evening/night hours from 2300 – 0600 to 19.00 - 07.00 in their Noise & Flight Path Monitoring Reports.

Airservices

## 5. ENGINE GROUND RUN REPORT - SEPT TO DEC 2006

5.1 For the 4 month period, only 2 engine ground run complaints were received in September. Neither could be correlated with actual events.



## 6. NOISE AND FLIGHT PATH MONITORING REPORTS (PH06Q3) JUL, TO SEPT.2006

- 6.1 Mr Petersen referred to page 48 of this report which shows a table of the hourly spread of aircraft movements between 22:00 and 01:00 hours indicating that aircraft movements are significant at this time of night.
- 6.2 It was agreed by the committee some time ago that hard copy reports would not be posted to members as they are readily available on the Airservices web site.
- 6.3 Mr Atkinson agreed to e-mail members when the reports are posted to the Airservices web site.

Mr Atkinson

#### MONTHLY AIRCRACFT NOISE COMPLAINTS DATA – SEP. TO DEC. 2006

- 7.1 There was an increase in noise complaints for the month of November (38) and a lesser increase in December (29). On average monthly complaints are about 17.
- 7.2 Various factors contributed to these increases:-
  - November:-
    - : Summer weather pattern with north-easterly winds
    - : The one week Red Bull Air Race meant a lack of airspace to the west of the airport.
    - : Therefore aircraft were flying in areas not normally affected by aircraft noise and there was more concentration on the 03 ILS.
  - December:-
    - : Summer weather pattern with north-easterly winds
    - : 10 complaints were a result of helicopter movements outside controlled airspace.

## 8. PRESENTATION: AIRCRAFT TAKE-OFF PROFILES (T. Petersen)

- 8.1 Mr Sellick was unable to attend our meeting to deliver his presentation. However Mr Petersen gave the presentation on his behalf using Mr Sellicks Power Point slides. Refer to slide prints for details of the presentation.
- 8.2 This presentation generated a lot of discussion but it was difficult to clarify issues in the absence of Mr Sellick. The presentation was to assist in the understanding of aircraft noise effects on the population of Guildford for runway 03 departures using both full length and taxiway intersections.
- 8.3 Various issues were raised which included:-
  - Modelling of standard profiles for various aircraft types previously presented to the committee shows a maximum difference of 3dB(A) between full length and taxiway intersection departures.
  - Mr Sellicks explanation of actual profiles flown by a B737-800 indicates that this difference maybe significantly less.
  - Is modelling available to give aircraft noise levels on the ground for actual profiles flown.
  - For the main runway, 80% departures are 21 and 20% are 03.
  - Actual profiles flown for other than Qantas aircraft should also be investigated.

Qantas



- Qantas use full length departures.
- Jet aircraft are required to follow noise abatement climb procedures
- It was agreed that further clarification should be sought from Mr Sellick at the next meeting of the committee.

Qantas

## 9. INTERSECTION AND FULL LENGTH DEPARTURES FOR RUNWAY 03

9.1 Discussed at Agenda Item 8 above

## 10. COMMITTEE STRATEGIES AND ACTION PLANS

- 10.1 The draft Strategy Implementation Table was discussed and some minor amendments and additions were agreed to. See final table for details.
- 10.2 Action item 1.1 generated discussion regarding the SPP 5.1 and recent proposed residential developments in Guildford. Discussion included:-
  - The developments in question are effected by the 25-30 and the 30-35 ANEF zones.
  - The planning policy allows this sort of development provided policy measures such as notification on title and noise insulation are met.
  - Responsibility rests with the buyer (buyer beware)
  - Information on housing insulation costs and health issues is not available.
  - Development in high noise zones such as these should not be allowed.
  - If there is evidence that shows that residential development should not occur in highly effect noise zones, then the planning policy should be changed.
  - Councils should zone areas appropriately.

#### 11. OTHER BUSINESS

11.1 The WA Route Review has been delayed with a new date of 22 November 2007 for implementation

The meeting closed at 12.00 pm



## **PERTH AIRPORT** AIRCRAFT NOISE MANAGEMENT CONSULTATIVE COMMITTEE

## **MINUTES OF MEETING - FRIDAY 18 MAY 2007**

#### **PRESENT**

Chairman

Jackson, Brett Perth Airport

## Members or Member's Representative

Atkinson, Geoff Perth Airport Marks, Phil City of Belmont Benkovic, Adam Member for Hasluck Miller, Iain Airservices Australia Collins, John City of South Perth Petersen, Torb Perth Airport Devenish, Stuart City of Canning Sellick, Andrew **Qantas Airways** Gaynor, Drew DPI White. David Virgin Blue Airlines

Heidl. Nick Bellevue Action Group

Macpherson, John

Coutinho, Marcel Virgin Blue Airlines

Observers

The meeting opened at 10:05 am.

## **APOLOGIES**

Apologies were received from:

Airservices Australia Henry, Stuart Member for Hasluck Dale. Lance Delle Donne, Joe City of Canning Moylan, Judi Member for Pearce Dittmar, Geoff Airservices Australia Tomlinson, David Shire of Kalamunda Wilkie, Kim Member for Swan

Action Required

Prior to Agenda Item 2, Mr Jackson gave a brief overview of the current changes to the Westralia Airports Corporation company structure which included :-

- Mr Jackson is the new GM, Asset Management Process, and will be chairing meetings of the Aircraft Noise Management Consultative Committee.
- Mr Brad Geatches is the new CEO. He has come from, and spent 5 years with, the Cairns Port Authority which manages both the seaport and the airport. His previous working background is the NSW coal industry and he brings to WAC a strong emphasis on safety.
- WAC is expanding their Executive team.
- At the next meeting of the Committee, Mr Jackson will present WAC's new company structure and the company's Business Plan.

Mr Jackson

#### 2. MINUTES OF PREVIOUS MEETING - 21 February 2007

2.1 The minutes were accepted as a true and accurate record of the meeting.



#### 3. MATTERS ARISING FROM THE MINUTES

- 3.1 <u>Clause 3.1</u> The WA Route Review has been delayed and not expected to be implemented until June 2008. Airservices are currently holding discussions with the RAAF. As a result of this delay, the environment assessment reports associated with the WA Route Review have also been delayed.
- 3.2 <u>Clause 10</u> Further discussion is necessary for practical ways to move forward for the implementation of the Committees strategies as listed in the Strategy Implementation Table. This will be an agenda item for our next meeting.

# Required

Action

Mr Atkinson

## 4. CORRESPONDENCE

4.1 There was no correspondence to discuss.

## 5. PRESENTATION – TORB PETERSEN – FORECAST GROWTH FROM MASTER PLAN COMPARED TO ACTUAL GROWTH

- 5.1 Mr Petersen gave a presentation of actual growth of passengers, aircraft numbers and tonnage comparing them with the forecasts included in the 2004 Master Plan. Refer to slide prints for details of the presentation.
- 5.2 The downturn in growth around the years 2001 to 2003 was caused by September 11, SARS, collapse of Ansett, Bali bombing etc.
- 5.3 This was the time of the forecasting for the 2004 Master Plan when the future of aviation at Perth Airport did not look healthy.
- 5.4 The largest growth has been in the General Aviation (GA) sector caused mainly by the mining industry.
- 5.5 The flights to mine sites all want to depart at about 06:00hours. The capacity for departure is full at this time of the morning.
- 5.6 This capacity is not just affected by the number of departing aircraft, but also by air traffic associated with Jandakot and Pearce airports. The Perth area airspace is also approaching capacity at this time.
- 5.7 WAC are currently in negotiations with mining companies discussing possibilities of larger, quieter and faster aircraft that can depart later than the current peak time and still arrive at sites on time.
- 5.8 Considering this large growth, the parallel runway will still not be needed for some time. Modelling indicates that the current runway system has a capacity of 205,000 aircraft movements per annum. Current movements are 100,000.
- 5.9 The international aircraft fleet is moving away from the noisier large aircraft such as the B747s and flying smaller quieter aircraft. Mr Collins reported that this was noticeable over South Perth.

## 6. ENGINE GROUND RUN REPORT – JAN. TO MAR. 2007

- 6.1 For the 3 month period there were no Engine Ground Run (EGR) complaints.
- 6.2 There were 3 dispensations for January, 4 for February and 4 for March.



6.3 Dispensations are only given when an early morning departure is required. If no early morning departure is required, then the EGR is carried out later in the morning (after 05:30 hours) when no dispensation is necessary.

#### 7. ENGINE GROUND RUN ACOUSTIC ASSESSMENT

- 7.1 WAC have engaged Herring Storer (acoustic consultant), to measure EGR noise and model the noise levels at the airport boundary.
- 7.2 After analysis of the EGR reports it was found that there are not many EGRs each month at full power for the aircraft that are to be included in the study (refer to the EGR table from September 2006 to March 2007 previously posted to members).
- 7.3 It is considered if noise measuring loggers were to be placed near EGR locations, there is no guarantee that the significant measurements would be taken.
- 7.4 Herring Storer are currently working with WAC for alternative methods of obtaining data for use in the modelling.
- 7.5 WAC will report on progress at the next meeting.

Mr Petersen

## 8. NOISE AND FLIGHT PATH MONITORING REPORT (PH06Q4) OCT TO DEC 2006.

- 8.1 Mr Petersen referred to pages 48 to 50 of this report showing hourly movements for each month. The totals and percentages for each month indicate the busy times over a 24 hour period.
- 8.2 Virgin Blue did not change their timetable for daylight saving. Other airlines did.
- 8.3 This has affected the totals in the tables. For example, between 00:00 and 04:00 hours there is a percentage increase in December (when daylight saving started) compared to November and October.
- 8.4 Changes in December from earlier months may also be caused by the season schedule changes that occur each November.
- 8.5 Page 21 indicates night movements with a larger number of departures than arrivals.
- 8.6 This is because the night time hours in this report are from 23:00 to 06:00 hours. A lot of aircraft arrive in the evening and depart between 23:00 and 06:00.

## 9. MONTHLY AIRCRAFT NOISE COMPLAINTS DATA – JAN. TO MAR.2007

- 9.1 The numbers of noise complaints for the 3 month period have returned to normal.
- 9.2 Most complaints occur when there is a flight path diversion. The reason is usually weather conditions.

## 10. PRESENTATION – ANDREW SELLICK – AIRCRAFT TAKE-OFF PROFILES.

- 10.1 Mr Sellick referred to his presentation delivered at the last meeting by Mr Petersen (refer to slide prints for details of the presentation previously posted to members).
- 10.2 The modelling for various aircraft of noise levels over Guildford, for full length and intersection departures assumes the same thrust settings and the same takeoff profiles for each case. This assumption is incorrect. Refer to page 4 of the presentation. For noise differences refer to the table "Aircraft noise comparison of 03 departures".



Action

# The takeoff profiles of an aircraft using full length compared to the same aircraft using an

- 10.3 The takeoff profiles of an aircraft using full length compared to the same aircraft using an intersection departure is different because different thrust settings are used. This is because the full length takeoff has more runway available (less thrust) than the intersection takeoff (more thrust). Refer to page 6 of the presentation.
- 10.4 When comparing the take-off profiles on page 4 to page 6 the aircraft height difference is less when considering the actual thrust settings used. Therefore, the differences in noise levels shown in the table "Aircraft noise comparison of 03 departures" could be less.
- 10.5 Qantas do not have the ability to analyse noise benefits and therefore cannot say if there is a benefit or not.
- 10.6 These procedures have always been followed by Qantas and are also followed by other airlines around the world. They are recommended by the aircraft manufacturers to reduce engine wear and improve the safety margin.
- 10.7 Qantas prefer to have the flexibility to depart from taxiway intersections.
- 10.8 These procedures are also promoted around the world to reduce the emissions of nitrous oxide. A higher thrust setting results in more emissions.
- 10.9 Longer taxiing times for departures from runway end also increase emissions on the ground before takeoff.
- 10.10 Mr Sellick will ask Qantas to analyse emissions for various scenarios and present the findings at the next meeting of this committee.
- 10.11 Brisbane Airport have some restrictions on intersection departures as well as one runway at Sydney Airport. All other airports in Australia allow pilots discretion to request intersection departures.

## 11. INTERSECTION AND FULL LENGTH DEPARTURES FOR RUNWAY 03.

11.1 Refer to discussion at 10 above.

## 12. OTHER BUSINESS

- 12.1 Mr Jackson referred to the Strategy Implementation Table and briefly ran through the main points for discussion at the next meeting. (refer to the table previously posted to members).
- 12.2 Mr Devenish stressed the importance of timely reports from Airservices with regards to environmental assessments at Strategy No. 6.
- 12.3 For strategy No. 7.3, Mr Macpherson reported that after liaison with the Dept. of Health, the Department of Environment and Conservation now have a brochure (currently with their publisher), which provides information on the health effects of aircraft noise.

The meeting closed at 11.35 am.

The next meeting will be held on Wednesday 22 August 2007

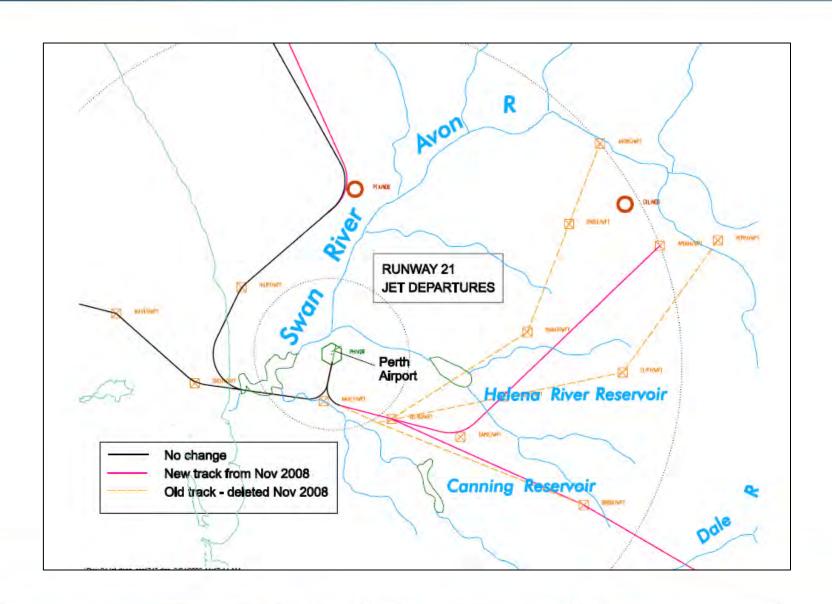
Mr Sellick

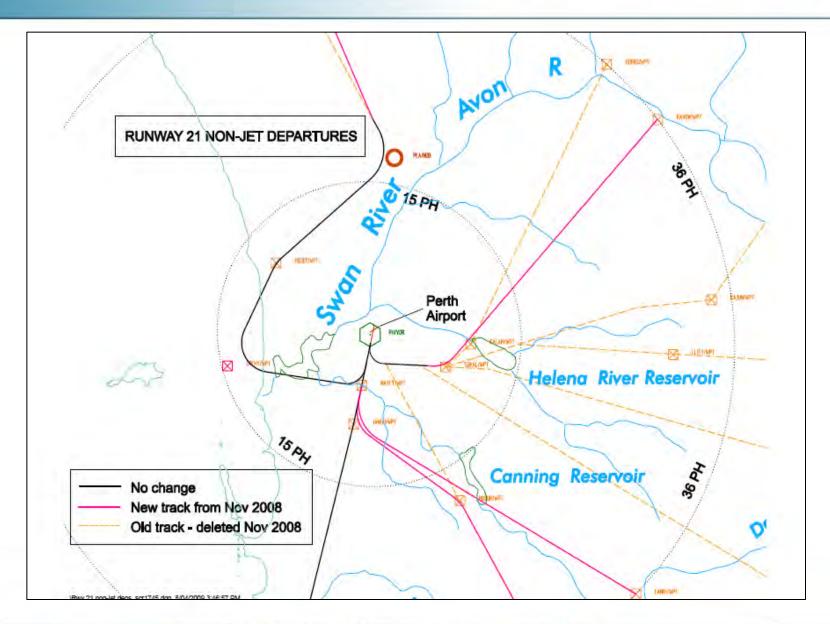
# **ANMCC**

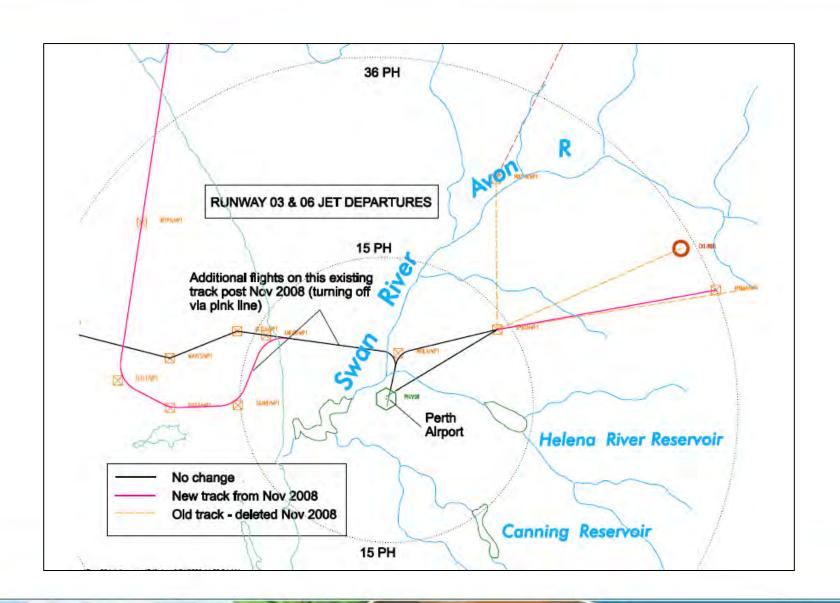
- WARRP Route Changes
- NOISE Complaints

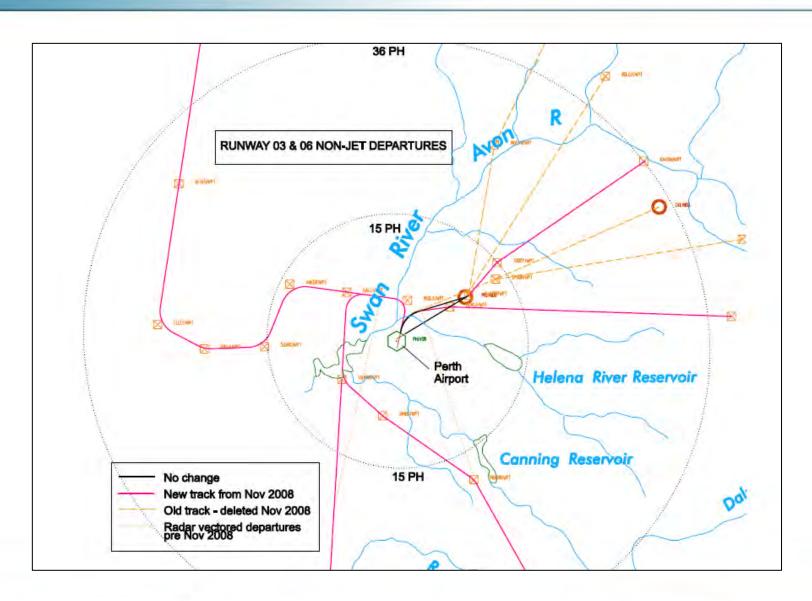
**22<sup>nd</sup> April 2009** 

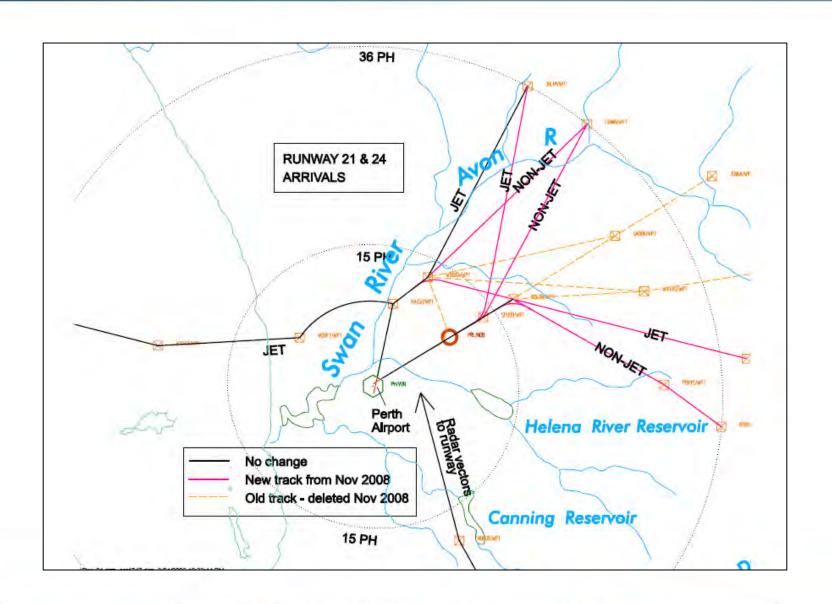
from the ground up

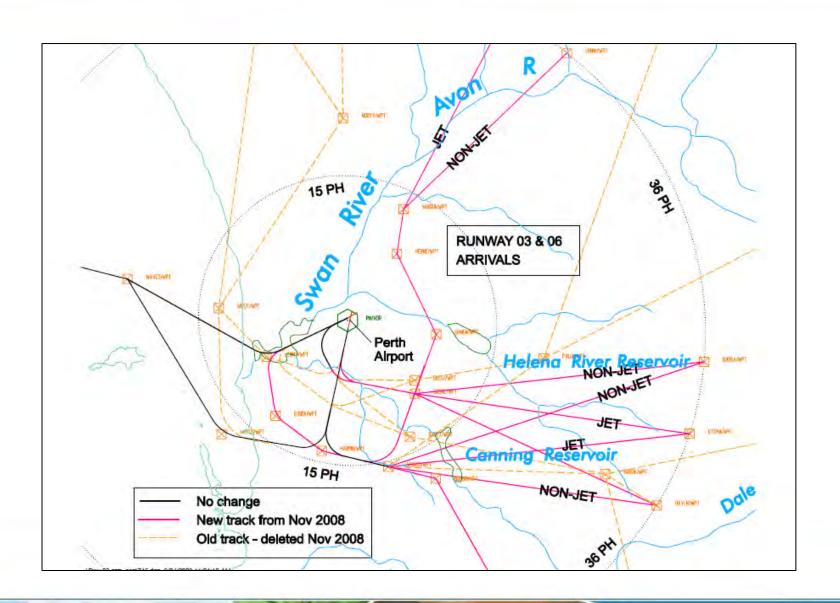




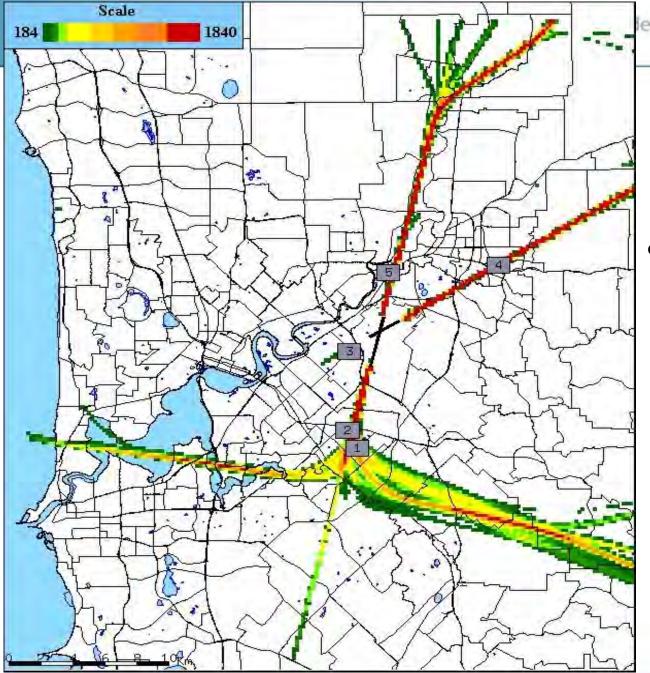




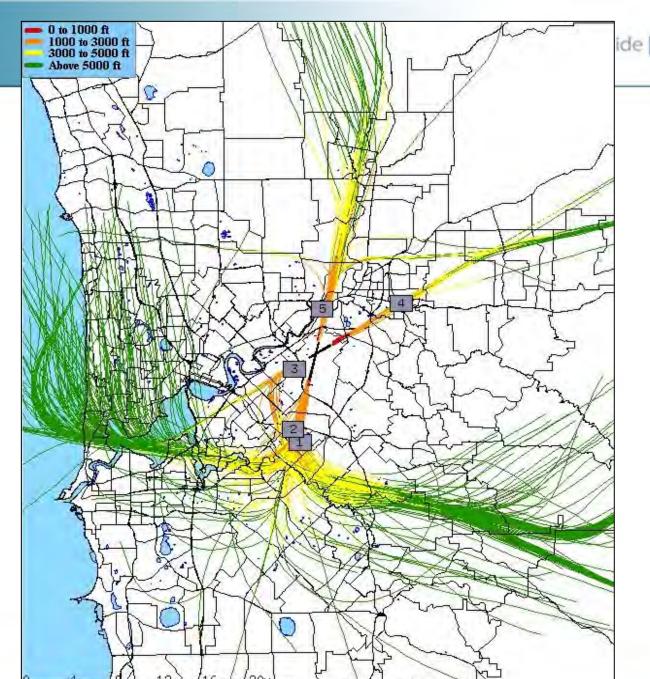








Track density plot for jet operations only during the fourth quarter 2008.





Track plots coloured by height for jet departures during the period 2/12/2008 to 8/12/2008.