



Hawkesbury City Council

Attachment 1
to
item 201

Royal Australian Air Force - Review of
Civil Aviation Access to Air Force
Airfields - September 2010
(released 16 June 2011)

date of meeting: 13 September 2011
location: council chambers
time: 6:30 p.m.

ROYAL AUSTRALIAN AIR FORCE

REVIEW

CIVIL AVIATION ACCESS TO AIR FORCE AIRFIELDS



**Air Vice Marshal Robert Treloar
Air Commodore Paul Devine**

September 2010

CIVIL AVIATION ACCESS TO AIR FORCE AIRFIELDS

If the airbases are not available, or their operational capability is impaired, then the successful conduct of joint operations may be compromised or in the worst case the mission may fail¹.

ACM Houston, CDF

INTRODUCTION

1. The review was conducted at the direction of Air Vice-Marshal G.C. Brown, Deputy Chief of Air Force, to address the matter of the provision of access for civil aircraft operations at Air Force airfields.
2. The National Aviation White Paper noted that the review conducted by Defence would be considered by Government to ensure that civil access to Defence airfields is compatible with current and future military requirements.²
3. Defence capability is inextricably linked to the availability of its airfields for training and, if necessary, the conduct of operations. Air Force airfields exist to support the generation, sustainment and deployment of military capability to meet Defence tasking by the Australian Government. Military use shall always have primacy at these locations. Accordingly, military activities may affect or even preclude civil aviation at Air Force airfields.³

BACKGROUND

4. The Air Force conducts flying operations from 12 bases around Australia. Two of the bases are Joint User Airfields, Darwin (DAR) and Townsville (TVL); five can be classified as “operational bases”, Amberley (AMB), Edinburgh (EDN), Tindal (TDL), Richmond (RIC), and Williamstown (WLM); two as “training bases”, East Sale (ESL) and Pearce (PEA); and three are “bare bases”, Curtin (CIN), Learmonth (LMO), and Scherger (SCG). Other bases include Avalon (AVL), Woomera (WMA), Point Cook (PCK), and Wagga (WAG). These classifications are used within the report.
5. Air Force airfields in proximity to capital cities are also proximate to civilian airports – both Major Capital City Airports and Major Capital City Secondary Airports.
6. Civil Aviation activity has grown strongly over the last twenty years. This has largely been driven by broader economic growth, increased tourism, regulatory reform, and greater industry efficiency. More people than ever before are flying to a greater number of destinations on aircraft that are bigger, quieter and more fuel-efficient.⁴

¹ ADDP 3.15 – Air Base Operations, Foreword, September 2006

² The White Paper also noted that Government will also consider options in 2010 in relation to industry cost recovery arrangements at Defence and joint-user airports where Defence provides air traffic management and related services to civil aviation to ensure Defence is properly resourced to meet compatible future civil aviation requirements at an appropriate level of safety. National Aviation White Paper, page 25

³ Ibid, page 25

⁴ National Aviation Policy Green Paper, page 176

7. Given the development of the civil aviation industry, it is likely that the drive to expand airline, charter and general aviation activities across Australia will continue. Consequently, ongoing pressure from civil operators to use Air Force airfields cannot be discounted, as airlines, including low cost carriers, seek to minimise expenditures whenever possible.

8. In remote localities, Air Force has traditionally provided access to its airfields for airlines, charter operators and general aviation. This access reflects the Government position highlighted in the recent Aviation White Paper. Airports are a critical part of the transport infrastructure of regional and remote Australia, often providing the only means of reliable year round transport to other centres and cities. Without them, many Australians and local economies, already disadvantaged by distances from major markets, would be denied access to essential goods and services.⁵

9. In 1994 the Government commenced the privatisation of Federal airports and leases were signed with commercial organisations or local councils and shires for the management of these airports. The *Airports Act 1996* was established to promote the sound development of civil aviation in Australia and to establish a system for the regulation of airports that has due regard to the interests of airport users and the general community⁶. This has resulted in a commercial approach to the operation of these airfields with fees imposed for their use.

10. Apart from the joint user airfields of DAR and TVL, formal leases enable the operation of civil aircraft on a regular basis at the Air Force airfields of WLM, TDL, CIN, LMO, PCK, AVL, and WGA. The agreements governing the civil use of TDL, CIN, LMO and WAG are with the local Councils and Shires; the agreement at WLM is with Newcastle Airport Limited (NAL), a company jointly owned by Newcastle and Port Stephens Councils; the arrangements at PCK are between Air Force and individual aircraft operators and flying schools, rather than with an airport operator; and, AVL is leased to a private company. In the majority of cases, civil access has been granted to Air Force airfields because there are no suitable civil alternatives in the region, e.g. WLM.

11. The leases are standard documents which address real estate and rent issues; however, not all costs associated with supporting civil operations are captured, nor is a realistic value of access to an operating airfield reflected in rent valuations. Operating agreement clauses have been developed on an ad hoc basis at the tactical level with little consideration for strategic capability management, and specific clauses are not incorporated in all leases, which potentially leaves Air Force without effective control of civil access at a number of airfields. Although leases appear to reflect the intent of “no detriment” to Air Force, there has been little or no consideration for the growth of civil air operations at these airfields; the medium and long term impact of this growth on military flying operations; and, the overall impact that civil aviation access will have on airfield availability for Air Force operations.

12. Currently, civil aviation access to the remote bare bases is not detrimental to Air Force activities or its obligations; however, increases in civil aviation activity at LMO and CIN, and lease renegotiations between the lessees and the Department of Defence (Defence), have the potential to constrain future ADF activity in these locations. This is particularly so in regard to large scale exercises and preparations for operations. Additionally, the emerging civil demand for increased

⁵ Aviation White Paper: Flight Path to the Future, December 2009, page 21.

⁶ Airports Act 1996, Clause 3

access exposes Air Force to external pressure for the provision of Air Traffic Services (ATS) and Airfield Rescue and Fire Fighting Services (ARFFS).

13. At the Joint User airfields of DAR and TVL, military and civil aviation has operated without significant issues for decades, based on the premise of mutual inconvenience. While these locations appear to offer encouraging examples of civil use of Defence facilities, Air Force has not permanently based force elements larger than squadron size at either airfield since WWII. Although large scale air exercises and operations are hosted by the Joint User airfields, the events are of a transitory nature and are able to be managed in a manner that seeks to minimise disruption to civil movements. Consequently, the nature of civil access at these locations is not necessarily an appropriate yardstick by which to judge civil access at other Air Force airfields.

14. In the case of WLM, the agreement with NAL has recently resulted in unexpected obligations concerning ATS and ARFFS. The unexpected obligations took the form of providing increased levels of service, as well as extended hours of service provision, because of increasing civil air traffic levels outside normal military operating windows.

15. A combination of increasing civil air traffic levels and rising costs at commercially controlled airfields could well encourage civil operators to seek lower cost alternatives. Presently, Air Force airfields provide such an alternative. This is reflected in applications by airlines, charter and general aviation operators to Air Force for access to EDN airfield and numerous requests from charter and general aviation operators for access to its other airfields. Increasing civil traffic at some leased (Defence) airports has the potential, if not checked, to restrict Air Force flying. Ultimately, over-generous compromise has the potential to impact operational efficiency and effectiveness, the likely implication of which is a deleterious impact on operational capability.

16. A review of Civilian Use of Military Airfields was conducted in 2006. The Review was led by Defence Support Group (DSG) and was intended to provide Joint Policy Guidance from Defence and the then Department of Transport and Regional Services to inform the development of a Cabinet Submission. The Review did not proceed beyond draft and the Cabinet Submission was not progressed. Since 2006, civilian use of military airfields has increased and new leases have been negotiated and existing leases renewed. The consequences of increased civilian use of military airfields have become more apparent since then. Deferral of consideration of this matter will only serve to exacerbate the impacts on Air Force use of its bases and, in all likelihood, threaten the maintenance of Defence capability.

17. Air Force operational capability is a sub-set of overall Defence capability and is directly linked to its airfields and adjacent training and exercise airspace. Replication of the majority of these facilities and assets is not feasible; therefore, civilian access to existing airfields will need to be appropriately managed to ensure that Air Force capability and, ultimately, Defence capability is not compromised into the future.

THE WLM EXPERIENCE

18. Civil air operations at WLM have been conducted successfully for more than 40 years, although not without some disruption to the flow of civil traffic from time to time. Civilian operations are managed by NAL⁷, under a lease agreement that expires on 31 March 2045.

19. Within the lease, an Operating Agreement was established to define guidelines for civil use of the airfield. Intended as no detriment to Air Force, the Operating Agreement limited the provision of ATS and ARFFS to periods of operations required by Air Force. The Operating Agreement also limited the civil rate of effort to protect Air Force access to its airfield and airspace.

20. As a result of concerns raised by CASA regarding the level of civil activity conducted during periods when ATS were not available, Defence extended the ATS within the WLM Restricted Areas in January 2008 to 0800 to 2200 on weekdays. A Certified Air/Ground Radio Service (CA/GRS) was provided during specified hours on weekends. Defence also extended the coverage and RFF category of Williamtown ARFFS.

21. However, increasing use of WLM by low cost airlines operating B737 and A320 aircraft during Periods of Stand Down and week-ends, which were outside the hours of the provision of the extended military ATS, resulted in a CASA safety review. An outcome of this review has been the pending withdrawal of the CA/GRS services during weekends, to be replaced by ATS prior to the end of 2010. Ultimately, Air Force will be providing both ATS and ARFFS for 16 hours per day, seven days a week; well in excess of the requirements to support military operations. While cost recovery action is being implemented, the revised WLM arrangements can no longer be considered as 'no detriment' to Air Force.

22. With regard to leasing arrangements, and the operating agreements between Defence and civil airport operators, Williamtown is the lead airfield. Therefore, the lessons learned and consequences from this experience are important and must not be overlooked. They are referred to throughout the paper to give context to the comments and recommendations made by the Review Team concerning other airfields and organisational considerations.

AIM

23. The aim of this Review is to address the impacts and consequences of the use of Air Force airfields by civil aircraft, with recommendations to enable the drafting and implementation of policy that supports the current and future needs of military aviation. In drafting this report, the Review Team has also been cognisant of the obligations on CASA that are inherent in Civil Aviation legislation and regulation. Notwithstanding these considerations, the retention of Defence capability, and flexibility, for the conduct of Air Force flying operations remains paramount.

24. The Review is also intended to provide the civil aviation industry with advice in regard to the Defence position, and the associated Defence concerns with respect to the development and maintenance of capability in the national interest. Any reading of this Review must also take

⁷ CASA: WLM Aeronautical Study, Office of Airspace Regulation, February 2008, page 3

cognisance of the obligations on Defence to deliver to Government the requisite capabilities necessary to meet extant national policy requirements.

CIVIL AVIATION ACTIVITY

Civil Aviation Growth and Change

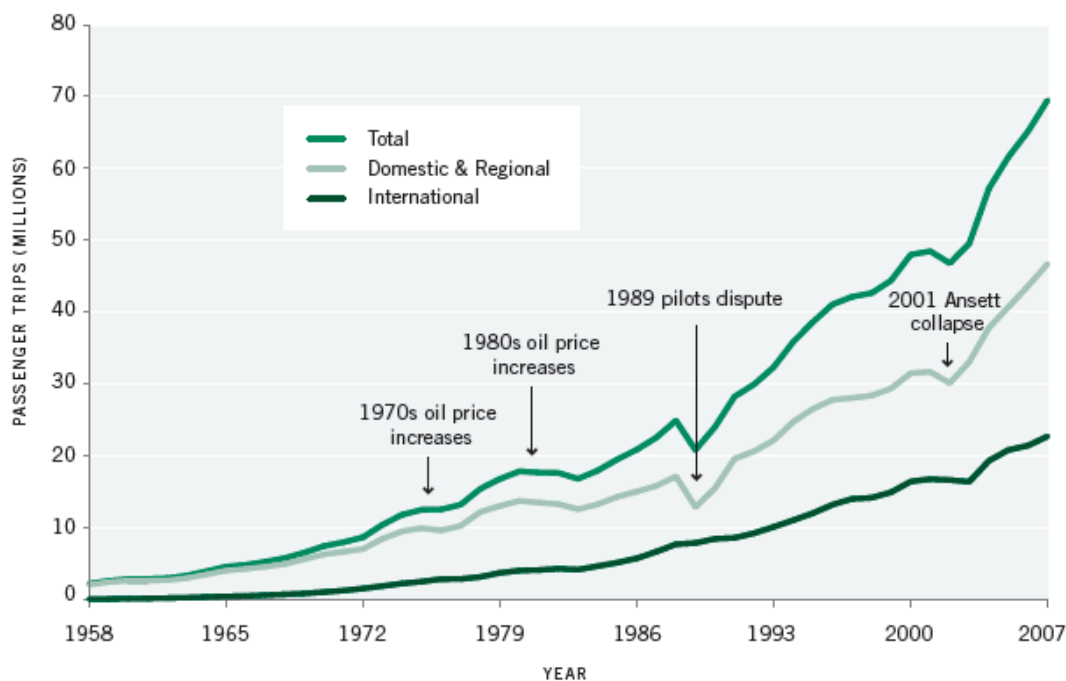
25. The growth of Australian internal passenger airlines in the seventy-five years between 1921 and 1996 has been spectacular with 381 airlines having been part of this evolution. The end of 1996 saw 44 passenger airlines operating, but the nine that made up the two principal airline families performed 98 per cent of total passenger-kilometres.⁸

26. Industry growth has been strong in the past few decades, with passenger numbers, for example, trebling over the past 20 years alone. The rate of growth from 2.3 million in 1958 to 69.5 million in 2007 represents 14 times that of the population increase and is graphically illustrated at Figure 1. Growth is expected to continue, with the government forecasting a 4% annual increase through to 2025-6.⁹

Figure 1

Passenger journeys by air: Australia, 1958–2007

Source: BITRE



Aviation Green Paper, page 7

⁸ Howard G. Quinlan, FDF Management Pty Ltd, *Air Services in Australia: Growth and Corporate Change, 1921–1996*

⁹ Emma Kelly, *Flight International*, 27 February 2009: *White moves for Australia's aerospace industry?*

27. In 1994 the Commonwealth began the privatisation of what were then referred to as Primary and Secondary airports. The *Airports Act 1996*¹⁰ established a system for the regulation of airports that has due regard to the interests of airport users and the general community. The main objectives of the Airport Act are at annex B.

28. Under the Act, an airport-lessee company has a statutory obligation to use the airport site as an airport and the sole business of the airport-lessee company is to run the airport. However, an airport-lessee company can contract out the management of the airport to another company - an airport-management company which must be approved by the Minister.¹¹

29. The Act requires that each airport has a Master Plan, approved by the Minister, which considers an assessment of the future needs of civil aviation users of the airport, and other users of the airport, for services and facilities relating to the airport.¹² Master Plans address development needs over a twenty year period and are required to be renewed every five years.

30. The civil aviation industry is supported by the Major Capital City Airports and Capital City Secondary Airports, with the exception of DAR and airports at various regional centres. The Major Capital City Airports support the airline and commuter industry, while the Capital City Secondary Airports support charter and general aviation. Each airport considered in this report, that is either civil, joint user, or subject to lease arrangements between Defence and a civil airport operator, has a Master Plan approved by the Minister in accordance with the requirements of the *Airports Act 1996*.

Major Capital City Airports

31. The requirement for planning for future operations at Major Capital City Airports is demonstrated with the publication of Master Plans that outline air traffic growth projections and measures to meet the requirements of that growth. A perusal of the Master Plans for the Major Capital City Airports and WLM confirms that their Plans address assessments made by the Department of Infrastructure, Transport, Regional Development and Local Government (DITRDLG) concerning air traffic growth, and airfield and infrastructure development to meet these demands.

32. Total air passenger movements in Australia are projected to nearly double by 2025–26. This forecast level of growth calls for a significant increase in airline capacity and infrastructure at capital city airports. The major airports are already planning ahead and are in the process of implementing measures to cope with these increased future capacity requirements.¹³

33. To provide context, an Avline Report published in December 2008, and sponsored by DITRDLG, states the following:

“Adelaide Airport introduced a new Multi-User Integrated Terminal in late 2005 which increases the airport’s capacity to facilitate the movements of aircraft and

¹⁰ Airports Act 1996, Act No. 42 of 1996 as amended

¹¹ Ibid, Section 4.

¹² Ibid, Section 71 (2), (b)

¹³ Avline 13, December 2008, Department of Infrastructure, Transport, Regional Development and Local Government, page 9.

to service international, domestic and regional passengers. There is potential to further expand the terminal to meet future demand. Brisbane Airport will commence construction of a second parallel runway in 2009 and have (sic) plans to expand terminals, build new roads and increase car parking and commercial facilities..... Darwin Airport has completed construction of a fourth aerobridge, refurbished the existing three aerobridges and is planning to expand the existing terminal.... Perth Airport has commenced initial stages of a \$1 billion redevelopment project to build a new intrastate terminal that will boost capacity for domestic services to remote resource areas. The initial stage involves building an aircraft parking apron capable of holding up to 36 aircraft to service the future terminal.”¹⁴

34. An examination of the Master Plans indicates that the Major Capital City Airports around Australia are well placed to cope with the projected increase of passenger and aircraft movements though to 2029. BITRE¹⁵ has predicted that passenger movements through all airports will increase by four per cent per annum over the next 20 years, resulting in a doubling of passenger movements over the period.¹⁶ While noting the possibility for changing circumstances; for example, the recent global financial crisis, or policy changes that would compromise investment to meet long term capacity and demand¹⁷, in general, there is no projected need for the use of Air Force airfields by civil operators on the basis of a lack of capacity at the Major Capital City Airports. Furthermore, the Major Capital City Airports are better situated to service the major population centres. The exception to the foregoing concerns long-term capacity planning for the Sydney Region and Air Force is actively engaged with other Federal and State Government agencies in the Sydney Region Capacity Study, which is an initiative flowing from the 2009 National Aviation White Paper.

35. Notwithstanding capacity considerations, commercial imperatives, understandably, will continue to push airlines to seek cost-relief. Increased access to Air Force airfields is likely to be on the agenda as part of the mix relating to cost minimisation. Likewise, it could be reasonably expected that the relatively high costs incurred by general aviation at Major Capital City Airports will constrain growth in this sector and create increased pressure at Capital City Secondary Airports (formerly GAAP Airports) and possibly Air Force airfields.

36. As discussed, just as pricing imposts are forcing general aviation activities away from the Major Capital City Airports, a similar response to increasing airport charges can be expected from airlines who may seek less expensive operating environments. An example is the use of Air Force airfields for circuit training by airlines seeking relief from what they regard to be high cost operating environments. When cost recovery is applied, charges are considerably less for this service than at civilian airports. As an addendum, the Review Team established that cost recovery action is not applied for general aviation access, instrument approaches or circuit training, at Air Force airfields.¹⁸

¹⁴ Ibid, page 9

¹⁵ Bureau of Infrastructure Transport and Regional Economics

¹⁶ Aviation White Paper, 2009, Chapter 9, page 162.

¹⁷ Ibid, page 162.

¹⁸ 44WG data

Access for cost relief

37. The recent request by an international carrier for permission to nominate WLM and RIC as alternate airfields is a further example of searching for cost relief. Nomination of either of these airfields as a diversion destination would represent a reduction in the amount of fuel required than if more distant alternate airfields, such as Melbourne or Brisbane, were the nominated diversions. The outcome would be a reduction of operating costs/increased payload and an improved competitive position for the airline.

38. While such an outcome may prove to be attractive to a commercial carrier, the request bore no acknowledgement of the inability of those airfields to cater for the demands for equal treatment from other airlines. In short, a situation could well arise where granting access to one would compel Air Force to grant access to others. In the event of a mass diversion to a location such as WLM, and the clear inability of that airfield to cater for such diversions, the question must be asked as to where responsibility would lie in the event that capacity constraints and fuel exhaustion precluded diversion to a more suitable alternate.

39. Unfortunately, from the perspective of Air Force, insular considerations related to commercial imperatives tend to cloud the realities surrounding the ability of Defence airfields to cater for concessions such as fuel-saving alternate destinations, whether they are international or domestic in their origin. Air Force, in all likelihood, would be found wanting in the event that the granting of such concessions led to an inability of a passenger aircraft to reach safe haven.

40. A further issue, with respect to access for RPT, freight, and charter operations to those Air Force airfields in close proximity to Major Capital City Airports, goes to considerations regarding the limited cost recovery regime that Defence uses at those airfields where civil traffic is approved. If access was to be granted to airfields such as RIC, EDN or PEA, the question could be put as to whether such a concession could be construed as being anti-competitive, as well as running counter to the National Aviation Policy White Paper intent to establish a level playing field approach to civil costs at Air Force airfields.

Capital City Secondary Airports

41. Capital City Secondary Airports are designed to cater for high density air traffic operations in Visual Meteorological Conditions. There are five Secondary Airports in close proximity to Air Force airfields. They are: Archerfield (AMB); Bankstown and Camden (RIC); Parafield (EDN); Jandakot (PEA), and Moorabbin (PCK). The busiest Secondary Airports are Jandakot and Bankstown:

Table 1 GAAP Annual Movements 07/08¹⁹

Jandakot	Bankstown	Moorabbin	Parafield	Archerfield	Camden
368 000	367 000	335 000	231 000	135 000	28 000

¹⁹ Utility of General Aviation Aerodrome Procedures to Australian Administered Airspace, Report to: Office of Airspace Regulation, 30 June 2009, The Ambidji Group Pty Ltd, Table 3.2

42. Over the past decade levels of general aviation activity have declined and are now just returning to near former traffic levels, and based on historical trends can be expected to increase with an improving economic environment.

43. Each of the Capital City Secondary Airports has a Master Plan prepared in accordance with the *Airports Act 1996*, which addresses the airport's development for the next 20 years. The Master Plans are reviewed every five years.

44. While these Secondary Airport Master Plans anticipate growth, recent actions by Airservices Australia (Airservices) and CASA have the potential to cap capacity. A report by the Office of Airspace Regulation (OAR)²⁰, dated 30 June 2009 identified unacceptable hazard levels associated with aircraft operations at each of the six former-GAAP airfields. The report included the following observation:

“Using a combination of actual MAC [Mid Air Collision] rates at the GAAP aerodromes over the last 10 years and derived estimates based on FAA observations, it is shown that current (baseline) societal risks associated with GAAP operations at Bankstown, Jandakot and Moorabbin are intolerable when compared with the CASA risk criteria. Baseline societal risks at Parafield and Archerfield are shown to be tolerable, but well above the ALARP (As Low As Reasonably Practical) region”²¹.

45. The report advised that:

“Overall, the societal risk analysis shows that risk reduction measures are required (irrespective of costs) at Moorabbin, Jandakot, Bankstown and Parafield due to the tolerability limits being reached / exceeded, and that further risk reduction measures should be considered at all locations in order to minimise risks to within the ALARP region.”²²

46. The report concluded that this situation is a result of several factors including high levels of aircraft operations, airspace limitations and approaches to the airports. The report also concluded that there was insufficient airspace to cope with general aviation activities in the Sydney Basin, noting that Hoxton Park airport had recently been closed.

47. As a result of the GAAP airfields review on 21 July 2009 CASA mandated traffic limitations at GAAP airfields as an interim measure to reduce collision risks until the implementation of Class D airspace, which took effect in mid-2010.²³

48. The full implication of the introduction of Class D airspace is not yet quantifiable; however, CASA has stated that Australian Class D airspace will not have the same traffic handling capacity as

²⁰ The review of hazard levels at GAAP airfields was conducted by The Ambidji Group Pty Ltd

²¹ Utility Of General Aviation Aerodrome Procedures To Australian-Administered Airspace, CASA Report, June 2009, page 167

²² Ibid, page 148

²³ CASA Instrument 329/09

that of the United States Class D model²⁴. From this statement it could reasonably be expected that the traffic handling capacity of the Secondary Airports may be reduced. The proximity of Bankstown to RIC; Jandakot to PEA; Parafield to EDN; and Moorabbin to PCK gives rise to concern that relief from insufficient capacity at the Secondary Airports could be sought at the nearby Air Force airfields as general aviation traffic levels increase. Air Force airfields are already used by general aviation training organisations from nearby Secondary Airports and other regional general aviation centres for instrument approaches, and in some cases circuit training, to ease congestion at their home airports.

49. Air Force has not detected pressure from DITRDLG to seek increased general aviation traffic access to Air Force airfields above that which currently exists, despite the possibility of reduced capacity since the introduction of Class D procedures at the Capital City Secondary Airports.

Summary – Major Capital City and Secondary Airports

50. There is no case for RPT operations from Air Force airfields where an adjacent Major Capital city Airport is available as these aerodromes have adequate capacity well into the future. The caveat, with respect to the Sydney Region Capacity Study being the exception. In seeking to operate a civil airport at AMB, EDN, PEA, or RIC, a prospective operator would be basing their proposal on commercial rather than operational considerations. Additionally, the WLM experience provides sufficient warning that civil aviation access can have unintended consequences for Air Force, including increased costs, capability loss or skewing of personnel requirements, (both ATS and ARFFS), and ultimately reduced military access to the airfield, with attendant significant, and possibly irretrievable capability loss.

51. If significant general aviation activity was to be approved at Air Force airfields, reversing the decision would be difficult. Further, it would be difficult to be selective when agreeing to a request from a commercial organisation to use an Air Force airfield as it would no doubt be followed quickly by others requests seeking similar access.

52. Requests from general aviation operators for use of Air Force airfields beyond current approvals during airfield activation and periods of stand down should be viewed with caution - recognising that denial of access to Class G airspace is not feasible once military CTR and restricted areas are deactivated.

²⁴ CASA CEO Information Bulletin

AIR FORCE OPERATIONS

53. Air Force airfields, for the purpose of this review, have been classified to broadly reflect their military role and civil aviation access. Some Air Force airfields fit a number of categories and where this occurs secondary roles are noted.

Operational Airfields

54. Operational airfields include AMB, EDN, RIC, TDL, and WLM. These airfields directly support the Air Force operational capability, both flying and non flying force elements, and other Defence formations and organisations. Most of these airfields operate at high capacity in terms of air traffic, surface movements, and estate use. The introduction of new capability and force consolidation will place additional pressure on these establishments over the next two decades.

Williamtown

55. Civil aviation activity at WLM is limited to RPT, air ambulance, charter operations, and Air Force flying club activity. RPT movements totalled 18 900 in CY 2009 from a total of 28 000 total civil movements. Approximately 1.3 million passenger movements were recorded by NAL during CY 2009. This figure was a contributory factor in CASA's recommendations that Defence needed to expand the provision of ATC and ARFF services to cover all RPT traffic. There were 25 000 military movements in CY 09.

56. The lease between Defence and NAL contains an Operating Agreement that specifies civil rates of effort, retains Air Force control of schedule changes, declaration of operating windows, and hours of operation, which determines the availability of ATC and ARFF services. Outside air traffic operating hours, other civil flying activity unrelated to NAL occurs; however it is generally limited to instrument approaches, from which landings are not permitted.

57. That CASA observed growth in RPT operations at WLM over many years without comment and then recommended the enhancement of both ATC and ARFF services by Air Force, rather than capping RPT activity prior to those 'trigger' levels being reached, should be of concern. In short, the pressure to provide ATC and ARFF services during out of hours' periods, and the subsequent Air Force acquiescence, has overridden the intent of the Operating Agreement.

58. The current civil flying rate of effort at WLM is manageable, although airspace and surface manoeuvre area (runway and taxiway) congestion can occur during routine flying operations creating delays, primarily to RPT flights. In 2009, NAL operated at approximately 40 percent of its allowed movement rate, equating to an average six movements/hour with a peak of eight movements/hour.^{25,26} WLM operating capacity is limited by size and configuration of airspace, runway and taxiway configuration, the type of flying activity, and the ATC workforce.²⁷ Often overlooked is the impact of Saltash Air Weapons Range (SAWR) on airspace capacity.²⁸ WLM

²⁵ Since 2004 RPT regularly use 20 minutes of their mandatory 30 minutes holding fuel.

²⁶ 44WG data

²⁷ *ibid*

²⁸ *ibid*

terminal airspace is designed for fighter operations, and at certain times in the working day it is unsuitable for significant levels of RPT traffic. Of note, WLM is currently operating at capacity due ATC manning, and while this may not prevail in perpetuity, based on historical experience current manning levels are likely to remain the norm.²⁹

59. Should the civil rate of effort increase to the lease permitted rate of six landings per hour and unlimited departures it will cause significant disruption to civil and military traffic.³⁰ Staff of Number 44 Wing (44WG), the air traffic control parent organisation, assess that once six to eight civil movements per hour are exceeded regularly, military and civil flying will be affected by both surface manoeuvre area and airspace congestion.

60. The current civil military traffic mix is manageable largely because RPT traffic is comprised of Medium category aircraft, B737 and A320, which cause the least disruption to Air Combat Group (ACG) operations within the terminal airspace. Any initiative aimed at introducing Heavy category RPT aircraft will require increased wake turbulence separation distances, thereby reducing arrival and departure traffic rates, which will serve to disrupt both military and civil movements.³¹ WLM terminal airspace is designed for fighter operations, and is not adequate for either increased levels of Medium category aircraft activity or the introduction of Heavy category RPT activity.³² Major exercise activity also creates significant increased traffic flows adding to congestion. The impact of heavy aircraft activity on required ARFFS category may place further unfunded pressure of Defence resources. A review of the current Operating Agreement, to allow access by Heavy category civil aircraft to WLM, is inadvisable and the WLM/NAL lease should be amended to exclude Heavy category civil operations. A summary of WLM traffic capacity issues is at annex B.

61. Over the last 10 years military movements at WLM have remained static at around 25 000 per year. Since 2003, Hornet serviceability rates along with upgrade programs have resulted in lower activity levels than previously experienced. Civil air traffic movements also remained reasonably static at around 15 000, until 2006 when a significant upwards trend emerged - about two years after the two low cost carriers commenced operations using B737 and Airbus A320 aircraft.³³ Of note, civil air traffic movements have provided the majority of activity at WLM since 2007. NAL is predicting an increase in passenger levels to approximately 2 million, with growth to around 30 000 aircraft movements per year over the next 15 years³⁴. NAL has already installed luggage handling facilities to support this predicted passenger throughput. These predicted levels of civil activity will be in addition to mature Joint Strike Fighter (JSF) operations and other military activities over the same period – approximately 43 000 movements per year.³⁵

²⁹ ibid

³⁰ The Lease conditions were changed from six civil movements per hour to six civil landings per hour and an unlimited number of departures. The Review Team was unable to identify the reason or source for this change.

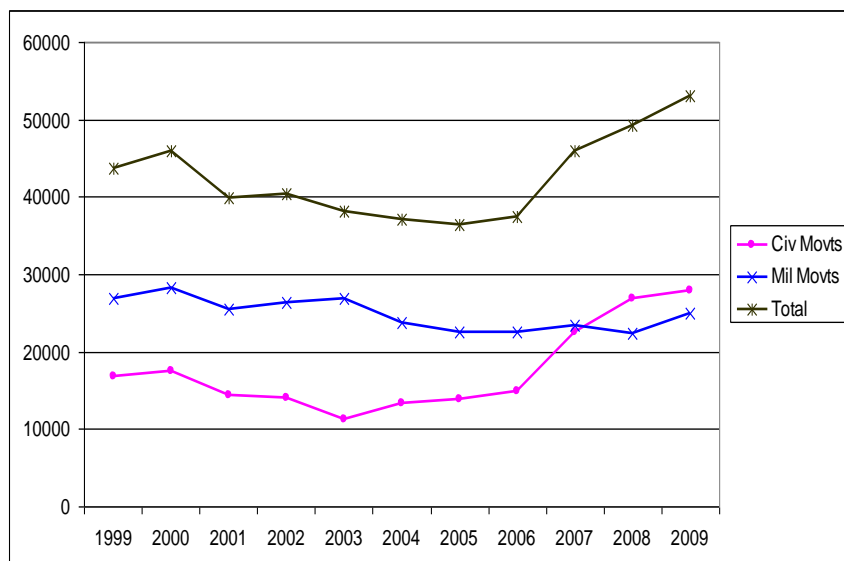
³¹ OC 44 WG

³² OC 44 WG

³³ Data provided by 44WG.

³⁴ Newcastle Airport Master Plan, 2007

³⁵ Department of Defence, DMO, JSF – Australian Next Generation Air Power, Draft Public Environment Report – Oct 2009.

Figure 2 Air Traffic Movements at WLM 1999 - 2009

62. The Figure 2 graph was derived from data provided by 44WG and data extracted from the CASA WLM Review in October 2008. Of note, the figures include transit movements (over flights), which totalled 9 600 civil movements in 2009.³⁶ While transit movements do not require use of the runway, they occur within military controlled airspace (not in the Airservices controlled overhead civil jet route) and contribute to ATC workloads and airspace congestion levels that affect traffic flows feeding circuit movements.

63. Loading of explosive ordnance on aircraft at WLM currently restricts civil operations as the associated Public Traffic Route Distance arcs extend over the parallel taxiway and sections of the runway. The parallel taxiway is currently used for parking aircraft with ordnance loaded. The construction of a new Ordnance Loading Area (OLA) complex to the north-west of the Base will provide some relief to this situation. However, because of the limited capacity of the new facility, which will only satisfy approximately half of the original requirement, there will be an ongoing demand for weapons loading on the parallel taxiway, with associated restrictions to civil aircraft access to the airfield. Arming/de-arming in the Operational Readiness Platforms (ORPs) will continue to disrupt traffic flows.

Tindal

64. Civil aviation activity at TDL consists primarily of general aviation movements and is not currently a significant issue for Air Force; however, in the longer term civil aviation activity can be expected to increase in line with population increases. TDL is home base to an F/A-18 squadron which in due course is expected to be replaced by a JSF squadron; it is an exercise base, a Forward Mounting Base (FMB), and would support the conduct of Defence of Australia (DA) operations. TDL, Delamere Air Weapons Range, and surrounding airspace provide the most important and unique military exercise venue within Australia.

³⁶ There were 6 100 light aircraft and helicopter civil movements which required a close level of management by ATC and 3500 medium and heavy jet RPT that require a lesser degree of management.

65. TDL is incorrectly described as a Joint User airfield in the En Route Supplement Australia (ERSA); this has probably been mistakenly done to facilitate its nomination as an international diversion airport. Conversely, LMO is also a designated international alternate, but no similar entry in ERSA has been required to facilitate this status. TDL is not a designated Joint User airfield and the ERSA should be amended to reflect Air Force as the airfield operator. The current lease has only general comment concerning civil flying rates and limitations and is in need of review.

Edinburgh, Amberley and Richmond

66. EDN, AMB and RIC are classified as military airfields where there are no extant airport lease arrangements. Ad-hoc use by civil aviation aircraft during hours of airfield operation is permitted at these airfields, but is subject to prior approval. Civil aviation activity levels recorded for CY 08/09 are at annex C. It should be noted that out of hours civil movements are not recorded at these airfields, or at any Air Force airfields. As significant civil training activity occurs on Saturday and Sunday, the annual numbers of civil movements at these, and other, Air Force airfields are substantially higher than recorded.

67. Both EDN and RIC attract a significant general aviation training overflow from nearby Secondary Airports, while AMB is less affected. The demands of general aviation, particularly the larger pilot training organisations, can be expected to increase into the future. Ultimately, the change from GAAP to Class D procedures may cause some reduction to Capital City Secondary Airport capacity, which could bring concomitant pressure from general aviation to access Air Force airfields. AMB may become attractive as a commuter base to link the Ipswich area to the Brisbane/Gold Coast /Maroochydore network of airports.

68. Air Force should resist proposals for RPT access to EDN, RIC,³⁷ and AMB airfields as the Major Capital City Airports adequately service the adjacent capital cities. General aviation access to the airfields beyond current approvals should be viewed with caution. Out of hours general aviation access is difficult to control as Class G airspace and Common Traffic Advisory Frequency (CTAF) procedures are activated during these periods. Landings are approved at some Air Force airfields; however, where landings are not permitted, approaches and circuits to overshoot cannot be prohibited. Air Force advertises in ERSA the services that are available during CTAF activation, along with other operational information and warnings; however, the risk of reputation damage, should a significant accident or safety event occur at one of these airfields during CTAF activation, should remain a consideration.

National Aviation White Paper initiative

69. An initiative within the National Aviation Policy White paper is Government tasking of the Aviation Policy Group agencies to establish clear and easily understood criteria that account for the nature and complexity of operations at individual locations. In theory, this will help determine when new, modified, or alternate air traffic management services and facilities are required. This will potentially provide greater clarity for Air Force regarding the likely provision of additional ATS and ARFFS when considering the introduction, or review, of leases to civil airport operators.

³⁷ GA traffic is not compatible with C-130 operations at RIC; C-17/MRTT operations at AMB; and AP-3C operations at Edinburgh.

Summary of operational airfields

70. Current or proposed lease arrangements that provide for airport developments at Air Force airfields have the potential to pose a long term threat to capability and impact negatively on resources.

71. As there are no defined activity level 'triggers' for safety related provision of ATS and airspace changes, CASA determinations rely on a mixture of risk management methodologies and a degree of subjective judgement. Consequently, a CASA requirement for introduction of service provision, or upgrade, cannot be accurately predicted. This is unsatisfactory from an Air Force perspective, as this arrangement places all the resource and capability risk on Air Force.

72. If the National Aviation White paper initiative does not deliver a system based on a series of defined requirements then Air Force should support a 'trigger' based mechanism; recognising that CASA experimented with the development of 'hard' triggers a decade ago and did not implement those 'triggers' due to concerns that a formulaic and simplistic approach to service provision created inefficiencies. However the existing assessment system employing a risk management regime that relies on a degree of subjectivity does not contribute to effective long term Air Force planning.

73. Drawing from the WLM experience, it is clear that there is little protection afforded Air Force/Defence activities, including budget compliance, by existing lease arrangements with third parties (airport operators). Consequently, variations to current civil aviation access levels to Air Force airfields should not be approved until the ramifications are fully understood; particularly the impact of civil movement rates on current and future Air Force operations. It is naïve to expect that substantial RPT operations could be sustained without the provision of ATC and ARFF services. In the case of WLM this has meant the provision of ARFFS and ATS to support increased hours of operations outside Air Force requirements.

74. Operating arrangements at WLM need to be reviewed to protect the airfield from potentially endemic traffic congestion and consequential capability impacts on operational ACG elements and their training units.

75. Flying operations at the remaining operational airfields are not currently adversely impacted by civil aviation activities; however, civil access should only be permitted after strategic planning has indicated this can be accomplished without long term detriment to Air Force capabilities. Permitted movement rates and aircraft types should be incorporated in the respective Operating Agreements when leases are drafted or renegotiated. Air Force-directed movement rates, and aircraft types, should be such that traffic levels do not interfere with Air Force flying or result in CASA determinations for service provision or airspace changes similar to those that have brought significant, and non-operational, resource demands on Air Force at WLM.

76. It is incumbent upon Air Force to introduce monitoring of aircraft movements at its airfields when Air Traffic Services are not activated.

Joint User Airfields

77. Advice provided to the Review Team suggests that the term ‘Joint User’ was originally coined in the 1974 Joint User Agreement between the Department of Defence and the then Department of Transport. With the advent of the Federal Airports Corporation (FAC), and the subsequent leasing of the 21 federal airports, the Agreement became defunct and, in the case of Defence, it was replaced by individual leases with the civil airport operators. Consequently, a high-level, detailed and documented definition of a Joint User airfield needs to be developed.

78. The *Airports Act 1996* is silent on the definition of a Joint User airfield, although it designates both DAR and TVL as Joint User Airports in Section 7B, while Section 20 of the *Civil Aviation Act 1988* authorises CASA to approve civil operations into Defence airfields.³⁸ CASR 139 Manual of Standards (MOS) contains what is regarded as a somewhat inadequate definition of a Joint User airfield as follows:

‘An airport under control of a part of the Defence Force in respect of which an arrangement under Section 20 of the Civil Aviation Act is in force’

The Manual of Air Traffic Services (MATS) defines a Joint User airfield as:

“one used jointly on a continuing or regular basis by civil and service aircraft where a tenant Department requires special facilities on the aerodrome for the conduct of its operations.”

The MATS definition reflects the DAR and TVL arrangements as these airfields largely meet civil aviation operating standards and are classified as certified airfields. However, the reference to a ‘tenant Department’ is dated and mirrors the earlier definition contained in the 1974 Joint User Agreement when the Department of Transport held civil responsibility for the federal airports.

79. No other Air Force airfields are identified as Joint Users within the *Airports Act 1996*, nor are they certified to civil aviation operational standards - they remain military airfields.

Joint-User and other Air Force airfields

80. Differentiation between Joint User airfields and other Air Force airfields, where civil airports operate under lease arrangements has become blurred as leases and civil operations at both classifications of airfields are similar. This has the potential to raise expectations, amongst civil operators, State, Local Governments, and the travelling public, concerning civil aviation access, and the associated availability of support services, including ATC and ARFF, at non Joint User designated airfields. These expectations create potential pressure on Air Force for provision of such services. In attempting to satisfy civil aviation access and its own requirements, Air Force risks adversely affecting its ability to conduct flying operations, and also its reputation when civil expectations are not met.

³⁸ A definition is not provided. Fairbairn was also identified as a Joint User airfield, but only until its disposal by Defence.

81. Joint User terminology should be formally defined and the pertinent legislation amended to correctly reflect the operational status of DAR and TVL in particular, and to differentiate Joint User airfields from other Air Force airfields.

Darwin and Townsville

82. **Operational activity.** Importantly, DAR and TVL airfields are FMBs for operations into Australia's areas of interest to the north and the SW Pacific. They are critical for the support of Defence of Australia tasks. Operations into East Timor were mounted from these airfields over an extended period with high daily military movements at both locations. Numerous humanitarian operations have been mounted from or through DAR and TVL including support following the Bali bombings, tsunami support to SE Asia, and various humanitarian emergencies in New Guinea, and the SW Pacific. TVL supported operations in Papua New Guinea, Bougainville and the Solomon Islands. Of note, DAR is inextricably linked to TDL in the conduct of operational and exercise tasks in the northwest area by geography.

83. **Routine defence activity.** Both airfields are regularly used by Air Force, and Australia's allies, for training and exercise purposes. DAR is critical to the conduct of large scale air exercises in Australia because of the availability of large volumes of airspace, proximity of Air Weapon Ranges and TDL airfield. No 5 Aviation Regiment is based at TVL airfield.

Air Force activity levels

84. Air Force activity levels at the Joint User airfields generally do not disrupt civil aviation activity due to limited use, and effective management processes employed by Air Force. However, significant scope exists for both exercise and operational activity to disrupt civil flying. And, notwithstanding the lack of large and permanent force element groups at these locations, future force consolidation at either one, or both, of these bases cannot be ruled out. The existing leases do not adequately explain the potential for disruption and leave Air Force open to significant criticism. Both DAR and TVL operate at capacity levels during Defence exercises, and a similar situation could arise during FMB operations. Both leases should be amended to more clearly apprise civil airport operators and users of potential traffic disruptors.

85. While operational airfields provide priority for military operations, Joint User airfields provide "mutual inconvenience." Consequently the declaration of additional Joint User airfields is not recommended. Further, Joint User arrangements limit force element basing options, through estate availability, and subsequent surface manoeuvre area and airspace congestion.

Summary

86. Air Force operates two Joint User airfields, which are primarily used for exercises and operations. Both airfields are important FMBs and have Defence of Australia obligations. They both host large exercises, with DAR being particularly important to the larger scale exercises with Allied Forces in the northern training airspaces. Major force elements are not currently based permanently at these airfields, therefore civil aviation access is not routinely disrupted under present arrangements. However, and as discussed previously, future force consolidation at either location cannot be ruled out.

87. Leases at DAR and TVL should be amended to more clearly apprise civil airport operators and users of potential traffic disruptors.

88. A definition of the term 'Joint User' is not clearly enunciated in legislation, which has caused confusion both within and external to Air Force, particularly with respect to the status of other Air Force airfields where civil aviation access is approved. A robust definition needs to be agreed between DITRDLG and Air Force to avoid future confusion. Declaration of additional Joint User airfields is not recommended.

Air Force Training Airfields

89. Pearce³⁹ and East Sale are Air Force flying training airfields.

90. **Pearce.** No2 Flying Training School (2FTS), No 79SQN, and an RSAF FTS are based at PEA. Flying activity levels are high and the mix of aircraft types operating at PEA gives rise to air traffic compatibility issues. From time to time, PEA hosts operational exercises, but this activity is usually at constrained flying rates of effort to minimise the impact on flying training. PEA is an Air Force operational airfield for DA tasks in the Indian Ocean and for regional Defence Assistance to the Civil Community (DACC) tasks.

91. **East Sale.** Central Flying School and School of Air Warfare are based at ESL where airspace and movement areas are underutilised at existing flying activity levels. If progressed, the relocation of the Air Force Basic Flying Training School to ESL would better utilise airspace and movement areas. Operational flying occurs occasionally at ESL.

Air Force training airfields and Capital City Secondary Airports

92. Capital City Secondary Airports in Australia have been developed to support the civil aviation training industry, with RPT operations concentrated at the Major Capital City Airports. This arrangement separates incompatible traffic types and provides optimum operating environments in respect of flight safety. Military flying training activity is incompatible with RPT operations and Air Force training airfields need to be considered in the same way that DITRDLG and CASA consider the Secondary Airports. Accordingly, RPT activity should not be permitted at PEA or ESL. Similarly, proposals to allow general aviation access to Air Force training airfields during periods of military flying training would be impractical, presenting safety of flight issues arising from high activity levels and the mix of different operating philosophies used by military and civil (general aviation) operations. Requests for access to training airfields outside Air Force operating hours should not be agreed as airfield and navigation aid maintenance is performed during these periods. Furthermore, as the WLM experience has shown, access, once granted, inevitably leads to higher expectations and additional pressure for increased concessions.

93. Jandakot is one the busiest Secondary Airports in Australia. The recent CASA action to temporarily limit movements at the former GAAP airports and the recent change from GAAP to Class D airspace raises questions concerning the capability of Capital City Secondary Airports to cope with growing general aviation traffic levels. An overflow of traffic could result in a quest to use PEA airfield. While an argument could be mounted that the use of PEA during periods of Air

³⁹ The satellite airfield at Gingin is used as an overflow airfield for flying training operations.

Force stand down would not compromise Air Force training activities, these aircraft operations would be subject to Civil Aviation regulations. Consequently, a concomitant recommendation from the civil regulator for provision/enhancement of ATS and ARFFS support could not be discounted.

94. Although this section is primarily concerned with the potential disruption that general aviation traffic would cause at the training airfields, primarily PEA; Air Force also needs to remain cognisant of recent pressure to gain access to this airfield for operations such as 'Fly-in-Fly-Out,' to ease congestion at the Major Capital City Airport of Perth. From the perspective of this Review, PEA is incapable of hosting such operations in terms of infrastructure, support services, compliance with civil airport regulations and the incompatibility between high intensity training activity and passenger transport operations. While an argument might be put that civil operations would be confined to periods outside training operations, Air Force experience at WLM has shown that expectations in respect of increased access tend to move in one direction. Even if this were not to be the case, for the other reasons mentioned PEA is logistically incapable of handling such traffic.

95. The proximity of West Sale (WSL) to ESL probably reduces the potential for requests for use of ESL by general aviation operators. Notwithstanding, the Review Team considers that should any request originate with respect to the use of this airfield for civil flying training, it should be viewed from the perspective of incompatibility with military flying training.

Summary

96. Air Force training airfields have a specialist role which is not compatible with civil aviation. Requests from civil flying training operators for use of PEA and ESL airfields should be considered on the basis of incompatibility with military flying training. Similarly, any requests for passenger transport access, particularly with respect to PEA, must be considered in the light of incompatibility issues and the range of logistics-related considerations that make such access entirely inappropriate and impractical.

Bare Base Airfields

97. Air Force maintains three 'Bare Bases' in remote areas to support various Defence tasks. The bases were developed to meet strategic guidance for the defence of Australia and include limited infrastructure to support military flying operations. The airfields are Scherger (SCG), Curtin (CIN), and Learmonth (LMO). Bare bases are activated on an irregular basis to support operations and major air exercises. During full activation, Class C airspace and ATS is provided, along with ARFFS. Restricted airspace is also activated to protect civil and military traffic in the associated exercise areas. Bare bases are used by various force elements on operational tasks and training activities when full activation is not required. When not activated for military exercises or operations the bases are managed by Air Force care-taking elements. The function of the three bare base airfields is not expected to change.

Civil airports

98. Local shire councils operate civilian airports at LMO and CIN airfields under lease arrangements with Defence and attract RPT, charter and general aviation movements. SCG is rarely used by civilian traffic as Weipa is serviced by a separate civil airport. LMO and CIN are

located in a region of significant mining, oil and gas operations. As the scope of these operations expands, civil flying activity will increase to service industry needs. Additionally, the Exmouth region is becoming increasingly popular as a tourist destination, which will create increased demand for RPT and Charter services at LMO. Similarly, the Derby area will probably attract increased tourism in the medium term driving increased RPT and charter activity at CIN.

Civil aviation movements at bare bases

99. Civil movements at LMO are substantial, currently some 24 per day, which equates to an annual rate in excess of 8 500.⁴⁰ This is significant and will increase when Bristow Helicopters relocate their base to LMO from the Exmouth ALA. CIN movements are significantly lower at approximately 50 movements per week.

Leases

100. The LMO lease was renewed in February 2010, while the lease for CIN dates from 1994. The LMO lease includes operating considerations for use of the airfield by civil aviation operators. Importantly, it contains a warning that civilian operations on the airfield may be restricted should they prove to be incompatible with military operations. With regard to operational restrictions, the terminology used in both documents is vague and gives rise to ambiguity, failing to provide adequate advice of why or when military and civil operations would be incompatible, and is either silent or vague on contingency operations and preparatory exercises.

101. Other routine operational considerations included within the LMO lease limit civil flying operations to six landings per hour⁴¹, while the lease for CIN is silent on the scope of civil flying operations. The limitation of six landings per hour, along with other operating limits in the LMO lease, has been lifted directly from the WLM Operating Agreement. These limitations were not subject to analysis or consideration of their relevance to LMO and the Review Team has concerns regarding the appropriateness of the limitations and the apparent lack of analysis. In particular, a “one size fits all” approach is not a suitable methodology for developing operating arrangements for any Air Force airfield.

102. Both leases state that ATS and ARFFS provided by Air Force will only be available at these airfields when required to support military flying operations. Outside these requirements the responsibility to negotiate with Airservices for the provision of ARFFS has been assigned to the Shire Councils. The Review Team could not find any requirement defining interoperability or co-ordination agreements between local ARFFS and Air Force ARFFS during base activation. The CIN lease implies that ATS will, if needed, be provided by Airservices.⁴²

⁴⁰ There were 4318 air movements at Learmonth in the first six months of FY09/10. Email SQLDR Rowe, Capability and Plans – AF.

⁴¹ As with the WLM lease this figure is misleading in that it makes no mention of take offs. Therefore the total civil movements are not controlled and could achieve 12 in an hour.

⁴² Curtin lease permits Derby Shire to sublease land for ATS and BoM purposes.

Bare bases – emerging pressures

103. At the regional airports of Broome, Avalon, and Karratha⁴³, issues including traffic levels and mix of traffic type triggered CASA reviews of airspace, ATS⁴⁴ and ARFFS adequacy. The reviews resulted in the pending introduction of Class D airspace and the provision of ATS at Broome and Karratha from 18 November 2010. Should traffic levels rise significantly at LMO and CIN, Air Force can expect similar scrutiny. Based on the WLM experience, if traffic levels and mix exceed what CASA considers reasonable, Air Force can expect pressure to provide supporting services.

104. Increased civil movements at LMO and CIN will create an expectation of continuity of access which could hinder Air Force's ability to 'reclaim' bare base airfields for exercise activities or operations and, therefore, inhibit operational capability. Looking ahead 25 years, a reasonable assumption posits that the tourism and the mining industries will create increased demand for air services in the Exmouth and Derby areas. Potential pressures in the Weipa area are less clear; however, closure of Weipa airfield, which has been mooted in the past due to pavement deterioration, would create a demand for civil use of SCG. This would present Air Force with a conundrum, given the remote locality implications.

Control measures

105. Airport lease arrangements with local government for access to the bare base airfields must include robust operating agreements. These agreements should include;

- a. a maximum movement clause to:
 - (i) preclude civil aviation activity interfering with military flying activity,
 - (ii) avoid traffic levels at which CASA will insist on the provision of services that are effectively unfunded, and
 - (iii) dispel any notions that unfettered civil access to the bare bases is a given, and
- b. the right to interrupt, to close, reschedule, or limit civil aviation access to the airfields for limited periods when essential to Air Force requirements. These include high intensity flying operations or exercises when airspace safety and manoeuvre areas become limiting factors.

106. Noting the strategic reasons for the establishment of the bare bases, the Review Team recommends that operational control of ARFFS and ATS remain with Air Force. Rather than provide military ARFFS, Air Force could contract these services to a civilian organisation and retain control of the operation to ensure interoperability with Air Force augmented services during base activation. Should an ATS be mandated, Air Force would need to consider ways in which this could be achieved that assists augmentation during base activation. Additional costs for these services could be reflected in lease variations. The overriding driver for this service provision model is

⁴³ Airservices Airfield Studies etc

⁴⁴ Class D Towers

retention of control by Air Force so that in the longer term the bare bases do not evolve into de-facto civil airports.

Summary

107. The remote bare base airfields will come under increasing pressure from civil aviation over the next 25 years. Air Force never intended permanent occupation and continuous flying activity at these airfields. This under-utilisation presents an attractive apparently low cost facility for local governments, business, and the airlines as the remote north west of the Australian continent develops. Effective access control measures are needed if Air Force is to retain unimpeded access to these airfields for operations and exercises. While there is no immediately obvious pressure on SCG, Air Force should maintain the same access principles recommended for CIN and LMO.

Other Airfields

Wagga

108. Wagga has been the subject of a CASA Study which may result in recommendations for Class D airspace and ATS in 2012+ time frame. Air Force has expressed an intention to draw down the combat support presence from the Southern Bases, but retain full command of those bases with airfields⁴⁵. In the case of WAG, however, current strategic guidance suggests that Defence will forego the option of future significant ADF aviation activity at this airfield, thereby ceding control of WAG airfield and airspace to Wagga Council and CASA/Airservices.

Woomera

109. Woomera is a special case within Air Force airfield consideration. It is located in a restricted access area and supports the adjacent WMA range facility (Prohibited Area). Aerospace Operational Support Group (AOSG) is the airfield operator and prior approval is required for civil and military aviation access. Defence trials activities are often incompatible with civil aviation for safety considerations and are usually incompatible from a security perspective.

110. AOSG management of Woomera airfield and associated airspace appears robust and current procedures should be maintained. Civil aviation access is not generally approved. If RPT operations were to be approved they would be subjected to random cancellation and delay to accommodate Defence trials activity, noting that WMA restricted areas are active for some 300 days per year. There is also little justification to approve the use of WMA, given the proximity of the airfield at Olympic Dam. Furthermore the Review Team does not believe there is sufficient demand in the region to warrant establishment of a civil airport at WMA.

Summary

111. Woomera should remain a restricted access airfield - prior approval required. Extant management arrangements should be retained, with access constrained to military, RFDS, and emergency aircraft. Civil aviation operators should not be permitted to nominate Woomera as a diversion airfield.

⁴⁵ Statement of Capability Intent: Combat Support - Chief of Air Force, November 2007 (unsigned document)

Point Cook

112. Point Cook is used by several civil flying schools and private operators, either based on the airfield or at other aerodromes. In particular, one civil flying training organisation maintains a substantial footprint at PCK, operating up to 25 aircraft from the ex 1 FTS facilities⁴⁶. While an Airport Manager has responsibility for control of the airfield, Defence arrangements at PCK are made directly with the aircraft operators and flying schools. A standard agreement was introduced in 2003.⁴⁷ Information provided by Headquarters No 395 Expeditionary Combat Support Wing, and confirmed by the recent 2019 ANEC,⁴⁸ indicate that there are up to 80 000 total aircraft movements per annum at PCK.

113. PCK was removed from an airfields disposal list in 2009. Before then, the status and the management of PCK over the previous five years were confused.⁴⁹ PCK now has a defined military operational role, in addition to its use by civil organisations. Consequently, arrangements for its future management need to be reviewed.

114. The Office of Airspace Regulation has noted concern and expressed an interest in determining more accurately the extent of civil flying activity at PCK and has requested installation of a movement logger to register airfield flying activity. Of note, the OAR has requested information concerning mitigation strategies for PCK that Defence may be considering should the level of civil air traffic get to the point where an ATS is required.

Avalon

115. Avalon is an orphan airfield not fitting into a specific category in that it does not support an Air Force presence and is rarely used by Air Force aircraft.⁵⁰ However, it is part of the Defence estate and should be considered in the strategic planning process so that informed decisions can be made regarding its future.

Summary

116. The Review Team recommends an airfield review of PCK to determine actual activity levels so that the potential liability for ATS and possibly ARFFS can be assessed. As with the recommendation concerning LMO, the Review Team recommends that Air Force reinforce its ownership of PCK with the provision of ATS and ARFFS if required. Any such arrangements would need to be considered in tandem with a regime of fair and equitable cost recovery in relation to these services. If the services are contracted then Air Force should retain control of contract management.

⁴⁶ This accounts for 65,000 – 70,000 annual movements. RAAF Williams Point Cook Airfield INM Data Report.

⁴⁷ Deed of Agreement for Airfield Use – Standard Conditions, The Australian Government Solicitor, 26 September, 2003.

⁴⁸ DRAFT RAAF Williams Point Cook Airfield Integrated Noise Model Data Report.

⁴⁹ Interview with Commander Combat Support Group, 4 March 2010.

⁵⁰ Support to the biennial International Airshow.

NEW WORKS TO SUPPORT CIVIL AVIATION AT AIR FORCE AIRFIELDS

117. Airfield manoeuvre area congestion is one of the consequences of civil aviation use of Air Force airfields. Further, Air Force use of explosive ordnance regularly disrupts civil traffic at some airfields and, therefore, provision of additional taxiways may be an option at some airfields. For example, at WLM an additional parallel taxiway sited to the south west of the runway has been mooted as a potential option for reducing manoeuvre area congestion, and relieving traffic delays created by arming/de-arming activities. If additional airfield works need to be undertaken to ease congestion as a result of civil access, then they should be funded by Defence and not the civil airport operator. This approach reinforces Air Force ownership of its airfields and provides a distinct separation from the Joint User model.⁵¹ Fair and equitable cost recovery for these works would be reflected in lease variations increasing civil aviation operating costs, noting the Government's policy regarding cost recovery.

AIRFIELD STANDARDS

118. Civil and military airfields are constructed to meet different operating requirements. Military and civil flying operations have different purposes, and support significantly different operations; consequently, civil airports and military airfields are configured differently. For example, the placement of aircraft arresting systems on runways is a feature of Air Force airfields which is an impediment to civil operations.

119. The Australian Defence Force is a member of the Air Standardisation Coordinating Committee (ASCC) which promotes standardisation in many areas between the air forces of the United States of America, the United Kingdom, Canada, New Zealand and Australia. Relevant ASCC Air Standards will normally take precedence over other agreements. However, at Joint User Aerodromes, where there is a conflict between ASCC Air Standards and the Civil Aviation Safety Authority (CASA) obligations to ICAO Annex 14; Department of Defence, Air Force Headquarters (AFHQ), will determine which criteria shall be used.⁵² Similarly, for civil airports where there is a difference between ICAO standards and the CASA Manual of Standards (MOS), the MOS standard prevails.⁵³

Joint-user airfields

120. Air Force has largely harmonised the configuration of Joint User airfields with civil standards enabling their certification as civil airfields. Complete harmonisation of configuration and standards is not feasible due to incompatible civilian and military operating requirements.

121. Noting that there is currently no agreed definition of a Joint User airfield, the Review Team recommends that a formal agreement between Air Force and CASA be established that recognises

⁵¹ While a parallel taxiway at DAR would alleviate cross-over traffic on the manoeuvring area and increase runway capacity. A separate funding model would need to be developed to reflect Darwin's Joint User status. This model would also apply to TVL.

⁵² ADFP 602, Chapter 1, para 102

⁵³ Civil Aviation Manual of Standards 139, Chapter 1, para 1.1.3.1

the configuration and standards of Joint User airfields. Air Force should regularly review standards to enable harmonisation, wherever possible, with civil requirements at these airfields.

Non-Joint-user airfields

122. Under the *Civil Aviation Act 1988*, Section 20, civil operators may be authorised to use military airfields in accordance with conditions specified by CASA. CASA authorises this activity by endorsement of an airline's Air Operators Certificate or Licence advising that Air Force airfields are not certified airports, and ATS and ARFFS may differ from civil requirements. CASA does not have legislative cover to order compliance with civil aviation standards at these airfields. Although Defence (Air Force and DSG) and CASA are working to align civil and military airfield standards, full compatibility is not achievable because of differing operational requirements.

123. Defence (AFHQ) determines requirements for the construction of new airfields or the upgrading or expansion of existing airfields. The layout and extent of aircraft pavements, and operational, technical and support facilities will be dependent upon the intended role and classification of the airfield.⁵⁴ Air Force should make clear statements to the effect that at non Joint User airfields, at which civil aviation access is permitted, airfield design will differ from the civilian configuration in order to support military flying operations.

124. A willingness by CASA to endorse operations into non civil-compliant Air Force airfields has the potential to expose Air Force to issues and pressures similar to those experienced at WLM. This 'by-exception' approval process needs to be formally addressed within a proposed Statement of Operating Requirement agreed between Air Force and CASA.

Summary

125. Civil and Air Force airfield configurations are based on different standards to meet different operating outcomes. These standards are largely harmonised despite the differing operational requirements.

126. Joint User airfields are harmonised to civil aviation standards to the extent they are certified civil airports. Minor differences remain to accommodate Air Force specific requirements.

127. It is most likely that Non Joint User Air Force airfields will never meet full civil certification criteria. Where civil aviation access is currently approved at Air Force airfields, and before approving access to additional airfields, non compliance with civil standards should be noted in the lease operating agreement and have CASA approval.

128. Air Force and CASA should enter into a formal agreement on configuration status of Joint User airfields.

129. CASA approval of civil passenger carrying operations into Air Force airfields should be managed through a formal Statement of Operating Requirement to protect both organisations.

⁵⁴ ADFP 602, Chapter 2, para 101

MILITARY-CIVIL OPERATING ARRANGEMENTS

Civilian airports

130. The relationship between the airport operator and the airlines, charter operators and general aviation is a commercial activity while the relationship between the airport operator, the airlines, charter operators, general aviation, and CASA is one of regulation and compliance.

131. CASA requires the airport and civil aircraft operators to meet regulatory requirements. The relationship between the airport operator, DITRDLG and CASA is clear and unambiguous.⁵⁵ The relationship between the airline, the civil aircraft operators and CASA reflects the same level of understanding.

Civilian operations at Air Force airfields

132. While the Commonwealth is the owner, Air Force is responsible for configuration, management and operation of its airfields and the conduct of military flying operations. The civil airport operator on an Air Force airfield is responsible for the conduct of civil air operations in the civil apron and associated passenger terminal environment. Where regular passenger transport operations are permitted at Defence airfields, CASA should be cognisant of the regulatory standards and their compatibility, or lack thereof, with civil aviation standards. Ideally, any departures from civil standards should be identified and the effects of those departures mitigated within financial and operational constraints. Information on any departure from normal civil standards should be understood to allow an informed judgement about the viability of civil operations which may result in appropriate caveats or prohibition of operation.

133. At operational airfields such as WLM and TDL, ATS and ARFFS are provided by Air Force. At Joint User airfields Air Force provides ATS while ARFFS can be provided by either Air Force or Airservices.⁵⁶

134. At Air Force airfields the relationship between the civil airport operator and civil aircraft operator remains a commercial activity,⁵⁷ while the CASA relationship with civil aircraft operators remains one of regulation and compliance.⁵⁸ CASA has advised that they do not have the same degree of regulatory control of airport operator activities at Air Force airfields as they do at civil airports. For instance, CASA cannot direct changes to a military airfield configuration; however, CASA can direct configuration changes within the airport operator's leased area, subject to Air Force approval.

⁵⁵ Under the *Airports Act 1996* DITRDLG is responsible for the management of leases at the airports identified in the Act, and is not directly involved in the regulatory process. CASA deals directly with operators at leased airports identified within the Act as well as all other airports.

⁵⁶ Air Force contracts Airservices to provide the service for both military and civil aviation at the Joint User airfields.

⁵⁷ The relationship between Defence and the civil airport operator is also commercial.

⁵⁸ *Civil Aviation Act, Section 20*. CASA may arrange with the appropriate Ministers for aircraft to use an aerodrome controlled by a part of the Defence Force and, subject to the arrangement, CASA may authorise the aircraft to use the aerodrome in accordance with conditions specified by CASA.

135. In summary, at Air Force airfields, relationships exist between CASA, the civil airport operator, and civil aircraft operators. These three entities operate within the framework of the civil aviation regulatory environment. While CASA is able to exercise its regulatory responsibilities within the leased civil precinct; it does not have the power to direct configuration changes to the airfield or direct changes to the conduct of military operations.

Air Force and CASA

136. When Air Force (Defence) enters a lease arrangement with an airport operator it does so with a requirement that the conduct of civil flying activities will be in accordance with the appropriate civil regulations⁵⁹ – a matter for the airport operator, the airlines and CASA.

137. Agreements between the airport operator and Defence do not include consultation between Defence and CASA. Consequently, when enacting lease agreements, DSG and Air Force are unaware of conditions that CASA may feel obliged to insist on, concerning the conduct of civil flying activities from the airfield. While Air Force may place limitations on the conduct of civil flying activities through agreements with the airport operator, it may not be aware of subsequent CASA concerns that could bring pressure for changes to the provision of airport support services. This was the case at WLM.

Statement of operating requirement

138. An agreement between Air Force and CASA concerning a statement of operating requirement would address the support requirements for civil aviation operations under consideration at the Air Force airfields. Importantly, it should outline agreement between the two organisations that the civilian aircraft access levels are consistent and compatible with the provided levels of support service provision. This will enable Air Force to better manage airfield operations and support services and avoid retrospective implementation of additional requirements. This activity should be undertaken before Defence enters into agreements with prospective airport operators.

STATEMENT OF OWNERSHIP

139. Given the importance to Air Force of uninhibited access to its airfields and continuing pressure from civil airport operators and airlines for increased access to them, it is incumbent on Air Force to clearly state its requirements and intentions.

140. A Chief of Air Force statement that describes the various categories of Air Force airfields highlighting their importance for operations and training is required. The limited capacity of Air Force airfields to support civil aviation activities also needs to be stated, in order to contain expectations from within the aviation industry, and the community, concerning unimpeded civil air traffic growth at Air Force airfields, particularly WLM.

AIR FORCE CONTROL OF AIRPORT LEASES

⁵⁹ Noting that Air Force airfield configuration: RWY marker boards, arrestor systems, etc, prevent civil operations completely IAW CASA regulations.

141. Formal leases with local Councils, Shires and commercial organisations are the mechanisms for authorisation of long term civilian operations on Air Force airfields. A lease arrangement provides surety of tenure, economic security and recognises the need for commercial organisations to amortise investment costs.

142. Leases dealing with Joint User airfields and other Air Force airfields are similar, the major differences being that at Joint User airfields leases provide for mutual access for civilian and military operators while at other airfields military operations are clearly afforded priority.

143. There are formal lease arrangements with airport operators at:

DAR, TVL, WLM, TDL, LMO, CIN, PCK, WAG, WMA, AVL (annex D)

Operating Agreements

144. While the leases are similar in intent and content, a significant variation in the WLM and LMO leases⁶⁰ is the insertion of an Operating Agreement that limits civil aircraft movements and specifies the limited availability of ATS and ARFFS outside normal Air Force operating hours. The other leases are silent on the matter of civil flying rate limitations and contain only general statements addressing restrictions during national contingency (TDL and CIN leases). This presents a significant risk to Air Force's ongoing ability to maintain and develop capability and conduct flying operations. It also has the potential to cause unnecessary and unwanted friction when civil aviation access is either restricted or denied.

Defence Headquarters

145. Mentioned earlier in the Report, DSG has responsibility for development and maintenance of the leases. While conducted in a professional manner, the leases are treated by DSG as a real estate issue and apart from the operating restrictions contained in the WLM and LMO leases, do not consider the impact on the conduct of current operations or future operational requirements. Input from AFHQ to DSG detailing operational requirements concerning the negotiation and renewal of leases needs to be formalised. This procedure should be captured within a Service Level Agreement between the two organisations. This will then inform the operational and tactical levels of control.

Airport master plans

146. Restrictions currently placed on civil airport operations are broad and do not appear to address the responsibilities of airfield ownership by Air Force. The Review Team has already commented that the limitations within the Operating Agreement in the WLM lease will cause congestion on the airfield and in the adjacent airspace should the full extent of permitted civil aviation activity levels be reached. The other airport leases⁶¹ do not contain operating agreements and remain silent on the issues.

⁶⁰ The Review Team expressed significant concern regarding the limit of six civil landings per hour. In effect, this means that there is potential for 12 civil aircraft movements per hour, or a movement every five minutes. The WLM operating agreement has been copied in the redrafted Learmonth lease (Jan 2010) without amendment. No obvious analysis of specific air traffic issues has been undertaken.

⁶¹ LMO draft Lease includes Operating Agreement based on existing WLM lease.

147. While civil aviation operations have not yet been impeded by Operating Agreement limitations, where such Agreements exist, airport operators no doubt have an expectation of increased activity levels to the permitted limits. This intention is stated in the Newcastle Airport Master Plan (available on the web). By permitting Master Plans to be published without influence, Air Force is implying tacit approval of developments which may well not be in its best interests. Consequently, Air Force must ensure that active engagement is undertaken during Master Plan formulation, in accordance with the provisions of the existing leases.⁶⁶

Strategic planning

148. Without control of the rate and scope of civil aviation operations at an Air Force airfield, Air Force is vulnerable to changing support requirements. This has the potential for adverse impact on Air Force capability and budget management. Additionally, and of greater importance, uncontrolled civil aviation access to Air Force airfields will create airspace and manoeuvre area congestion, which in turn will reduce Air Force capacity to conduct operations, with resultant capability limitations. If current and future civil aviation activity levels are not adequately assessed against Air Force and Defence long term capability planning requirements then military flying operations and the ability to either relocate force elements or introduce new capabilities at some airfields may not be feasible. The outcome will likely be one of friction between Air Force and civil aviation and airport operators who will have expectations of long term access and, most likely, increasing levels of flying activity.

Lease conditions

149. Current leases address estate management issues in fine detail but are generally deficient when addressing operational matters. For example, the leases that control Joint User airfields make reference to military use of the airfield in time of contingency. However, there is no reference to lead up activities, precautionary actions or the degree that civil aviation activities may be disrupted by these operations. The lease wording is vague and needs to be more informative so that airport operators are fully aware of Defence obligations. Leases for other Air Force airfields have similar shortcomings, although the recent redraft of the LMO lease is an improvement.

150. Leases are generally silent on the loading and carriage of ordnance by Air Force aircraft and the consequent disruption to normal airfield operations. Of the nine airfields that are subject to lease arrangements, seven are configured with OLAs. When OLAs are active the use of the main parallel taxiways by civil aircraft is precluded at five airfields and use of the runway at three airfields. For example, use of some OLAs at Darwin precludes the use of one of the runways with resultant high levels of air traffic congestion. (annex E).⁶² Apart from LMO, the leases do not address this matter and need to be specific regarding the Air Force requirement to use Ordnance Loading Areas. This results in denial of access to those parts of the airfield that are inside the "Public Traffic Route Distance," inevitably causing significant disruption to airfield surface traffic and can cause suspension of civil operations. While waivers may be sought, to date Ministers for Defence have not agreed to the grant of a waiver for civil passenger carrying aircraft to transit the

⁶⁶ Under existing leases, Air Force is obliged to review Master Plans

⁶² The use of the Eastern and Western OLA complexes require the closure of Runway 18/36 to civilian traffic. To overcome the congestion issues a parallel taxi way is required.

safety templates. Use of Operational Readiness Platforms (ORPs) for arming and de-arming of aircraft departing/returning from flight further restricts use of the runway.

151. The lease drafting process needs to address future capability changes. For example, Unoccupied Aerial Systems (UAS) are being introduced into the Air Force inventory. While Air Force UAS will be operated as State aircraft, sharing of airspace and airfields with civil aircraft will require Air Force compliance with CASA Regulations. CASA is in the process of developing regulations concerning the operation of UAS, but until adequate technology is developed, a stepped approach that segregates UAS from other air traffic will be employed. Access to Air Force airfields by civil aircraft where UAS operations may occur in the future requires careful consideration. Lease Operating Agreements need to address UAS operations.

Summary

152. While Airport Leases address the matters of estate management in significant detail, operational considerations generally are not addressed in sufficient detail across the range of Air Force airfields. Each lease needs to contain an operating agreement which addresses specific operating requirements and conditions. The operating agreement needs to be amendable to accommodate changing circumstances. While a templated approach is recommended to ensure that relevant issues are considered, one size does not fit all and each airfield needs to be subjected to operational analysis and planning outcomes.

COST CONSIDERATIONS⁶³

153. The use of Air Force airfields by civil operators has developed in response to a need to service regions not supported by a civil airport or to take advantage of low cost operating environments. The use of Air Force airfields by civil operators has been a long standing practice, generally conducted on a semi-formal basis.

154. These arrangements have traditionally been allowed on the basis that there is sufficient spare capacity to allow some civil operations without impinging greatly on Defence operations or driving material additional cost for Defence. Recent increases in civil operations in some locations have led to a significant management cost and required the provision of additional services to directly support civil air operations. Of increasing concern is the long-term planning by civil operators for growth and demand, with associated impact on Defence capability through competition for capacity and demand for additional services.

The need for review – Aviation White Paper 2009

155. Government released the Aviation White Paper in 2009, which directed Defence to review cost recovery practice.

“Defence, in conjunction with other government agencies, will develop options relating to industry cost recovery for consideration by Government in 2010 to

⁶³ The research and facts provided for this section of the report was largely completed by ASRP-AF.

ensure that a level playing field exists in the provision of these services to civil operators at airports throughout Australia,”⁶⁴

Cost recovery policy

156. In situations where Defence provides support or resources to a non-Defence entity, Defence is generally bound by Government and Department of Finance & Deregulation (DoFD) guidelines to seek full-cost recovery⁶⁵. In the past this has not been applied with respect to civil operations at Defence airfields, for reasons that are probably buried in long-standing practice. Despite this historical practice, the context of the review and the extant cost recovery policy and guidelines require Defence to consider full cost recovery.

157. For Defence, full cost recovery for support provided to non-Defence entities supports the Defence role in a number of ways. The primary role of the Australian Defence Organisation is the defence of Australia and its national interests, and Parliament appropriates money to the Australian Defence Organisation for that purpose. Full cost recovery helps to ensure that Defence resources are expended in accordance with Parliament’s intent. A secondary and associated purpose of full cost recovery is to encourage non-Defence entities to be economical with their demands upon Defence.

Leases for civil terminal operations at RAAF Bases

158. Defence, on behalf of the Commonwealth, has negotiated leases for civil terminal facilities at WLM, CIN, LMO, TDL, WAG and AVL. These leases allow for civil aviation operations and provide a return to the Commonwealth for making land available adjacent to the airfield. In several cases there are associated operating deeds which prescribe and limit the volume of civil traffic allowed and the level of support provided by Defence. These leases and their associated financial conditions were created in an estate-management context rather than a cost recovery context, and may not achieve the level of recoveries that would be required to satisfy cost recovery policy as they do not take into account the full range of services provided to the lessee and the civil aviation operators. In effect these leases have treated the services as a “free good” on the assumption that (the assumed) spare capacity in the military system could be given away to civil operators without charge.

159. The current leases provide a low cost operating environment for airlines and charter operators, particularly for low cost carriers, which encourages increasing civil traffic levels and commercial expectations at Air Force airfields. Noting that Increasing civil traffic at Williamtown has already started to impact military operations, Defence should carefully consider the pricing signals that the current cost recovery practice is sending to airlines, charter operators and general aviation.

Recovery of the additional cost of providing additional services for Newcastle Airport Limited

160. Under the operating deed for Newcastle airport Defence undertook to provide ATS and ARFFS only during the hours required for military operations. Through 2008 and 2009 increasing

⁶⁴ National Aviation White Paper, December 2009, page 131

⁶⁵ Finance Circular 2005/09 - Australian Government Cost Recovery Guidelines

civil traffic at WLM led to safety concerns arising from the volume and density of civil traffic during out-of-hours operations. An agreement was reached with NAL for Defence to provide extended hours of ATC and ARFFS on the condition that NAL pay Defence for the full cost of providing the additional services.

161. Under this model Defence recovers the full cost of providing the additional services, but does not recover the cost of those same services provided during normal operating hours. This model partly satisfies the full cost recovery policy requirements. In addition, an advantage of this model is that Defence recovers costs from a single customer – NAL – which passes this cost along in their charges to their customers.

Recovery of the full cost of support to civil operations

162. Under general full cost recovery policy and assuming a “clean slate” approach (which is not possible where leases exist) cost recovery for support to civil operators would be based on a comprehensive analysis of all the resources that contribute to support. In this context it would essentially require a full costing of the ATC and ARFF services and developing a means to fairly attribute the cost of these services to “consumers” including all users of the airfield (ADF, other military, civil/non-military). This study may require Defence to gather detailed information (such as precise aircraft type/model) that is not currently reported to Air Force Headquarters (AFHQ). Charges for these services would be analogous to the Terminal Navigation Charges and ARFF charges levied at civil airports by Airservices Australia.

163. A further study would be needed to determine the cost of providing the airfield infrastructure (runways and taxiways, lighting, navigation aids, communications, drainage, fencing, security, etc) in terms of both the capital cost of creating the infrastructure and the ongoing maintenance costs. These charges would be analogous to the landing and other usage/service charges levied by civil airports.

164. In 2009 civil aircraft movements at WLM comprised approximately 40% of total aircraft movements (excluding transits). In a cost recovery model this percentage of the cost would therefore be attributed to the civil sector. The application of charges that recovered 40% of the full cost from NAL and civil operators could be expected to meet resistance and would possibly result in a reduction in civil aircraft operations and an increase in costs to passengers.

Competitive neutrality (CN)

165. Government policy requires Defence to maintain a neutral position with respect to actors in commercial markets. “The central tenet of CN is that government business activities not enjoy net competitive advantages over their private sector competitors (or potential competitors), simply by virtue of their public sector ownership.”⁶⁶

166. In the aviation context this has two applications. Firstly it means that Defence should not provide aviation services, such as access to a landing field with associated ATC, ARFF and navigation aids, at a price level that could be seen to undercut commercial alternatives by virtue of Defence’s favourable financial position.

⁶⁶ Australian Government Competitive Neutrality Guidelines for Managers, February 2004.

167. The second implication is that, consistent with Government's intention to encourage competition through a level playing field, Defence should not provide support to any particular entity or group that provides them with competitive advantage.

Record-keeping to support Cost Recovery, and Revenue Collection

168. Aircraft movements are currently reported to AFHQ for all RAAF airfields, with civil aircraft movements aggregated into broad weight categories. To support cost recovery, more comprehensive records would need to be collected and maintained to enable individual aircraft operators to be identified and billed. With charging determined by aircraft maximum takeoff weight (MTOW) as the industry standard, it becomes essential to record the type/model of aircraft for each movement. This may impose an additional workload not currently supported and/or require system changes.

169. A related question is how revenue might be collected. Both Airservices and private airport owners collect revenue directly from commercial and private aircraft operators, which require considerable effort and systems to gather data on aircraft movements, calculate charges based on aircraft weight, and to bill the costs to owners and operators. Defence needs to investigate options for revenue collection in cooperation with airport operators and Airservices.

Environmental Management Overheads

170. Although somewhat more difficult to quantify, image management is an issue. Noise complaints around airfields are generally attributed to military operations, even if the noise is generated by civil aircraft. There is an aggregated effect of noise levels, including extended exposure, and their effect on building construction requirements within the surrounding communities that is attributed to military operations. Joint arrangements should be put in place to manage consultation with the community and management of the noise impacts of airport operations.

Reputation Management

171. The delay of RPT operations is often quite rightly attributed to the conduct of military operations; however, the public reaction of annoyance at the Air Force is often not balanced with knowledge of lease arrangements and that the airport is on an operational military base.

172. Other issues include environmental considerations such as pollution. At WLM there has been an extended campaign by parts of the community criticising alleged pollution levels arising from Air Force operations. There is seldom mention of similar impacts attributable to civil operations.

ESTATE MANAGEMENT

173. While management of airfield estate is a DSG responsibility, Air Force retains the obligation to provide guidance derived from capability plans concerning future requirements for its airfields.

Estate Encroachment

174. Air Force has been consolidating its operational and training force elements for some time and this process will continue as new capability is introduced to service. Over a typical 30 year

service life, most in-service or new Air Force capability will be subject to upgrades, modifications, and life extensions, which can require additional workshops/hangars and other support facilities. This, in turn, often creates a need for additional real estate.

175. Security protection requirements for new capabilities can also be expected to become more stringent, driving requirements for more secure flight lines, maintenance areas, and operations facilities, usually increasing footprints and consequently creating a need for additional estate.

176. Defence / Air Force capacity to consolidate and form 'Super Bases' is finite. Real estate, airspace (both terminal and training), and environmental pressures on local communities are some of the limiting factors. Additional pressures on airfield real estate are created by:

- a. Basing of Army force elements at AMB, TVL, and EDN.
- b. Existing or proposed development of Industry Parks at TVL, WLM, and AMB, which at face value seems to benefit Air Force, but with long term potential to restrict real estate availability for future Air Force/Defence use.

177. **Industry Parks.** Industry Parks could reasonably be expected to grow their business over time, creating further pressure on airfield estate. Taxiway access to the airfield from the Park would be a fundamental part of the business plan and creates the potential for manoeuvre area congestion, while increased air traffic activity is a further consideration. While initially not an issue, longer term implications create additional pressures on Air Force activity. It is recommended that should industry parks be built on commercial property adjacent to Air Force airfields, access to the airfields be limited to Defence support activities.

178. **Civil Aviation footprint.** Civil aviation access creates a need for terminals, aprons, taxiways, road access, fuel farms, hangars, ARFFS facilities, and security buffers, amongst others, all of which requires significant real estate. The estate on which civil terminals are sited is effectively permanently unavailable to Air Force and Defence for future occupancy.

179. **Estate capacity.** The capacity of existing airfields to support civil aviation airports, and the implications to Air Force concerning loss of access to parts of the Defence estate at bases, requires holistic oversight and analysis. Annex F lists potential impacts of civil use of Air Force estate.

Summary

180. Air Force estate has been leased for long terms to civil airport operators and there is an emerging pressure to approve Industry Parks either on or adjacent to airfields. Leasing of Air Force estate to civil business has occurred without adequate analysis of both short and long term implications to Defence. At some locations civil occupancy of Air Force estate limits Air Force and Defence ability to implement force consolidation and force element expansion. Longer term implications are yet to be addressed and it could reasonably be expected that Air Force ability to operate effectively from some airfields (e.g. WLM) will be compromised. Air Force should not permit additional leases at any airfields until robust strategic plans addressing the long term use of each site have been developed. Some leases may require renegotiation to protect Air Force interests if the strategic planning exercise identifies significant conflict of interest.

SECURITY

181. A major issue for Air Force is protection of airfields against security threats. The tasks are broadly;

- a. protecting personnel and assets from physical attack,
- b. denying access to classified information, equipment, operating procedures, and documentation, and
- c. minimising civilian collateral damage from Air Force actions during heightened security arrangements or direct threat.

182. The introduction of new capabilities continues to bring with it increased requirements for more stringent security measures. This will result in demand for access to increased areas of real estate or will require defensive measures to protect the operation of classified equipment. Placement of civilian establishments in proximity to Air Force infrastructure limits on-base expansion flexibility.

183. Public access to Air Force airfields and controlled areas poses a significant risk to Air Force personnel. A policy of restriction needs to be continued. Conversely, access to Air Force airfields exposes the public to risk from Defence related actions. At civil airports and industry parks, large vehicular and human traffic volumes are the norm and Air Force is faced with a virtually insurmountable problem unless the civil facility is remote from the Air Force complex, completely separating the military and civil operating environments. Annex G lists some security related considerations concerning civil development on Defence airfield estate.

184. Security requirements were reviewed⁶⁷ in 2009 following an incident at a Defence site. Policy should be developed to specifically address civil operations at Air Force airfields, with specific reference to Airports and Industry Parks.

Summary

185. Air Force should continue to develop security criteria for siting civil airport and related infrastructure on or near Air Force airfields. These criteria should complement specific estate development guidelines employed routinely by DSG in these matters.

CONCLUSION

186. The control by Air Force of its airfields is fundamental to the projection of air power. If current and future civil aviation activity levels are not adequately assessed, against Force and Defence long term capability planning requirements, then the conduct of military flying operations and the ability to either relocate force elements or introduce new capabilities will face unrealistic and potentially damaging restrictions. It will inevitably bring Air Force into confrontation with civil aviation and airport operators who will have expectations of long term access and, most likely, increasing levels of flying activity.

⁶⁷ Review of Defence protective Security Arrangements 14 Aug 2009

187. While civil aviation operations have not yet been impeded by limitations contained in (some) Operating Agreements, airport operators will continue to expect increasing activity levels up to the permitted limits. Airport Master Plans need to be carefully reviewed by Air Force and, if necessary, expectations tempered. This will be difficult given the commercial environment in which airports operate. However, permitting Master Plans to be published without input from Air Force implies approval of developments which may not be in its best interests. Consequently, Air Force must ensure that active engagement is undertaken during Master Plan formulation, in accordance with the provisions of the existing leases.

188. Airport leases and their associated financial conditions were created in an estate-management context rather than a cost recovery context, and do not achieve the level of recoveries that would be required to satisfy cost recovery policy as they do not take into account the full range of services provided to the lessee and the civil aviation operators. In effect these leases have treated these services as a “free good” on the assumption that (the assumed) spare capacity in the military system could be given away to civil operators without charge. The current leases certainly provide a low cost operating environment for airlines and charter operators, particularly for low cost carriers, which has the potential to increase capacity demand and fuel commercial expectations at Air Force airfields.

189. Defence is generally bound by Government and Department of Finance and Deregulation guidelines to seek full-cost recovery and Government policy requires Defence to maintain a neutral position with respect to actors in commercial markets. In practice this has not been applied with respect to civil operations at Defence airfields, for reasons that are probably buried in long-standing practice. Emerging demand and the National Aviation Policy White Paper provide an incentive and opportunity for review of cost recovery practice in this area. Failure to accurately identify the costs of services provided by Air Force to commercial operators has the potential to compromise the budgetary process as funds allocated for Air Force activities continue to be diverted to support commercial operations.

190. Currently, there is little protection afforded Air Force/Defence activities, or budget compliance, by existing lease arrangements with a third party (an airport operator). Consequently, increased civil aviation access to Air Force airfields should not be approved until the ramifications are understood, particularly the impact of the agreed civil movement rate on current and future Air Force operations. It is naïve to expect that substantial RPT operations could be sustained at Air Force airfields without the provision of ATS and ARFFS.

191. Leases are generally silent on the matter of restrictions concerning civil flying rates and contain only general statements addressing restrictions during national contingency (TDL and CIN leases). This has the potential to cause friction with civil industry when civil aviation access is either restricted or denied.

192. The WLM experience provides sufficient warning that civil aviation access can have unintended consequences for Air Force, including costs, capability loss or skewing personnel requirements, (ATS and ARFFS), and ultimately reduced military access to the airfield, with attendant significant, possibly irretrievable, capability loss. With regard to leasing arrangements and operating agreements between Defence and civil airport operators, WLM is the lead airfield. Therefore, the lessons learned from this experience are important and must not be overlooked.

193. The absence of a defined trigger activity level above which CASA requires airspace and service changes for safety reasons is currently unsatisfactory as this arrangement places all the resource and capability risk on Air Force. The limitations of a simplistic 'trigger' based assessment system are recognised; however, the existing system must be improved to provide Air Force the information it needs for effective long term planning to support both military and civil operations at its airfields.

194. An agreement between Air Force and CASA concerning a statement of operating requirement is needed to address support requirements for civil aviation operations at Air Force airfields. Importantly, it should address the catalysts that would trigger changes and enable Air Force to better manage airfield operations and support services. This activity should be undertaken before Defence enters into agreements with prospective airport operators.

195. Major Capital City Airports are better situated to service population centres and there is no case for RPT operations to be conducted from Air Force airfields near these airports. The Major Capital City Airports have adequate capacity to meet current and future civil air traffic demands.

196. Under the existing policy of limited cost recovery, civil access for RPT, freight, and charter operations at Air Force airfields near Major Capital City Airports, could be construed as being anti-competitive. Furthermore, such arrangements would likely be counter to the National Aviation Policy White Paper intent to establish a level playing field approach concerning civil operating costs at Air Force airfields.

197. General aviation activity can be expected to increase into the future; however, the change from GAAP to Class D procedures at the Capital City Secondary Airports may cause some reduction in airport capacity, giving rise to requests for general aviation to access to Air Force airfields.

198. Approval for general aviation flying activities at Air Force airfields is not recommended, either during normal operating periods or out of hours. Once significant general aviation activity is approved at Air Force airfields, reversing the decision would be difficult. Further, it would be difficult to be selective when agreeing to a request from a commercial organisation to use an Air Force airfield as no doubt it would be followed quickly by others seeking similar access.

199. A Chief of Air Force statement of requirement that addresses the various categories of Air Force airfields, their importance for support to operations and training activities, and security requirements is needed. The limited capacity of Air Force airfields to support civil aviation activities needs to be stated in order to reduce expectations from within the aviation industry and the community for unimpeded civil air traffic growth at Air Force airfields.

RECOMMENDATIONS

200. The Review Team recommends the following:

Strategic Planning

- a. Air Force produces and maintains a strategic plan for development and use of its airfields that has a planning horizon comparable to the length of airport leases.

- b. Increased civil aviation access to Air Force airfields should not be approved until the ramifications on operations, infrastructure and services/resources are fully understood. The approval process should involve an evaluation of current and future compatibility.
- c. Defence should actively review civil airport master plans to ensure the civil operator's expectations meet Air Force requirements, including the provision of responses in writing to civil airport lessees making the Defence position clear.

Chief of Air Force Statement of Ownership

- d. That Chief of Air Force releases a public statement of ownership addressing the various categories of Air Force airfields, their importance to the support of operations and training, including security requirements, and highlighting the limited capacity of most of these airfields to support civil aviation activities. The statement should identify those locations where civil and military operations can continue to operate jointly.

Statement of Operating Requirements

- e. A Statement of Operating Requirements be agreed by CASA and Air Force to address the management of civil aviation operations at Air Force airfields.
- f. The Statement of Operating Requirements addresses support requirements for civil aviation operations at Air Force airfields.
- g. An analysis of support requirements for civil aviation operations be undertaken before Defence enters into agreements with prospective airport operators.

Operating Agreements

- h. Airport lease arrangements for civil access to operational, bare base, and other Air Force airfields (excluding Joint User) include robust operating agreements that include the following access controls;
 - i. maximum permitted civil movements;
 - ii. permitted civil aircraft types;
 - iii. provisions to prevent civil aviation interfering with Air Force flying;
 - iv. controls for prevention of criteria for service provision being exceeded to discourage expectations of unlimited access by civil operators;
 - v. the right to interrupt, reschedule, or limit civil aviation access to an airfield for limited periods;
 - vi. operating agreements be living documents with the flexibility to address changing operational circumstances in both military and civil operations, with a templated approach recommended to ensure that all the relevant issues are considered; and

- vii. any 'templated approach' is cognisant of the fact that 'a one size fits all' approach is not necessarily appropriate, and that each airfield needs to be subjected to separate operational analysis.

Leases

- i. A Service Level Agreement be struck between AFHQ and DSG to formalise the lease development process which should include:
 - i. mandatory AFHQ formal capability analysis before DSG starts lease negotiations, and
 - ii. Air Force development and provision of operational requirements to DSG for airfields which are the subject of lease negotiations.
- j. Additional airport leases not be approved until robust strategic plans, addressing the long term use of each site, have been developed.
- k. Air Force be prepared to renegotiate leases to protect Air Force interests if the strategic planning process identifies significant detrimental impacts to capability.
- l. Amendment of existing airport leases, including Joint User leases, to more clearly describe contingency operations and associated preparatory activities that would disrupt civil passenger transport operations.⁶⁸
- m. Leases for bare base airfields be amended to reflect Air Force control of ATS and ARFFS contracts, where these are implemented.

Williamtown

- n. Air Force establish if it has underestimated the potential impact of civil movements at WLM and if so review the existing Defence/NAL Operating Agreement.
- o. The WLM/NAL Operating Agreement be amended to exclude civil Heavy Category operations.

General Aviation⁶⁹

- p. Requests from general aviation will be viewed against their compatibility with the airport's military operations and any other demands and impacts they might have on the military.

Joint User Airfields

- q. Formal definition of Joint User terminology be agreed by Defence and DITRDG and injected into relevant legislation and regulation.

⁶⁸ The Department of Infrastructure and Transport notes that any variation to the Joint User airport (head) lease would be a policy decision on the part of the Minister for Infrastructure and Transport and any amendments would need to take into account the current agreements in place at the Joint User airports and be consistent with the Airports Act and all relevant legislation

⁶⁹ The term General Aviation does not include RAAF Flying and Gliding Clubs.

- r. Air Force and CASA enter into formal agreement on Joint User airfields' configuration.
- s. Declaration of additional Joint User airfields is not recommended.

Training Airfields

- t. Development of civil airport facilities and/or RPT access not be permitted at Air Force training airfields. (PEA and ESL).
- u. Requests for General aviation access to PEA and ESL should be viewed from the perspective of incompatibility with Defence flying training.

Point Cook

- v. Air Force conduct an airfield review of Point Cook to confirm existing traffic levels.
- w. Air Force be prepared to develop mitigation strategies to manage the high civil air traffic movements at Point Cook.

ATS, ARFFS, and Infrastructure

- x. Air Force monitor civil aircraft movements at its airfields when Air Traffic Services are not operating.
- y. Control of ATS and ARFFS contracts at bare base airfields be retained by Air Force.
- z. If PCK ATS or ARFFS are contracted, Air Force should retain control of contract management.
- aa. Defence fund airfield works undertaken to relieve military and civil traffic congestion with cost recovery actions reflected in lease variations.

Airfield Standards

- bb. Air Force instigate a regular review of airfield standards to enable harmonisation wherever possible with civil requirements at Joint User airfields.
- cc. Air Force clearly states that, at non Joint User airfields where civil aviation access is permitted, airfield standards will differ from the civilian configuration to support military flying operations.
- dd. Where civil aviation access is currently approved, and before approving access to additional Air Force airfields, non compliance with civil standards should be noted in the lease operating agreement and be subject to CASA concurrence.

Costs

- ee. Air Force not enter into agreements to provide support to any particular entity or group that provides them with competitive advantage.

- ff. Review existing agreements to identify those organisations that are gaining a competitive advantage from Air Force support.
- gg. Air Force commission a study to establish the cost of support to civil operations at Air Force and Joint-User airfields.
- hh. Rental values of civil airport leases should reflect the value of access to a functional airfield.
- ii. Amendment of the airfield lease development process to incorporate Government cost recovery principles.
- jj. Cost recovery of the full range of services provided to airport lessees and civil aviation operators be reflected in airport lease documentation.
- kk. Defence carefully consider the pricing signals that cost recovery practice can send to the RPT, charter operators and general aviation.
- ll. Defence consider the influence cost recovery practice can have on demands for civil aviation access to Air Force airfields.
- mm. Defence investigate revenue collection options.

Security and Estate

- nn. Air Force continues to develop security criteria for siting civil airport infrastructure on or near Air Force airfields. These criteria should be included in DSG estate development guidelines.
- oo. Access to Air Force airfields from industry parks on adjacent commercial property be limited to Defence support activities.

Miscellaneous

- pp. Extant Woomera management arrangements be retained; restricted access airfield arrangements continue and access be constrained to approved military, RFDS, and aircraft emergency diversions.
- qq. Civil aviation operators not be permitted to nominate Woomera as a diversion airfield.
- rr. ERSA be amended to reflect Air Force as the TDL airfield operator.

ORIGINAL SIGNED

R.B. Treloar, AVM

September 2010

ORIGINAL SIGNED

P.F. Devine, AIRCDRE

Annexes:

- A. *Airports Act 1996* – Summary
- B. Impact of Civil Aviation on Williamstown Traffic Capacity – No 44WG Analysis
- C. Summary of Civil Traffic at Air Force Airfields in ATC Operating Hours
- D. List of Air Force Airfields and Civil Airports
- E. DAR Airport Limitations – OLA Usage
- F. Estate
- G. Security

AIRPORTS ACT 1996

1. The objects of this Act are as follows:
 - a. regard to the interests of airport users and the general community;
 - b. to promote the efficient and economic development and operation of airports;
 - c. to facilitate the comparison of airport performance in a transparent manner;
 - d. to ensure majority Australian ownership of airports;
 - e. to limit the ownership of airports by airlines;
 - f. to ensure diversity of ownership and control of certain major airports;
 - g. to implement international obligations relating to airports

2. The following airports are subject to the provisions of the Airports Act 1990:
 - a. Sydney (Kingsford-Smith) Airport;
 - b. Sydney West Airport;
 - c. Melbourne (Tullamarine) Airport;
 - d. Brisbane Airport;
 - e. Perth Airport;
 - f. Adelaide Airport;
 - g. Coolangatta Airport;
 - h. Hobart Airport;
 - i. Launceston Airport;
 - j. Alice Springs Airport;
 - k. Canberra Airport;
 - l. DAR Airport;
 - m. TVL Airport;

- n. An airport specified in the regulations, where the site of the airport is a Commonwealth place.

**ANNEX B TO
REVIEW OF ACCESS TO AIR FORCE AIRFIELDS BY CIVIL AIRCRAFT
SEPTEMBER 2010**

IMPACT OF CIVIL AVIATION ON WILLIAMTOWN TRAFFIC CAPACITY – NO 44WG ANALYSIS

1. This is an analysis by 44WG Detachment Commander Williamtown and the Operations Flight Commander of the impact if NAL related civil aircraft movements regularly reached the agreed maximum movement limit contained in the current Operating Agreement.

2. Para 3 of the Defence/NAL operating agreement (attached) states "between 0600 and 2200 hours each day six aircraft arrivals and unlimited aircraft departures are permitted each hour" - potentially around 12 moves per hour. Current movement rate is approximately six per hour with a regular peak of eight moves per hour twice per day. Any more than six to eight civil movements per hour will impact on military operations. The following analysis is based on Operations Flight Commander's six years experience at WLM:

- **Circuit operations.** Concentrated circuit training occurs twice per year:
 - Following each POS when the circuit and Instrument Flying patterns are very busy for approx 4-5 weeks with both training (76SQN/2OCU) and recency sorties for operational squadrons.
 - Mid-year for both 76SQN and 2OCU for around 3 weeks. During these periods civil aircraft have regularly been required to hold.
- **Explosive Ordnance (EO) use.** When ACFT are loaded with EO and parked on TXY Alpha, a displaced threshold and reciprocal RWY operations with back tracking requirements are required to keep civil aircraft outside the Public Transit Access Limit. The OLA complex currently under construction will reduce, but not eliminate, this issue. Further, arming/de-arming procedures in the Operational Readiness Platforms (either end of the RWY) do not permit others to use the RWY and result in delays to both civil and military traffic.
- **Saltash Air Weapons Range (SAWR) activity.** Activation of SAWR airspace causes significant impediments to civil and military movements and increases ATC workload. Instrument Meteorological Conditions and intermixed civil and military movements further exacerbates traffic management complexity and congestion.
- **Air Defence Exercise (ADEX) Operations.** Arrivals and departures of large numbers of aircraft and ADEX operations are currently manageable but may be impacted should civil aircraft movements regularly achieve 6-8/hr rather than just peak at this level approximately twice per day.

3. Current ERSA civil fuel holding requirement for WLM is 30 minutes. Up to 20 minutes holding has been used regularly by PTO aircraft since EOY 2004. If NAL regularly achieves 12 moves per hour, vice the current 4-6, increased civil holding can be expected, but this alternative will be limited by airspace availability for holding areas. This may require daily activation of R583B (SFC to

10000ft) to facilitate manoeuvring room for both civil and military traffic and ATC sequencing of aircraft either via final (civil) or initial approach (military).

4. Civil movements 'generally' do not conflict with military air traffic management except in the afternoons when ATC manages approximately 6-8 civil aircraft movements in the hour plus military circuit training. Civil aircraft are held when ATC cannot manipulate the traffic pattern to enable their departure or arrival. Circuit capacity is six aircraft, plus arrivals and departures. When circuit capacity is reached, civil aircraft arrivals and departures can be delayed for up to 20 minutes. For departing aircraft, the resultant congestion on the taxiways prevents further military departures and creates airspace holding issues for arriving civil aircraft.

5. Instrument approaches add to the workload. Civil aircraft movements at current 'peak' periods disrupt the flow and arrival of aircraft conducting practice instrument approaches and adversely affects 76SQN and 2OCU training programs.

**ANNEX C TO
REVIEW OF ACCESS TO AIR FORCE AIRFIELDS BY CIVIL AIRCRAFT
SEPTEMBER 2010**

SUMMARY OF CIVIL TRAFFIC AT AIR FORCE AIRFIELDS IN ATC OPERATING HOURS

- RIC: 2 200 general aviation practice Inst approaches – landings not permitted. OOH activity unknown.
- EDN: 3 060⁷⁰ general aviation practice Inst approaches – landings not permitted. OOH activity unknown.
- AMB: 520 general aviation practice Inst approaches – circuits and landings permitted. OOH activity unknown.
- TDL: 360 general aviation and airline practice instrument approaches and circuits operations.
- TVL: 7 020 general aviation practice instrument approaches and circuit operations.
- DAR: 97 000 movements total of which approximately 10% are military.
- PCK: Up to 90 000 with up to 75 000 movements/year by RMIT a civil flying training school – to be confirmed.
- CIN: 2 400 a mixture of RPT and Charter flights primarily supporting the mining industry
- LMO: 8 500 a mixture of RPT and oil/gas offshore helicopter support

Civil flying operations are not permitted at PEA or Gingin. These figures represent data captured during the operating hours of Air Force ATS, (where provided), and do not reflect civil operations conducted at these airfields out of hours. These figures do not represent civil transits of airspace associated with these Defence airfields. CIN and LMO data is sourced from the civil airport operator through the local Air Force airfield managers.

⁷⁰ Civil flying operations are limited instrument approaches, no landings or circuits.

**ANNEX D TO
REVIEW OF ACCESS TO AIR FORCE AIRFIELDS BY CIVIL AIRCRAFT
SEPTEMBER 2010**

LIST OF AF AIRFIELDS, LESSEES, AND LEASE PERIODS

Airfield	Operator	Lease Start	Duration	Option
AMB	RAAF			
AVL	Avalon Airport Aust	Feb 97	50	49
CIN	Shire of Derby	Jul 94	30	
DAR - JU*	Darwin Intl Airport	Jun 98	50	49
TVL – JU*	Aust Airports (TVL)	Jun 98	50	49
EDN	RAAF			
LMO	Shire of Exmouth	Mar 93	30 ⁷¹	
PCE	RAAF			
PCK	Individual Leases ⁷²			
RIC	RAAF			
TDL	Katherine Town Council	Aug 93	10	10
ESL	RAAF			
WGA	Wagga Council	Jul 95	30	
WLM	Newcastle & Pt Stephens Councils (NAL)	Jul 94	51	

* Joint User

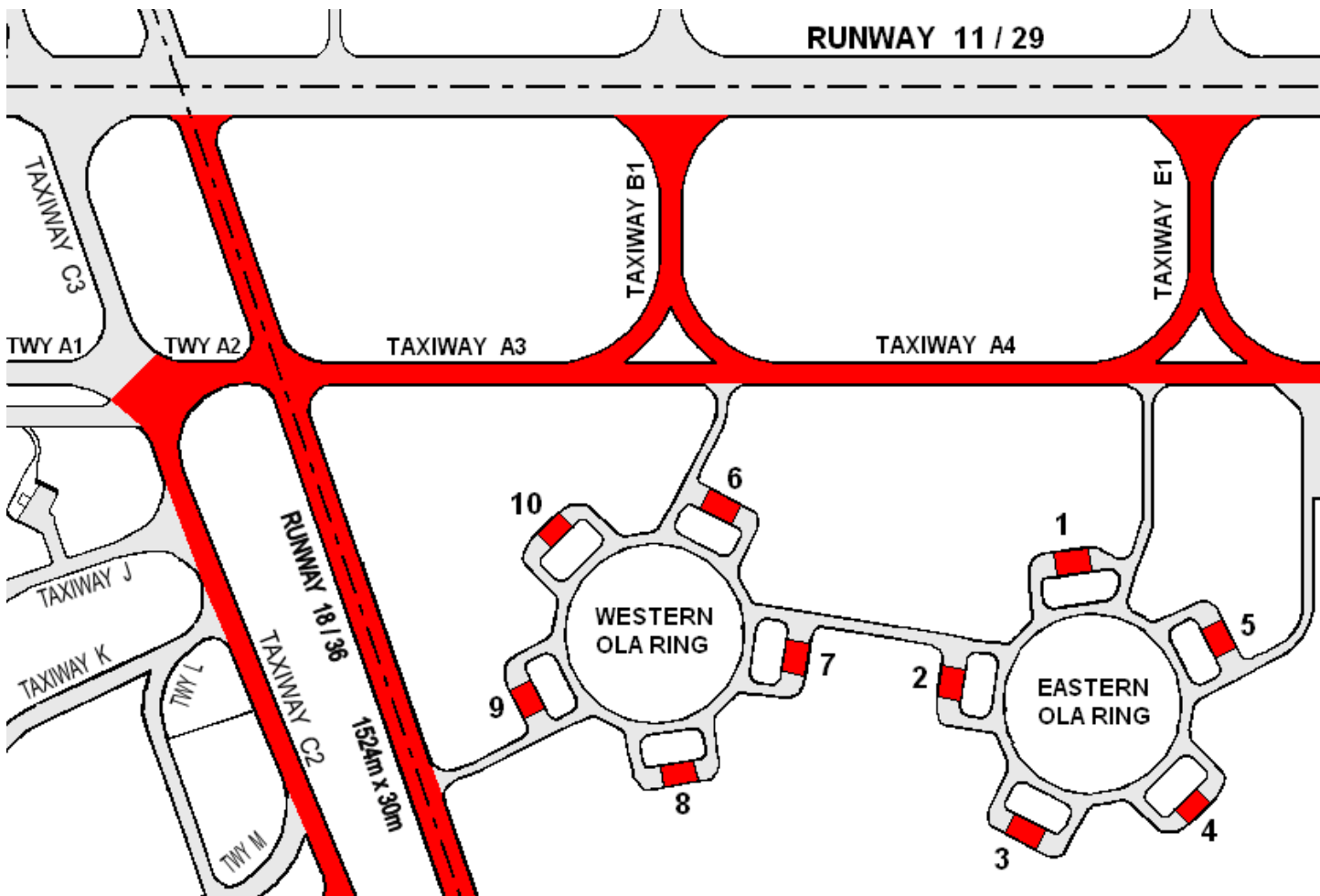
⁷¹ Lease renewal under negotiation. Review Team unaware of progress.

⁷² Individual leases with aircraft operators.

ANNEX E TO
REVIEW OF ACCESS TO AIR FORCE AIRFIELDS BY CIVIL AIRCRAFT
SEPTEMBER 2010

DAR AIRPORT LIMITATIONS – OLA USAGE

1. **Restrictions** – Taxiways Alpha 2, 3, 4 & 5, Bravo 1, Echo 1 and Charlie 2 are closed to all civilian aircraft.
2. Runway 18/36 South of Runway 11/29 is closed to all civilian aircraft.
3. **Active** – When OLA's 1 through 10 have EO.



ESTATE

1. Civil aviation occupancy of Defence estate can permanently constrain:
 - a. force element expansion;
 - b. maintenance support facility expansion;
 - c. force element relocation/consolidation (Air Force and Army);
 - d. EO employment,
 - e. EO storage facility development;
 - f. Air Force ability to react to changed EO management regulations (safety distances);
 - g. force element role expansion;
 - (i) increased EO usage;
 - (ii) introduction to service of new weapons;
 - (iii) UAV employment, through proximity to civil aircraft movements;
 - h. some classified activity;
 - i. the introduction to service of some highly classified equipment; and
 - j. the use of an airfield for forward mounting base for large operations, e.g. TVL capacity to host large numbers of transport aircraft is limited by existing tarmac space and there is little estate available for expansion should this become a strategic necessity.

SECURITY

1. The following are security related considerations for civil developments on Air Force estate:
 - a. Civil facilities should be remotely sited from
 - (i) the main Air Force base and related infrastructure, preferably separated by runway(s) with discrete taxiway access.
 - (ii) ordnance storage, ordnance loading, small arms ranges and other military hazardous and classified activity areas.
 - b. Access to airport or industry park and associated infrastructure should be via a discrete road system separate from public roads.
 - c. Preferably civil operations would be sited on private land adjacent to the airfield and linked to the Air Force manoeuvre areas by a controlled taxiway.
 - d. Civil airport runway access to be via discrete parallel taxiway to minimise observation of potentially classified activity and equipment.⁷³

⁷³ The Review Team is aware that civilian proximity to some Air Force flight lines has inhibited employment of classified aircraft equipment.