

WHEATBELT SNAPSHOT SERIES: AVIATION

Version 1 – July 2014

OVERVIEW

The Wheatbelt region comprises an area of 154 862 square kilometres, extending north to Dandaragan and Dalwallinu, east to Yilgarn and Lake Grace and south to West Arthur. The region comprises 43 local government authorities and in excess of 100 communities.

There are more than 54 airports and airstrips in the Wheatbelt. The quality of these facilities varies greatly but the majority of strips meet a minimum standard suitable for Royal Flying Doctor access. They are mostly owned, operated and maintained by local government at considerable expense. Although a large number of these facilities would be underutilised, they present a solid infrastructure base on which to further develop the aviation industry in the region.

Figure 1 Wheatbelt Region (WDC 2012)



Currently, Wheatbelt airstrips are used for a range of purposes, including:

1. Flight Training

There are active aero clubs in Narrogin, Northam and Wagin, reflecting high levels of private aircraft ownership in some areas. Wheatbelt strips are generally surrounded by land available for development of private hangars for storage of aircraft at a relatively low cost.

China Southern Flying College has been operating out of Merredin airfield since the late 1990s, specialising in training airline pilots from raw recruits with no flying experience to multi-engine instrument rated jet first officers. The operation is without doubt the most active commercial operation in the Wheatbelt and provides flow-on benefits to the community.

Wheatbelt airstrips are also utilised by Jandakot based pilot training providers within their circuits for navigational and "touch & go" training.

2. Recreational/adventure Aviation

Recreational aviation is long established and very active in the Wheatbelt, particularly in the Avon sub region. Northam is internationally recognised as a prime location for ballooning and many tourists come to the area for this reason. York has a successful skydiving operation as well as the White Gum Farm ultra-light and micro-light facility and Cunderdin and Beverley have long established and active gliding clubs.

The success of recreational aviation is not limited to the Avon however. Skydive Jurien Bay was the 2012 winner of the Best Regional Business in WA in the Telstra Australian Business Awards. In Darkan, Hillman Farm Skydivers, established in 1975, is the longest continuously running skydiving club in Western Australia. Narrogin boasts both a flying club and a gliding club.

3. Emergency Services

The Wheatbelt's emergency service relies heavily on the Royal Flying Doctor Service which uses a large number of strips across the region. Helipads at Narrogin and Northam hospitals have allowed greater coverage by the emergency helicopter service, as has the refuelling facility at Ballidu. Wheatbelt airstrips are also used when necessary for water bombing operations.

4. Agricultural/spraying

Traditionally there is a link between aviation and agriculture in the Wheatbelt. Dunn's Aviation operates a large scale aerial agricultural spraying and water bombing business based in Ballidu. In Northam, Northam Air Services provide general aviation aircraft servicing and painting.

In addition to these main aviation activities, the military use Wheatbelt airspace on a regular basis. The Pearce RAAF base in Bullsbrook is located on the Wheatbelt boundary, with Wheatbelt airspace and facilities being utilised for both military and cadet training. The RAAF owns and operates an airfield in Gingin.

Westonia's airfield is home to many Unmanned Aerial Vehicles (UAV) companies. This airstrip is used regularly to test new inventions and technologies.

ISSUES

1. Planning

The Wheatbelt, with its close proximity to controlled air space, sparse population distribution and ideal topography and weather conditions, is well suited to the further development of the aviation industry.

Despite this, in the development of the *State Aviation Strategy* and the *Draft State Planning Strategy*, the region is not mentioned in relation to future planning and development for the industry. Wheatbelt airstrips are overlooked due to the fact that they do not cater for Regular Passenger Transport (RPT). Although private investors are beginning to understand the advantages of the region, a lack of government foresight and vision has the potential to inhibit the industry's growth.

This lack of structure and planning is also evident within the aviation industry itself. The *Wheatbelt Aviation Strategy Ministerial Taskforce Report* (2010) recommended that external facilitation would be required to assist the industry in formulating a development plan and in the process of collaboration and cooperation between businesses seeking to capitalise on opportunities.

2. Resources

Operators of regional airports, usually the local governments, are experiencing rising construction costs which restrict their ability to upgrade airport infrastructure. Despite these difficulties, there has been significant private and local government investment in aviation infrastructure in the region, in particular at Merredin (private), Cunderdin and Wyalkatchem.

The Regional Airports Development Scheme (RADS) was initiated by the Department of Transport in 1997 aimed at improving airport infrastructure in regional Western Australia. Since 2008, the program has been supported by a combination of Department of Transport and Royalties for Regions funding.

From 2008 to 2012, over 150 projects have received RADS grants totalling more than \$29 million, in support of projects valued at \$67m. Eligible projects include airport studies such as master plans, airside infrastructure, terminal and grounds development and maintenance projects.

Figure 2 RADS funding 2008 - 2011

Year	Airport	Project	RADS	Total Project		
			Contribution	Cost		
2008	Cunderdin	Develop an airport masterplan	\$15,000	\$35,000		
2008	Westonia	Extend runway, construct turnaround,	\$87,000	\$192,947		
		run-up and aircraft parking areas and				
		install markers and fencing				
2008	Wongan Hills	Reseal the runway	\$36,000	\$100,476		
2009	Cunderdin	Grade the runway, survey approaches,	\$169,772	\$339,454		
		coat-spray the runway and install				
		markers and markings to register the				
		aerodrome				
2009	Wyalkatchem	Design and build facilities including a	\$1,800,000	\$2,006,167		
		terminal, runways, taxiways and aprons				
2010	Corrigin	Increase the apron size, replace the	\$81,570	\$241,603		
		wind direction indicator, upgrade the				
		apron lighting and construct a new				
		patient transfer facility and helicopter				
		landing site				
2010	Cunderdin	Create a commercial aviation precinct	\$20,700	\$46,540		
		development plan				
2010	Hyden	Purchase and install runway lighting	\$33,923	\$97,479		
		and an illuminated wind direction				
		indicator				
2010	Kondinin	Purchase and install animal proof	\$5,528	\$12,122		
		fencing and lockable security gates for				
		entry and exit of the airport runway				
2010	Nudagong	Resurface the runway, construct a	\$107,415	\$291,540		
	(Dalwallinu)	taxiway apron, kangaroo proof fence				
		and patient transfer facility				
2010	Varley	Reconstruct the runway gravel surface,	\$24,214	\$48,429		
		drainage system, purchase new				
2012		markers and replace damaged markers	400 740	4.7.055		
2010	Wagin	Create an airport masterplan	\$30,748	\$47,355		
2010	Wyalkatchem	Complete the cross strip, construct a	\$484,546	\$771,623		
		taxiway and apron facility linking the				
		main runway to the terminal building,				
		construct 130m of new drainage and				
		complete entry roads and car park				
0044	1/ 1/ +	facilities	440.075	404.750		
2011	Kondinin*	Extension and sealing of blast areas at	\$12,375	\$24,750		
2011	Ni	the north and south ends of the airstrip	¢(0.20/	¢127 E02		
2011	Narambeen*	Gravel resurfacing of the landing strip	\$68,296	\$136,592		
0044	14/ 1 +	and taxi area surfaces	A444 000	4000.000		
2011	Wagin*	Seal the east-west runway	\$411,000	\$822,000		

Actual RADS contribution and total cost not available at time of application

Figure 3 RADS Funding for 2012-2013

Airport	Project	RADS
Amport	Troject	contribution
Alan Mather Airport (Kellerberrin)	Resurface the runway	\$45,400
Cunderdin	Upgrade the emergency water supply, additional taxiway availability, additional pavement markings and research into the condition of the pavement	\$775,300
Dumbleyung Aerodrome	Resheet the runway and access roads and replace damaged lighting	\$31,800
Hyden Aerodrome (Wave Rock)	Construct a patient transfer station and ambulance bays	\$40,000
Koorda Airstrip	Seal the apron and install a patient transfer facility and a toilet	\$15,000
Kunnunopping Airstrip	Construct a patient transfer facility with shower and toilet	\$49,200
Merredin Airport	Resurface and remark the runway and the taxiway	\$1,000,000
Narrogin Airport	Revise the master plan	\$16,000
Northam Aerodrome	Construct long-term aircraft parking area, an apron and a helipad, widen the taxiway, reseal 500 square metres of the runway, seal short-term parking area, provide concrete and paint around the windsocks and fence the parking area	\$75,500
Southern Cross Aerodrome	Sheet Runway 09/27	\$98,700
Turquoise Coast Regional Airport (proposed)	Commission a consultant to locate a suitable site for the proposed Turquoise Coast Regional Aerodrome	\$43,000

However, the State Aviation Strategy Issues Paper (March 2012) found that there is a need for long term funding solutions in order to prevent deficiencies in the quality of airport infrastructure constraining growth in regional WA communities. In particular, if the Wheatbelt was to realise its full potential as a flight training area, it would require investment in advanced navigational aids such as an Instrument Landing System (ILS).

3. Aviation Training

According to the International Air Transport Association (IATA) the global airline industry needs 3,000 more pilots each year than training schools currently provide. With a rapidly expanding international commercial fleet of planes, the International Civil Aviation Organisation (ICAO) is predicting that more than 800,000 new pilots and engineers will be required. WA will need to ensure that there are adequate numbers of skilled pilots, flight crew and Aircraft Maintenance Engineers.

Being well endowed with basic aviation infrastructure, Western Australia, and in particular the Wheatbelt with its proximity to Perth and excellent flying conditions, has the opportunity to become a training base for the aviation industry within Asia. Currently, however, the majority of Australian training delivery is on the east coast, although some commercial pilots train within WA.

There is limited air space availability for training in the Perth metropolitan region. To the north, military activity impacts on available airspace. Access to Perth Airport for training is limited due to the growing number of commercial flights. Upgrading of regional aviation infrastructure, in particular with regard to advanced navigational aids such as an ILS, is required in order to take advantage of the opportunity to expand the flight training industry.

4. Land Tenure

.¹ Pearson, D. 2008, April 25. Global pilots shortage worsens. *The Australian*.

Part of the impediment to development of aviation in the Wheatbelt has been issues of land tenure, both at airstrips and surrounding land. The Wheatbelt Aviation Strategy Ministerial Taskforce Report (2010) cites the case of Merredin, where the China Southern Flying School development progressed when they were able to purchase the airstrip, along with some surrounding land at minimal cost.

SOLUTIONS

1. Planning

The development of a policy framework and direction for general aviation and pilot training in Western Australia would provide benefits for government, industry and communities in terms of investment decisions for the future.

This planning could include:

- Review of the Regional Airports Development Scheme (RADS) to ensure that future funding aligns with the outcomes of the State Aviation Strategy
- Identification of potential locations in the Wheatbelt which could be developed as a second general aviation airport and linked to the metropolitan region by other public transport methods
- A State Aviation Strategy that explores the non passenger opportunities in aviation
- The development of regional aviation plans, providing opportunities for communities to implement local initiatives that fit into a regional context and deliver industry development within the region

2. Resources

The establishment of an additional ILS in the Wheatbelt region would be beneficial for pilot training in Perth and the regions. This would ease the current pressure on Perth and Jandakot airports.

3. Aviation Training

Jandakot Airport, the state's major training facility, is estimated to reach theoretical capacity in 2030. There are already reports of up to 20-30% of training time spent on the tarmac awaiting runway access. This congestion, with no alternative general aviation airport development, will limit the growth and efficiency of the pilot training industry and other general aviation operations.

Development of alternative locations for general aviation such as pilot training could alleviate some of the pressure on Jandakot. Encouraging pilot training operations to utilise a structure similar to that of the China Southern WA Flying College where ab-initio students are trained at a regional location and only require the final stages of training in the metropolitan setting may prove beneficial.

Western Australia could also look to adopt a skills development model similar to the one established by the Queensland Government in Brisbane and Cairns. The aviation skills training facilities provide training on general aircraft maintenance, cabin crew and regulatory and licence training to standards required by the Civil Aviation Safety Authority (CASA). This initiative has been extremely successful and the facilities are utilised by over 50 airlines and aerospace companies such as Qantas, Boeing and regulatory agencies from a number of Asia-Pacific countries.

4. Land Tenure

The airfields at Wagin, Wongan Hills and Wyalkatchem have land surrounding the strips which the Shires are keen to develop. There is interest in developing air-parks, with residential lots that include private hangars for residents. These are becoming popular lifestyle choices for private pilots in the Eastern States and could benefit the towns by attracting population.

5. Airport Development

The Avon has recognised Cunderdin as the likely location for any commercial activity involving large aircraft. There are other airfields that may offer long term development opportunities including Jurien Bay.

APPENDIX

Wheatbelt Aviation Facilities

Location	Owner/Operator	Shire	Current Facilities						
			No. of strips	Length	Sealed/Unsealed	Lighting	Fuel	Naviation Aids	Other comments
Ballidu	Shire	Wongan Ballidu	2	870m 760m	Unsealed-gravel	Nil	Nil	NDB; VOR	
Beacon	Shire	Mount Marshall	1	1500m	Unsealed - gravel	Nil	Nil	Nil	
Bencubbin	Shire	Mount Marshall	1	970m	Unsealed-gravel	Nil	Nil	Nil	
Beverley	Shire	Beverley	2	1250m 1460m	Unsealed-gravel	Nil	Avgas available on weekends	Nil	
Beverley – Westdale	Burnlee Park	Beverley	1	800m	Unsealed Grassed gravel	Nil	Avgas in emergencies only		
Bindoon – (Chittering)	Bindoon Catholic Ag College	Chittering	1	750m	Unsealed – brown gravel	Nil	Nil	Nil	Within restricted airspace; permission required prior to use
Bodallin	Ryan Pocock	Yilgarn	1	900m	Unsealed – natural brown and yellow sand	Nil	Nil	Nil	Permission required prior to use
Brooklands (York)	Skydive Express	York	2	900m 900m	Unsealed – gravel	Nil	Nil	Nil	
Bruce Rock	Shire	Bruce Rock	2	1200m 820m	1 x sealed 1 x unsealed	PAL – main runway	Nil	Nil	
Ceres Fields	Robert Sewell	Wongan Ballidu	2	1050m 600m	Unsealed – grass	Nil	Nil	Nil	Permission required prior to use
Cervantes	Shire	Dandaragan	1	900m	Unsealed gravel – sealed ends and parking area	Yes – emergency only	Shell – on consignment	Nil	
Corrigin	Shire	Corrigin	2	650m 1000m	Unsealed – gravel	Electric – main runway	Nil	Nil	
Cunderdin	Shire	Cunderdin	2	1850m 1520m	Sealed bitumen	PAL – main runway	Nil	NDB	
Dale River (Oralea)	Wayne Noonan	Beverley	1	1000m	Unsealed – sand, gravel & grass	Nil	Nil	Nil	
Dalwallinu (Nugadong Siding)	Shire	Dalwallinu	1	1200m	Sealed bitumen	PAL	Nil	Nil	
Dowerin	Shire	Dowerin	1	1050m	Unsealed – gravel	Portable – emergency only	Nil	Nil	Permission required prior to use
Dumbleyung	Shire	Dumbleyung	1	900m	Unsealed – gravel & clay	Electric	Nil	Nil	
Goomalling (Springlea)	Ross Sadler	Goomalling	1	950m	Unsealed – gravel & grass	Nil	Nil	Nil	Permission required prior to use
Harrismith	Shire	Wickepin	2	750m	Unsealed – gravel,	Nil	Nil	Nil	

				900m	earth				
Highbury	David Barret- Lennard	Narrogin	2	850m 450m	Unsealed – grass	Nil	Nil	Nil	Permission required prior to use
Hillman Farm	David Harrington	West Arthur	1	1200m	Unsealed – gravel	Nil	Nil- emergency available on weekends	Nil	Permission required prior to use
Hyden (Town Airstrip)	Shire	Kondinin	1	1000m	Unsealed – natural grass	Nil	Nil	Nil	Only usable if mowed
Hyden (Wave Rock)	D & S Collins	Kondinin	1	1400m	Unsealed – gravel	Battery operated	With prior notice	Nil	Unusable after rain. Permission required prior to use
Jurien Bay	Shire	Dandaragan	1	1300m	Sealed	PAL	On consignment	Nil	
Kalannie	Shire	Dalwallinu	1	1200m	Unsealed – gravel	Nil	Nil	Nil	
Kellerberrin	Shire	Kellerberrin	1	1000m	Unsealed – gravel with sealed apron	PAL	Nil	Nil	
Kondinin	Shire	Kondinin	1	1200m	Unsealed - gravel	PAL	Nil	Nil	Permission required prior to use
Koolyanobbing	Portmans Limited	Yilgarn	1	1100m	Unsealed – gravel	Nil	Nil	Nil	Private : Permission required prior to use
Koorda	Shire	Koorda	2	1300m 1100m	Unsealed – earth	Nil	Nil	Nil	
Kukerin	Shire	Dumbleyung	1	900m	Unsealed – dirt	Nil	Nil	Nil	
Kulin	Shire	Kulin	1	1080m	Unsealed – gravel	Nil	Nil	Nil	Airstrip becomes soft when wet
Kununoppin	Shire	Trayning	1	1300m	Sealed	Electric	Nil	Nil	Permission required prior to use
Lake Grace	Shire	Lake Grace	1	1200m	Unsealed – compacted gravel – sealed ends & parking area	PAL	Yes – 5 days notice required	Nil	
Lake King	Shire	Lake Grace	2	1000m 1200m	Unsealed – gravel & dirt	Nil	Yes – 5 days notice required	Nil	
Merredin	China Southern Flying School	Merredin	2	1290m 900m	Sealed – asphalt	PAL – main runway	Yes – prior notice required	Nil	Private
Moora	Wayne Vanzetti	Moora	2	900m 540m	Unsealed – gravel	Nil	Nil	Nil	Private – courtesy call appreciated
Mukinbudin	Shire	Mukinbudin	2	1220m 910m	Unsealed – gravel	Nil	Nil	Nil	
Narambeen	Shire	Narambeen	2	670m 1050m	Unsealed – grass, gravel & sand	PAL	Nil	NDB	
Narrogin	Shire	Narrogin	2	1240m 1500m	1 x sealed 1 x unsealed	PAL	Yes, prior notice required	Nil	
Newdegate	Shire	Lake Grace	2	810m 780m	Unsealed – gravel	Nil	Yes, 5 days notice required	Nil	
Northam	Northam Aero Club	Northam	1	950m	Sealed	PAL	Northam Air Services (weekday only)	Nil	
Northam	Dept of Defence	Northam	1	668m	Unsealed – red gravel	Nil	Nil	Nil	Only available to Defence aircraft with the exception of

									emergencies
Popanyinning (Coogabbie)	Tim Haslam	Cuballing	1	800m	Unsealed – dirt & grass	Nil	Nil	Nil	Permission required prior to use
Priarie View Station	Prairie View Station	Lake Grace	1	850m	Unsealed – pasture	Nil	Mogas only	Nil	Permission required prior to use
Quairading	Shire	Quairading	1	1360m	Unsealed – gravel	Electric	Nil	Nil	Permission required prior to use
Rapanui (Congelin)	Aubrey Fowler & Co	Williams	2	1200m 1200m	Unsealed – gravel	Electric	Nil	Nil	Permission required prior to use
Southern Cross	Shire	Yilgarn	2	1320m 1405m	Unsealed – gravel standard	PAL	Access to Shell fuel	NDB	Permission required prior to use
Tamma Grains	Kim Packer	Pingelly	2	900m 900m	Unsealed – natural	Nil	Nil	Nil	Permission required prior to use
Varley	Shire	Kulin	2	1000m 1100m	Unsealed – white dirt	Nil	Nil	Nil	
Wagin	Shire	Wagin	2	1200m 1000m	Unsealed – gravel with sealed ends	PAL	Avgas & JetA1	Nil	Permissions required prior to use
Westonia	Shire	Westonia	2	800m 1200m	Unsealed – natural sand	Nil	Nil	Nil	
Wongan Hills	Shire	Wongan Ballidu	2	1235m 750m	1 x sealed 1 x unsealed	PAL – main runway	By prior arrangement	Nil	
Wyalkatchem	Shire	Wyalkatchem	3	600m 1500m 550m	1 x sealed 2 x natural	PAL	Nil	Nil	Project underway to seal 2 nd strip to length > 1000m

Ref: The Western Australian Country Airstrip Guide: 28th Edition

REFERENCES

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