



Parafield Airport Today

2

2.1 Background

Parafield Airport is the major general aviation and pilot training airport in South Australia and is home to one of the largest pilot training schools in the Southern Hemisphere.

The airport site was originally farmland and was selected in the early 1920s, with the first aircraft operations commencing in 1927 and the airport officially opening in 1929. Parafield Airport has progressively developed to meet the growing aviation and pilot training needs of airlines throughout the world.

Parafield Airport Limited (PAL) is a wholly owned subsidiary of Adelaide Airport Limited (AAL) which purchased the operating leases for Adelaide and Parafield airports from the Commonwealth, in May 1998, to operate both airports for the next 50 years with an option for a further 49 years. The lease requires AAL to operate the site as an airport, as well as allowing for other developments to support the economic viability of the airport.

The first Master Plan for Parafield Airport was developed by the Federal Airports Corporation and was published in 1996. This is the fifth Master Plan prepared by PAL for Parafield Airport. It builds on the aeronautical requirements, environmental protections and land use development concepts developed in the previous master plans. The Master Plan 2024 focuses on the continued development of Parafield Airport as a significant economic driver for northern Adelaide. It conveys a clear indication of the future planning for precinct areas on the airport.

In 2022, Parafield Airport managed approximately 4,200 aircraft movements every week with the majority being student training flights. Situated near Adelaide Airport, and adjacent to a military airfield, Parafield Airport is internationally regarded for its suitability for pilot training qualifications requiring a high standard of performance.

The economic contribution of Parafield Airport in 2022 is estimated to be \$354 million towards the Gross State Product. It is estimated that in 2022, the businesses operating at the airport directly employed 1,249 people, both on and off the airport site.

Parafield Airport's proximity to the surrounding suburbs means that careful planning and consultation is required to ensure that the aviation considerations of the airport are protected, while also ensuring that operational requirements are balanced with the community's needs.

PAL is proud to take a strong leadership role in the community. As operator of one of the most significant business, training and employment precincts in the northern suburbs, PAL provides support where it will generate a lasting benefit. PAL assists the northern region through partnerships relating to the environment, community, business and tourism. PAL is proud to support sporting clubs, educational institutions, local council festivals, cultural programs and other local initiatives.

Furthermore, PAL encourages its aircraft operators to adopt the 'Fly Neighbourly' program, which seeks to manage the impact of aircraft operations on the surrounding community. All of the flying schools at Parafield Airport have adopted this program.



Figure 2.1: Snapshot of Parafield Airport today

2.2 Airport Site

Parafield Airport is located in South Australia, 18 kilometres north of the Adelaide Central Business District (CBD) in the city's strategic northern growth sector. Parafield Airport enjoys the facilities that come with being one of the busiest general aviation and pilot training airports in Australia.

The airport occupies a site of approximately 433 hectares and is well connected to the CBD, surrounding suburbs and other major locations in the Adelaide metropolitan area and throughout the State (see Figure 2.2). The airport is bordered by Kings Road to the north, Main North Road to the east, Bennett Road drain to the south and the main northern rail line to the west.

The airport site is located within the local government area of the City of Salisbury. Figure 2.3 shows the boundaries of the local government areas surrounding the airport site.

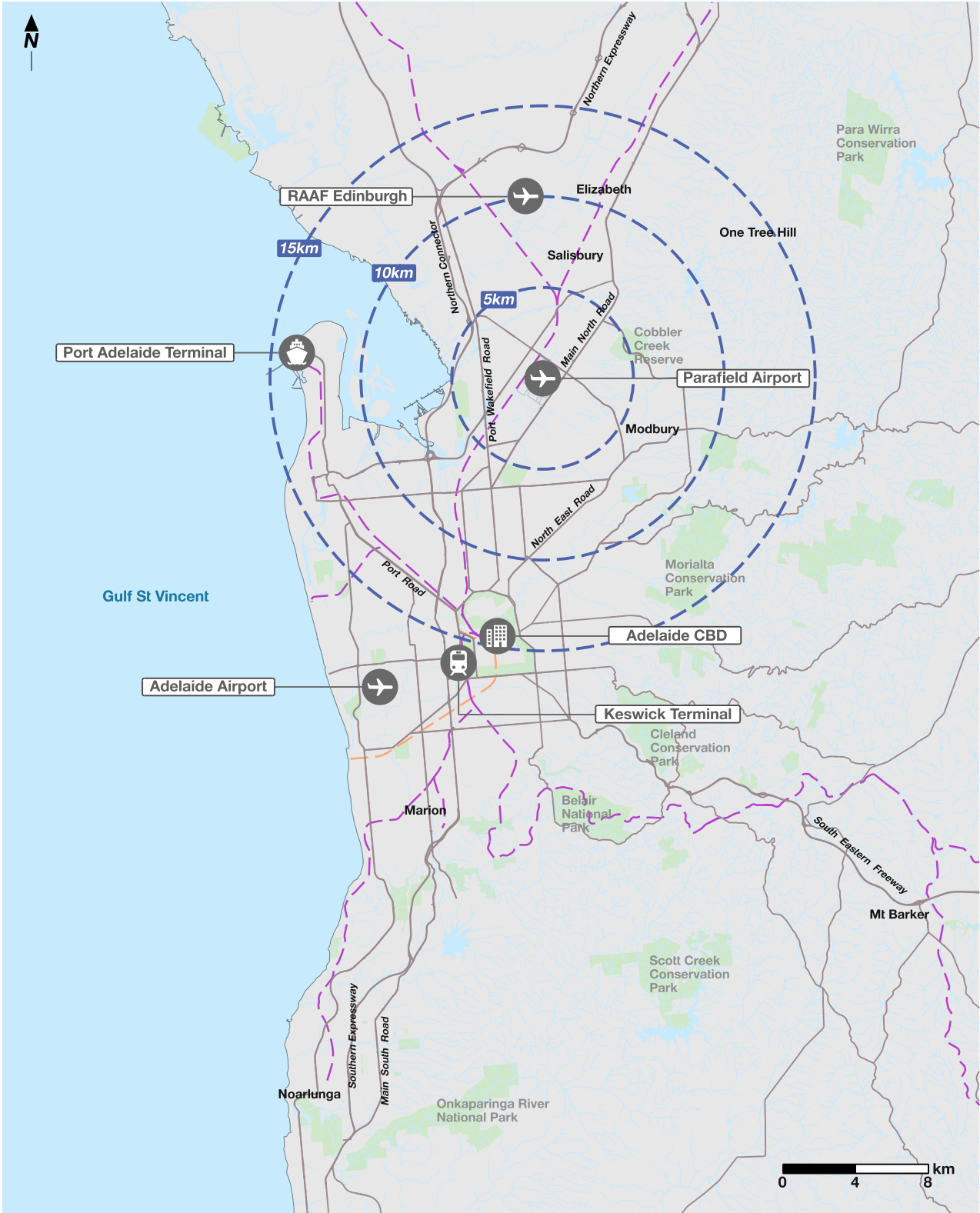
Since the establishment of the airport site in the 1920s, urban uses in surrounding areas have increased in intensity. Parafield Airport is surrounded by a mix of open space, in the form of recreational and sporting facilities, military infrastructure, retail and commercial businesses, low and medium density residential areas, and light to heavy industrial complexes.

Parafield Airport is one of three airports within the Adelaide metropolitan area. Parafield Airport is located approximately 25 kilometres to the north of Adelaide Airport and is 10 kilometres to the south of the Royal Australian Air Force (RAAF) Base Edinburgh.

The Parafield Airport site is divided into five precincts, and each has a specific development intent. These precincts are shown in Figure 2.4 and comprise:

- Runways Precinct
- Airport Business Precinct
- Commercial Precinct
- Bennett Precinct
- Enterprise Precinct.

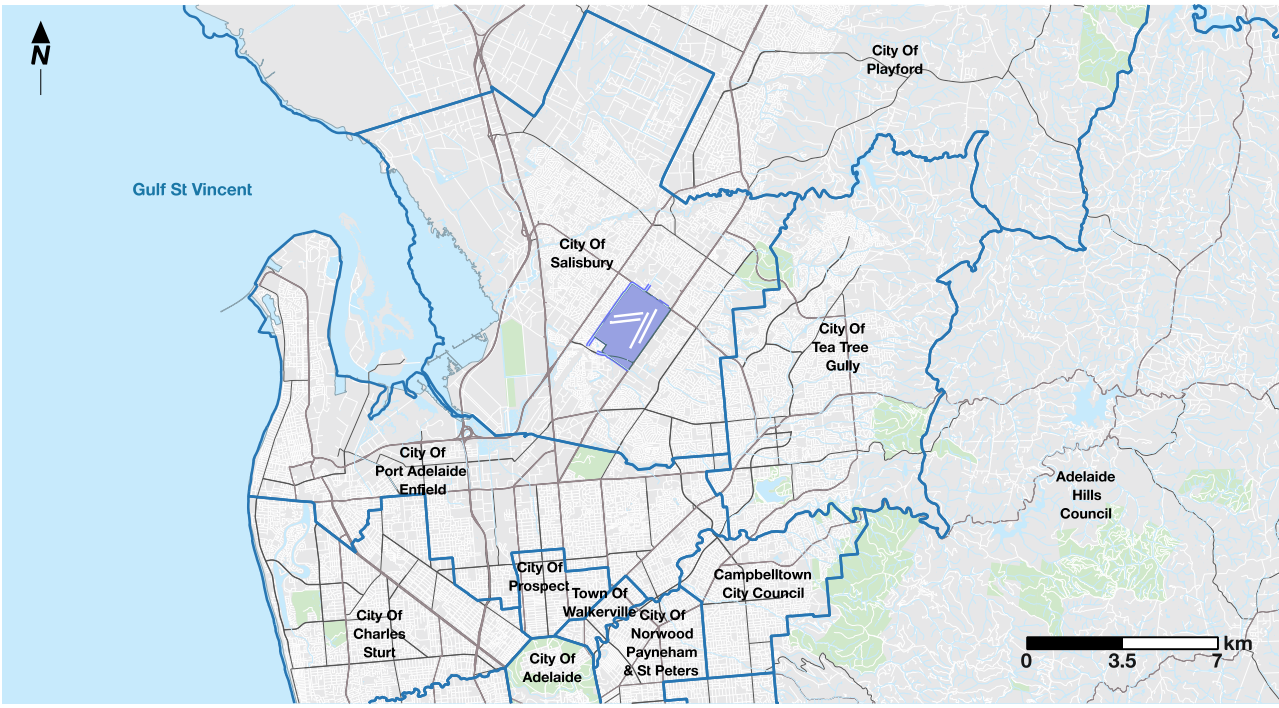




LEGEND

- Railway
- Tram Line
- Major Transport Routes
- Parks, Forests and Reserves
- Drainage/Water Body

Figure 2.2: Location of Parafield Airport



- LEGEND**
- Airport Site
 - Local Government Authority
 - Major Transport Routes
 - Parks, Forests and Reserves
 - Drainage/Water Body

Figure 2.3: Local government areas around Parafield Airport



LEGEND

- Runways & Taxiways
- Drainage/Water Body
- Arterial Roads
- Local Roads
- Current Airside Boundary
- ▨ Future Aviation Zone
- ▨ Management Zone
- ▨ Greenways/Buffer
- Airport Boundary
- Air Traffic Control Tower

PARAFIELD AIRPORT PRECINCTS

- Runways
- Airport Business
- Commercial
- Bennett
- Enterprise

Figure 2.4: Parafield Airport precincts

2.3 Airport History

Ethnographic records point to a rich and varied history of occupation by the Kaurna people across the Adelaide region, which included a practical and cultural relationship with the ephemeral creeks, swamps and basins in and around the Parafield Airport site.

Since post-European settlement, Parafield Airport has had a rich history of aviation. It was first used in 1927 and was Adelaide's main airport until the opening of the current Adelaide Airport in 1955. Since its inception, Parafield Airport has also been used as a pilot training base as well as for recreational flying and aircraft maintenance.

2.3.1 Early Airport Development

In April 1927, the Commonwealth government purchased 320 acres of open farmland at Parafield to establish a permanent landing ground for Adelaide. On 1 October that same year, H. C. 'Horrie' Miller became the first pilot to land at the airport.

The Parafield aerodrome was officially opened by Sir Tom Bridges, the then Governor of South Australia, on 26 November 1927 and flights began through the Australian Aero Club (SA Section) (later renamed Royal Aero Club of South Australia) which had built a hangar at Parafield and was loaned two aircraft for training and the Club's pageant and competition purposes. Miller Aviation Company (which became MacRobertson Miller Airways soon afterwards) began operating from Parafield in 1928.

On 29 May 1929, two De Havilland Hercules aircraft, carrying 21 passengers, arrived at Parafield from Perth on the inaugural flight of the east-west service. On 1 October 1929, 16 aircraft landed at Parafield during the East-West Air Race from Sydney to Perth.

The Depression briefly slowed the growth of aviation, but the 1930s saw a steady proliferation of new airline companies and the expansion of others. Australian National Airways was formed in 1936 and operated routes to Perth, Melbourne, Sydney and Hobart as well as country centres in South Australia. In 1937, scheduled services to Darwin were introduced by Guinea Airways, and Ansett began its services between Parafield and Melbourne.

During World War II, the Department of Defence took over the running of Parafield Airport, with some passenger services still able to operate in a constrained manner. The activities of the Aero Club were suspended from July 1940 when the RAAF commandeered its premises and aircraft for the use of the No. 1 Elementary Flying Training School. All

civilians were excluded from the aerodrome except those employed by civil aviation and commercial aviation companies. The building of the Control Tower was completed in 1940.

Commencing in 1942, the Commonwealth government began acquiring land adjacent to the airport to cater for the increasing size of aircraft using the airfield and the growth in military traffic, and began formalising the road network.

In June 1941, a separate Department of Aircraft Production was established. In 1942, the Department of Aircraft Production built two large airframe repair hangars/workshops at Parafield which serviced the RAAF No. 1 Elementary Flying Training School that operated during the war years. It was around this time that the original farmhouse was demolished and Kitty Hawk Lane was created.

At the end of World War II, the airfield plus numerous buildings were handed back to the Department of Civil Aviation and Parafield was returned to civil and commercial airline operations. By 1946 there were nine airline companies operating regular services within Australia, with ANA and Guinea Airways the main operators. By 1949, much of Parafield's wartime encampment had been sold off and removed from the airport site.

Parafield continued to operate as the only civil airport for Adelaide until the current Adelaide Airport was opened in February 1955. The major commercial airlines moved from Parafield to the new airport, and all remaining military aviation moved to the nearby RAAF Base Edinburgh which had opened in 1954.

The continued growth in general aviation activity since the mid-1950s has meant that Parafield has become a significant centre for recreational flying and pilot training, which is now its principal function.

Parafield Airport was a grassed field for its initial operations, with two cinder runways formed in 1949. In November 1968 a further 41 hectares of land was acquired by the Commonwealth for runway extensions, and the main runway was sealed for the first time in 1969. By the 1980s, Parafield Airport had three sets of parallel runways. These were mostly gravel runways and were hard to maintain, particularly as some of the land was prone to flooding. A decision was made to seal the gravel runways, but due to the cost not all runways could be sealed and two gravel runways were selected to be decommissioned in the early 1990s.

In 1982, the airframe workshop hangars were acquired by the Australian Aviation Company (now called Flight Training Adelaide) with the aim of training further commercial airline and helicopter pilots. The company adapted the former hangars and constructed additional accommodation for international students, classrooms and aircraft simulators.



Aeroplanes at Parafield aerodrome which was officially opened in 1929 with passengers arriving on an inaugural flight from Perth. By the time of this photograph (1936 approx), Australian National Airways was formed to fly passengers from Parafield to Perth, Melbourne and Sydney as well as country centres in South Australia.

Picture Courtesy: State Library of South Australia



The Royal Aero Club, Parafield. A row of aircraft and their pilots lined up at Parafield Airfield in September 1938.

Source: State Library of South Australia



Aerial view 1989.

Other contemporary buildings have been constructed at Parafield since the 1980s, including a new line of hangars on the western side of the airport. Other hangars were re-modelled, and a few relocated.

2.3.2 Privatisation

In the early 1980s the Commonwealth government began laying the foundation for the privatisation of its airports. The final stage of the program took place at midnight on 28 May 1998, when the operation and management of Adelaide and Parafield airports was transferred from the Commonwealth to AAL for 50 years, with an option of extending the lease for a further 49 years.

As a requirement of privatisation, PAL prepared its first master plan, Master Plan 1999, for public comment and Commonwealth approval. A subsequent Master Plan has been prepared and approved by the Commonwealth government in 2004, 2012 and 2017.

2.4

Achievements Since Master Plan 2017

Parafield Airport has continued to evolve and develop in line with the requirements and opportunities identified in the Parafield Airport Master Plan 2017.

Many of the developments outlined in the Master Plan 2017 have been realised. Recent developments include a mix of aeronautical and non-aeronautical facilities, such as the new ambulance station for SA Ambulance Service, site redevelopment and a new hangar for Aerotech, construction of the Parafield Service Centre which is anchored by Sydney Tools, RSEA Safety and KFC, relocation of the Rivergum Homes Display Centre, and repurposing the ex-Masters building for the HomeCo facility which includes Officeworks, Supercheap Auto, Tradezone and Tool Kit Depot. The Rivergum Homes Display site was relocated further south to its current location in 2019. In June 2021 construction commenced on the District Outlet Centre, which was completed in July 2023. These offerings add to the commercial ecology at the airport, attracting business investment and servicing the surrounding residential population.

The forecast growth and subsequent plans for aviation and airside facilities identified in the Master Plan 2017 have ensured that the airport facilities keep pace and continue to offer first class facilities for the aviation and flight training industry. Parafield Airport has continued to update facilities including planning for aviation-support facilities, and improved efficiencies of existing aircraft pavement areas. This includes a surface spray treatment of Runway 03R/21L, widening of Taxiway Sierra, and the expansion of the southern apron to provide additional aircraft parking.

The Parafield Aviation Heritage Centre was opened on 17 April 2018. Housed in the original clubrooms of the Royal Aero Club built in 1927, the Centre includes memorabilia and historical accounts from Parafield Airport and South Australia's early aviation pioneers. The Centre is a visitor attraction for the northern suburbs and an educational hub for school groups. Parafield Airport acknowledges the significant contribution of the aviation and heritage experts that provided their support to bring this project to fruition.



2.5 Airport Ownership

PAL is a wholly owned subsidiary of Adelaide Airport Limited, which purchased the operating leases for Adelaide and Parafield airports from the Commonwealth in May 1998, to operate both airports for the next 50 years with an option for a further 49 years.

The current shareholder equity of Adelaide and Parafield airports, as of May 2024, is shown in Figure 2.5. Superannuation funds make up nearly 84 per cent of the ownership. A key strategy of superannuation funds is investment in long-term infrastructure projects that provide a continuing inflow of funds, such as the continued development of Parafield Airport.

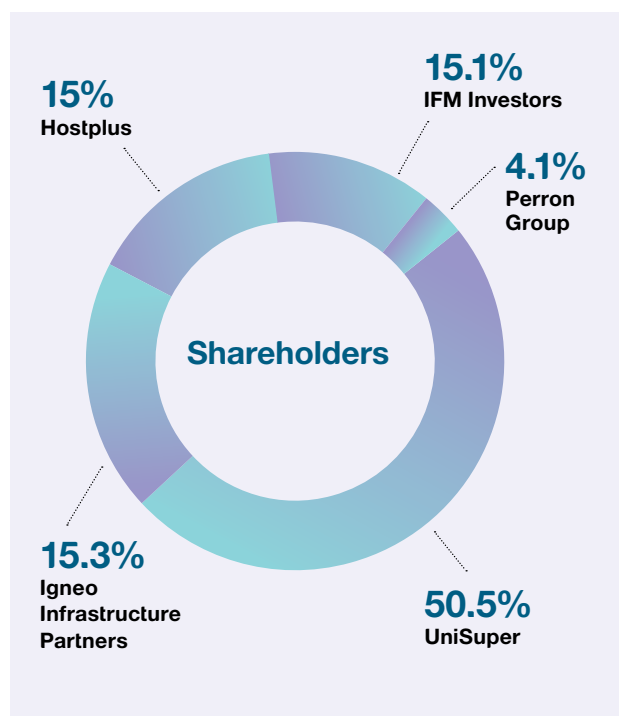


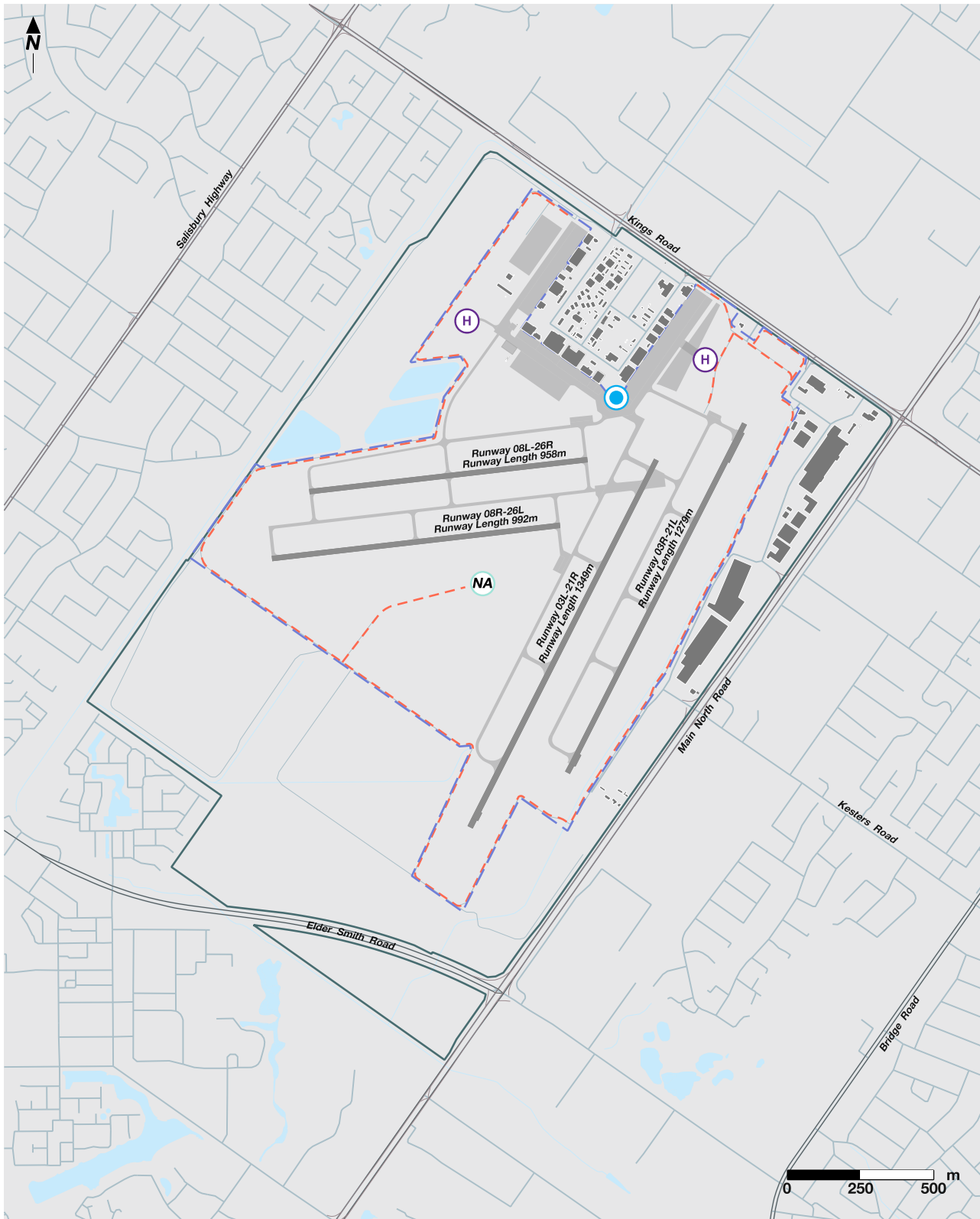
Figure 2.5: Current shareholder equity of Adelaide and Parafield airports

2.6 Facilities

Parafield Airport is a Certified Aerodrome which operates under the provisions of the Civil Aviation Safety Regulations 1998 Part 139 (Aerodromes). The airport has facilities to provide for pilot training, general aviation, charters and helicopter operations. The aviation-related facilities at Parafield Airport include:

- A four-runway system comprising the main (illuminated) runway 03L/21R (1350 metres in length), runway 03R/21L (1279 metres), runway 26L/08R (992 metres) and runway 26R/08L (958 metres) together with a sealed and unsealed taxiway system and associated aprons.
- Aircraft parking for over 200 fixed-wing aircraft.
- Two helipads and a dedicated helicopter parking area.
- Aircraft maintenance hangars and offices for aviation operators, including pilot training schools.
- Air Traffic Control tower.
- Aviation fuel facilities.
- Bureau of Meteorology automatic weather station.
- Non-Directional Beacon navigation aid.

Current aviation infrastructure at Parafield Airport is shown in Figure 2.6.



LEGEND

- | | | |
|------------------|------------------------|---------------------------|
| Airport Boundary | Drainage/Water Body | Airside Roads |
| Runways | Arterial Roads | Helipads |
| Taxiways/Aprons | Local Roads | Air Traffic Control Tower |
| Buildings | Airside Security Fence | Navigation Aid |

Figure 2.6: Layout of existing facilities at Parafield Airport

2.7 Airport Operations

Parafield Airport operates 24 hours a day, seven days a week, and is regarded as South Australia's premier general aviation airport and a world standard international training airport.

In 2019, prior to the COVID-19 pandemic, there was an average of 738 flights per day and 965 flights on a busy day. Approximately 93 per cent of these flights were related to pilot training activities. In 2022 there was an average of 600 flights per day and 831 flights on a busy day. The majority of flights occur between 9.00 am and 5.00 pm.

There is a range of other general aviation activities that occur, such as aerial agriculture, aerial photography, shark spotting patrols, firefighting support, adventure flights and charter services.

Parafield Airport has a total of four runways, comprising two sets of parallel runways. During Air Traffic Control tower operating hours, Airservices air traffic controllers stipulate which runway direction is the operational runway. This is typically determined by the direction of the wind, as aircraft predominantly take off and land into the prevailing wind, but may also be influenced by operational or other requirements.

Circuit training, in both daylight and night-time hours, is a vital part of pilot training. Circuit training is repetitive touch-down and take-off operations in a circuit pattern that allows pilots to practice essential take-off, approach and landing procedures. Pilot training activity is also undertaken in an area of airspace referred to as the Western Training Area D220, which is over a sparsely populated area north of St Kilda.

The parallel runway systems enable two circuits to operate at once. Due to different operating speeds, twin-engine aircraft will often be separated from the slower single-engine aircraft. When the main runways (03R/21L and 03L/21R, oriented approximately north to south) are in use, twin-engine aircraft will generally operate to the west of the airport and single-engine aircraft will operate to the east. When the secondary runways (08R/26L and 08L/26R, oriented approximately east to west) are in use, twin-engine aircraft will generally operate to the north of the airport and single-engine aircraft will generally operate to the south. There is only one runway (main runway 03L/21R) that is equipped with runway lighting, requiring all aircraft to use the circuit to the west of the airport in night-time conditions. The flight paths for operations at Parafield Airport are shown in Section 13.

The Civil Aviation Regulations 1988 require pilots to maintain a safe altitude at all times. The altitude of aircraft in the Parafield Airport circuit is typically around 1,000 feet (304 metres), except during landing or taking off or unless otherwise directed by Air Traffic Control.

The majority of aircraft operations at Parafield use the circuit paths. As well as repetitive touch-down and take-off operations for training purposes, the circuit path is also often used by aircraft coming in to land at Parafield Airport. The design of the circuit path is based on International Civil Aviation Organization standards and the Civil Aviation Safety Authority criteria. Pilots are required to make turns at specific angles to the runway being used and at specific flight altitudes. Following take-off, the first turn is conducted when the aircraft is at around 500 feet above mean sea level (AMSL), and the aircraft will typically reach the 1,000 feet AMSL altitude when it is on the circuit leg that is parallel to the runway being used. The aircraft will then commence descending for landing. Based on these requirements, approximately half of the circuit is conducted at around 1,000 feet AMSL, and the remainder of the circuit is performed at lower altitudes due to the aircraft ascending (take-off) or descending (landing).

Helicopters will generally fly at 800 feet (243 metres) to maintain safe separation from fixed-wing aircraft. These altitudes ensure that aircraft can operate in airspace that is clear of all obstacles. Helicopter manoeuvring training occurs at low level in the south/west area within the airport perimeter.

Parafield Airport introduced its Fly Neighbourly program (previously referred to as Fly Friendly) in 2012 to manage the impact of training operations on the surrounding community. Aircraft operators are encouraged to adopt the Fly Neighbourly program when conducting training activities. All of the flying schools at Parafield Airport have adopted the Fly Neighbourly program.

When safe to do so and/or under direction of Air Traffic Control, the main objectives of the Fly Neighbourly program are for pilots to:

- Climb to operating height as soon as possible.
- Maintain operating height.
- Reduce engine power as soon as possible.
- Follow the promulgated flight paths.
- Avoid residential areas if and where practicable.
- Do not fly wide circuits - keep as narrow as possible.
- Utilise low-powered descent approaches from training area to reduce aircraft noise exposure.

As part of the Fly Neighbourly program, circuit training is restricted to:

- **7.00 am to 11.00 pm (and 10.00 pm wherever possible) Monday to Friday**
- **7.00 am to 9.00 pm on Saturday**
- **8.30 am to 9.00 pm on Sunday.**

Circuit training is not permitted on Christmas Day or New Year's Day, or before 9:00 am on Anzac Day.

The Fly Neighbourly program is periodically reviewed by the Parafield Airport Technical Working Group (see Section 13).

2.8 Relationship to Other Airports

A number of other airports catering for the general aviation industry are currently operating within close proximity to Parafield as shown in Figure 2.7.

Adelaide Airport is the international and domestic air transport gateway to the city of Adelaide and the state of South Australia. Facilities at Adelaide Airport are well established and cater for the full range of commuter services, domestic and international services. It is located 18 kilometres to the south of Parafield Airport.

RAAF Base Edinburgh is a Commonwealth Defence facility located 10 kilometres north of Parafield Airport. It is home to No 92 Wing's AP-3C Orion maritime patrol aircraft that conduct surveillance operations throughout Australia's airspace.

Gawler Airfield is approximately 23 kilometres north of Parafield and is predominantly used as a flying and training aerodrome for glider and light sports aircraft operations.

Murray Bridge Aerodrome is approximately 62 kilometres east of Parafield. It has a cross-runway configuration with associated taxiways and apron parking areas. A number of units and small hangars exist with some maintenance activity. There is a flying school situated at the aerodrome.

Aldinga Airfield is approximately 56 kilometres south of Parafield Airport. It has a cross-runway configuration, with associated taxiways and aircraft parking areas. There is a flying school located at the aerodrome and some aircraft maintenance facilities. Flight curfews and some operational restrictions apply. The main activities include flying training and joy flights.

Goolwa Airport is approximately 77 kilometres south of Parafield. It has a sealed runway with a natural-surface short cross strip, sealed taxiway and apron facility. There is a flying school located at the aerodrome. The main activities include flying training and joy flights.



- LEGEND**
- Arterial Roads
 - Drainage/Water Body
 - Aerodrome

Figure 2.7: Airports located close to Parafield Airport

