MEEKATHARRA AIRPORT
MASTER PLAN
2022 – 2027

meekatharra
a golden prospect

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This revised plan was adopted by the Shire of Meekatharra at the Ordinary Meeting of Council on 21 January 2023.

KJ Matthews
Chief Executive Officer

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1. Introduction

The Shire of Meekatharra provides an Airport in partnership with the Civil Aviation Authorities, Airlines and private stakeholders to enable a safe and efficient air service for passengers and freight. The airport is currently serviced by a RPT service three times a week and accommodates a base for RFDS operations. Regular charter operations servicing the mining industry and government agencies operate through the airport. Due to the size of the runway, aircraft from other sites often use the airport for refueling and emergency purposes.

1.1 Description of Site

The site is owned by the Shire of Meekatharra. The Meekatharra aerodrome is located four kilometers east of the Meekatharra town centre. The aerodrome area is 573.8 hectares:

Certificate of Title: As described in the copy of Volume 1636 Folio 250

A number of leased areas occur within the airport.

Figure A - *Airport Location*

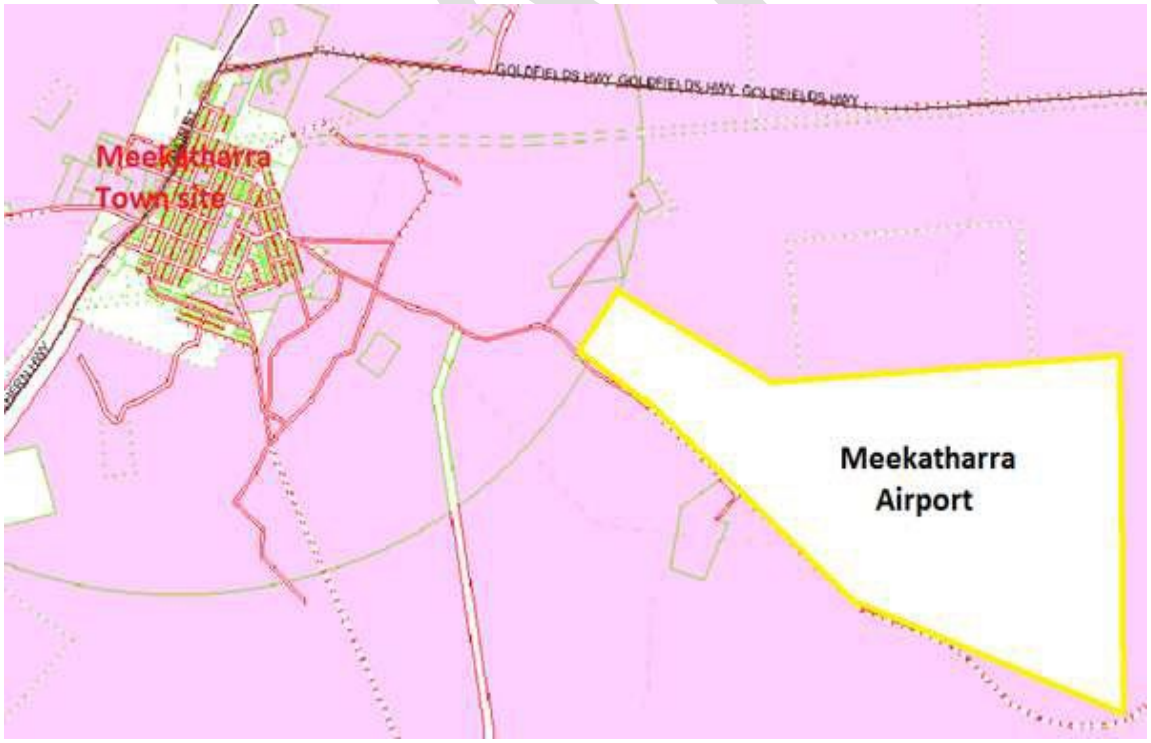


Figure B - *Airport Boundary*

1.2 Airport History

In 1943, the RAAF A1 class Government Aerodrome No 872 was constructed as part of the Commonwealth Governments Second World War defence program. The aerodrome was designed to take heavy bombers with two sealed runways: east west (7000ft / 2181m) and south west (5000ft / 1500m).

Meekatharra was one of a number of landing places intended for evacuation in the event of an enemy attack on the coast.

The Department of Civil Aviation took over the responsibility after the war and a terminal was built in 1958.

For many years Meekatharra was used as support back up to Perth Airport for larger aircraft.

The Shire of Meekatharra assumed control and ownership of the land and the facility in stages commencing in 2002. In recent times the old south west runway was decommissioned with Runway 15/33 (unsealed) being preferred as the minor runway.

2. The Plan

2.1 Purpose of the Plan

In December 2010 amendments to the Airports Act 1996 were introduced requiring airports to develop Master Plans to ensure the long term viability of the airports. These plans are now required to be submitted when making grant applications. In 2022 Council commenced the development of its Airport Strategic Framework Plan in accordance with the WA Department of Transport requirements. Council expects this Plan to be finalized in early 2023.

A Master Plan represents a framework within which the airport's future development can take place. It forms the basis to ensure that future aviation and other facilities required can be effectively located and developed. It is not a development plan, but forms the framework within which such detailed plans can be developed. The International Civil Aviation Organization states that a master plan is a guide and nothing more. It is not an implementation program.

A Master Plan, therefore, does not develop specifics with respect to improvements; it is only a guide to the types of improvements which should or could be undertaken.

The master plan points the direction of development. It does not present a detailed program of how to get to the actual design stage of improvement projects.

2.2 Goals

The goals of the airport master planning process are to:

- guide the responsible development of existing and proposed airport land uses and facilities;
- give consideration to a development philosophy that is compatible with State and local planning objectives, thereby ensuring an harmonious interface between the airport's operations and adjacent communities;
- inform public and private aviation interests, as well as the general public, of aviation requirements, and create a general awareness of the need for a systematic approach to planning and developing the airport;
- provide for future aviation traffic, passenger flows, ground traffic and various commercial functions within acceptable social, economic and environmental constraints; and
- incorporate issues raised through consultation with stakeholders from both the public and private sectors who may be impacted by ongoing airport development.

To achieve these goals, the Master Plan:

- outlines a framework for the provision of future facilities and services to achieve optimum airport use;
- incorporates planning considerations and management guidelines to ensure the airport is developed and managed in a socially and environmentally responsible manner, recognizing regional planning requirements and the goals of Local, State and Federal Government agencies;
- identifies opportunities for the development of aviation and commercial businesses; and
- follows a consultation program with both public and private sector stakeholders

3. Overview of the Airport

The airport and much of its infrastructure was established during the 1940/50's.
The airport is certified by the Civil Aviation Safety Authority (CASA) and operates in accordance with Manual of Standards (MOS) 139 – Aerodromes.
The aerodrome is bound by the Transport Safety Program (restricted) and is required to have a Drug and Alcohol Management plan.
The Aerodrome manual includes the emergency plan for the airport.

The main runway (09/27) is sealed with a length of 2181m and width of 30m. A secondary unsealed runway (15/33) is 1065m in length with a width of 30m. Taxiway "A" provides access from runway 09/27 to the main apron area. A general aviation sealed parking area is located to the west of taxiway "A". An additional taxiway is provided from Taxiway "D" to the Royal Flying Doctor Service (RFDS) base, which consists of an office and three hangars. A non directional beacon , satellite ground station and VOR/DME are located within the airport boundary and are maintained by Airservices Australia.

On site infrastructure consists of

Shire Infrastructure

Terminal – non screened check in area, seating, baggage area and toilets.

House – formerly air services office, now used to house the Airport Manager

Works Compound – This area contains workshop, garage /store and standby generator/power house

Diesel Fuel Farm – used for bulk storage of diesel fuel supply (Not Airport related but occupies Airport land)

Car parks & Roads – access to the airport, internal interconnection and parking areas

Fencing – Perimeter, Security and animal fencing

Airside Infrastructure –Runway 09/27, Runway 15/33, apron area, taxiways, GA aircraft parking area, runway/taxiway lights, Apron lighting and wind socks.

Fire Service – various hydrants with supplementary hydrants fed from an onsite system.

Non Shire infrastructure

Aviation Fuel Farm – AIR BP storage facility for aviation fuels (Jet A1 & Av Gas) which is piped to the airside self-serve bowsers. Pressurized Jet-A1 refueling is also available.

Aviation Fuel Farm (Airside) – The former Mobil fuel storage located near RFDS area

was removed in 2019 and replaced by AirBP facility in 2020. Proposed that AirBP then be replaced in 2023 by Viva Shell who have been awarded the contract by RFDS to provide fuel.

RFDS Base – Consists of a landside office 2 enclosed hangars and 1 parasol hangar.

Satellite Receiver Station – Provided and maintained by Global Star

Bureau of Meteorology Station- Provided and maintained by the Bureau of Meteorology that became fully automated and unmanned in 2019 with regular monthly inspections by BOM technicians on-site.

Aviation Communications –Three Compounds containing communication equipment provided and maintained by Air Services Australia, including the Satellite Ground Station, Non Directional Beacon and the VOR/DME.

The provision and maintenance of the Shire owned infrastructure is covered in the Airport Asset Management plan (Appendix 1).

The airport currently has a regular RPT service on Monday, Wednesday and Fridays with regular charter services occurring on most week days. General aviation flights are received on a fairly regular basis.

Due to its central location the airport is seen by the industry as an important link between all areas of the State.

RFDS operates 24 hours a day with approximately 100 landings per month.

Current passenger rates including charter flights through the airport are less than 25,000 per year; however, this varies dependent on the level of mining activities in the region.

4. Ground Transport Plan

The existing road network services the current airports transportation needs.

The road network consists of:

Airport Access road – a tree lined avenue from Murchison Downs Road into the airport terminating at the Terminal and associated car parks.

Airport House - RFDS Road – This road is a direct link between the two facilities and also provides access to the AirBp and Diesel fuel farms.

Airport Workshop Access Road – Runs off Airport Access Road terminating at the Workshop Gate.

House Access Road – Provides access from the Terminal Area to the manager's house.

All roads are sealed with one lane in either direction and cope with current traffic demands. Should it be required in the future a circular traffic flow could be initiated Refer figures B & C

Terminal Car Park A – currently suitably accommodates terminal traffic loadings there is adjoining land if this area was required to be extended for additional traffic numbers.

Terminal Car Park B – Acts as a coach parking area and overflow to Terminal Car Park A

The Murchison Downs road provides a sealed access to the airport from the town site of Meekatharra. It is a well maintained by the Shire of Meekatharra and is fit for purpose.

Land between the Terminal/Carparks and RFDS is zoned for Terminal improvements or additional car parking. This zoning fits well with the traffic flows indicated.

New internal road ways may be required to support any future developments in areas not already established. These will be assessed at the time of the developments

Figure C - *Current Traffic Flow*

Figure D - *Possible Traffic Flow (if required)*

5. Development

5.1 External

Due to is location the airport is unlikely to come under any external development pressures however there are long term mining operations in the local area that could affect take-off and landing distances if allowed to place waste material dumps within the approach paths. Regular supervision and consultation with operators will ensure flight paths are not compromised.

Potential light sources from these operations are another possible hazard to be monitored.

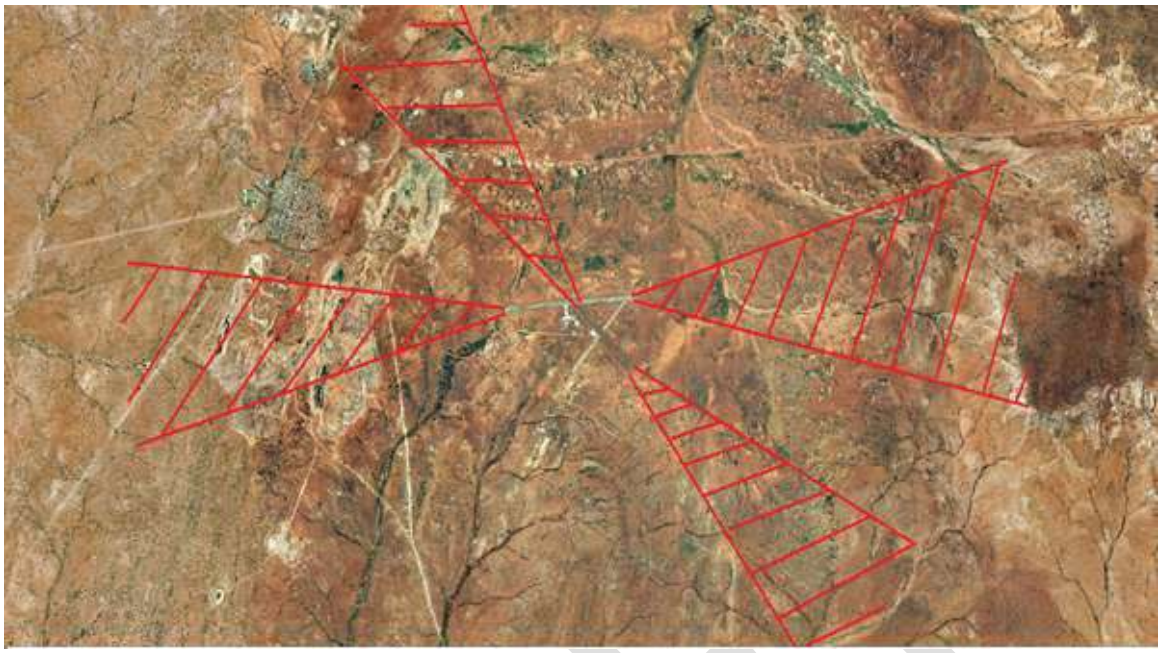
The Shire of Meekatharra Local Planning Scheme zones the areas within the flight paths as "Rural". A small reserve that abuts the northern boundary of the airport contains the Meekatharra Golf Club and offers no threat to flight paths. Another recreation reserve to the south of the airport contains the speedway that was developed as a Go Kart Track although no activity has occurred since circa 2019 due to the Speedway Club becoming defunct. The lease for the Reserve was transferred to Yulella Aboriginal Corporation, although again no activity has occurred. It is expected that any future activity will not impact the aerodrome flight paths.

Flight path zones that need to be monitored and protected when development applications are considered are highlighted in red in Figure E

Mining developments would be considered the highest threat to these zones. An additional threat may be blasting in open cut pits if these pits were to be redeveloped.

There are no current operations directly affecting these zones, a high level of vigilance is maintained with annual surveys being conducted.

Figure E



5.2 Internal

Whilst there are no immediate plans for new developments within the airport, critical areas have been zoned in accordance with the type of use and consideration for a new or renovated terminal building is planned in the next few years.

The zones cover current and possible future development areas and are highlighted on Figure F through to Figure Q.

Zone 1: General Aviation

a) Hangars and General Aviation operations (Fig F)

b) Future Taxiway & Aprons (Fig G)

Zone 2: Terminal

a) Terminal expansion (Fig H)

Zone 3: Car parks

a) Car parking (Fig H)

Zone 4: Commercial Developments

a) Offices/Commercial (Fig I)

b) Bureau of Meteorology (Fig J)

c) Satellite Receiver Station – Global Star (Fig K)

Zone 5: Critical Developments

a) Fuel Farms (Fig L)

b) RFDS Base (Fig M)

c) Communications NBN (Fig N)

d) Communications – VOR/DME (Fig O)

Zone 6: Possible Aeroplane Grave Yard or miscellaneous industry (Fig P)

Zone 7: Works Infrastructure (Fig Q)

Zone 8: Manager Accommodation (Fig R)

There are numerous areas that could be made available upon approach to the Shire.

These areas haven't been zoned at this stage so each application would be judged on its merits.

Figure F - *General Aviation Overview*

Figure G - *Possible Zone 1 configuration*

Figure H – Zone 2 & Zone 3 - *Terminal expansion and Car parking (Unplanned)*

Figure I – Zone 4a - *Offices/Commercial (Unplanned)*

Figure J – Zone 4b - *Bureau of Meteorology*

Figure K – Zone 4c - *Satellite Receiver Station – Globalstar*

Figure L – Zone 5a - *Fuel Farms & Communications*

Figure M – Zone 5b - *RFDS Base and Fuel Facility*

Figure N – Zone 5c - *Communications - Non Directional Beacon*

Figure O – Zone 5d - *Communications – VOR/DME*

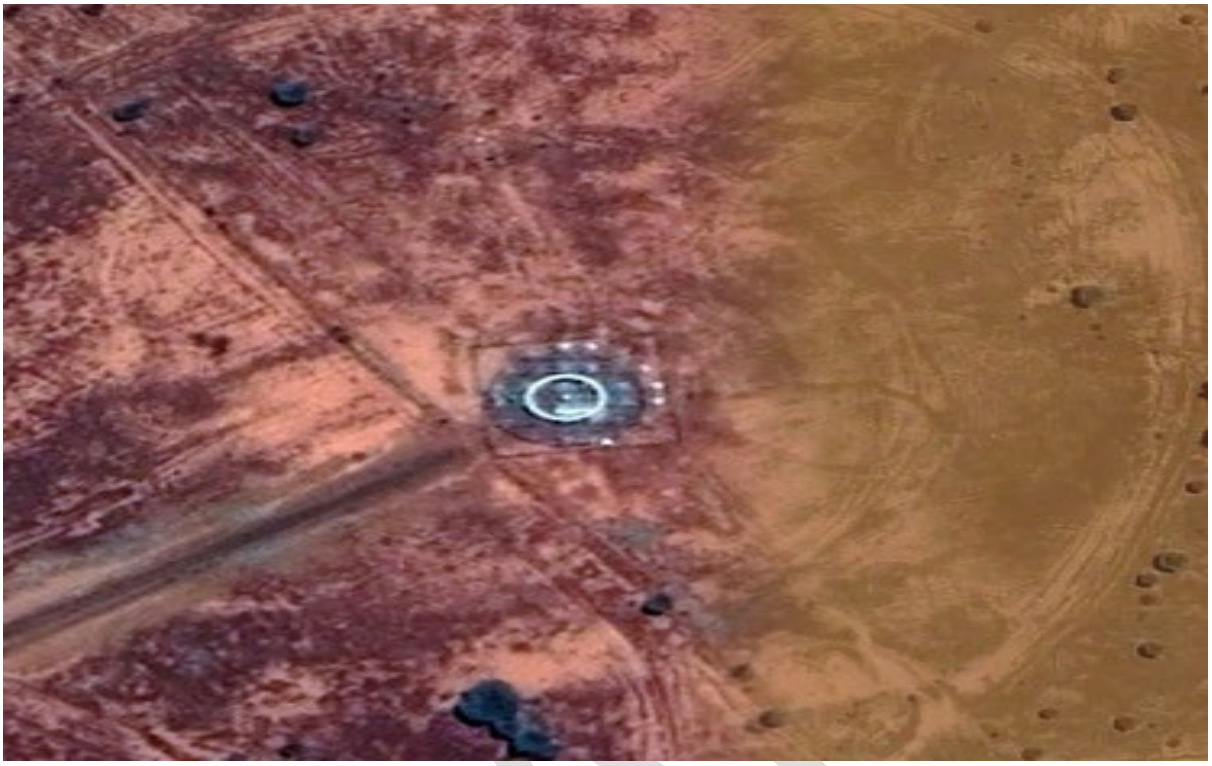


Figure P – Zone 6 - *Possible Development Area (Unplanned)*

Figure Q – Zone 7 - *Works Infrastructure*

Figure R - Zone 8 – *Manager Accommodation*

Terminal

The terminal was proposed in the Asset Management Plan for an upgrade in 2018/2019 however, this did not occur. The impact of COVID 19 also affected any possible development and the process will now be planned for between 2023 and 2025 pending Councils approval and funding availability, both internal and external.

Accommodation

Accommodation is provided on site for the Contract Airport Manager. This accommodation meets current requirements but may be subject to redesign as part of contract negotiations. The Building footprint is expected to remain unchanged therefore there will be no impact on surrounding infrastructure or the transport network

6. Local Planning Scheme

The Shire of Meekatharra has commenced a review of the current Town Planning Scheme (TPS) and Local Planning Strategy (LPS), TPS No. 4. Previously the TPS (No. 3) and LPS only covered the township of Meekatharra. Therefore, planning and development permissions were not required outside of that area. In 2015 a Local Planning Scheme was prepared which covers the entire Shire of Meekatharra, but not gazetted and therefore the proposed contents, purpose and aims of the TPS (including the airport) were not formally approved. This will be addressed in the current TPS No. 4 and Local Planning Strategy

Upon approval the Shire will have increased rights over development and building permits in the area of the Airport, including what standards are applied to buildings and developments within the airport.

As the Shire owns the airport and sees it as an important facility for the community and region, it is envisaged that the operational requirements of the airport will be protected. Section 120 of the Mining Act 1978 does allow mining activities to have the power to bypass Town Planning Schemes. These activities will be monitored to ensure operational standards are not impinged.

7. Environment

7.1 Wildlife

The effects on wildlife at the Meekatharra airport have been minimized by the introduction of a wildlife fence. This fence assists in isolating the airside area, in particular the runways, from wildlife intrusions. Regular slashing of grass also assists in deterring birds from the general area. Non-lethal means are used to further deter entry or nesting in the area.

7.2 Land degradation

Land degradation is well controlled with water flows monitored and any effects rectified. Erosion by wind or water is monitored and rectified as necessary. Runway 15/33 is closed when effected by water.

Fuel spills are dealt with in the prescribed manner. The two refueling points (main apron and RFDS base) are monitored. No major spills have been reported. The storage areas are well bunded so as to contain any spills. Daily checks are carried out on the fuel systems and storage facilities.

There are no perceived threats that may further impact on the environment.

7.3 Noise

Due to its location and the type of aircraft using the airport, aircraft noise is not seen as an issue. However Noise pollution is covered in the Meekatharra Environment Strategy (appendix 2).

Very few aircraft fly over the Meekatharra town site and the surrounding topography acts to block sounds traveling from the airport towards the populated area. Sound penetration is very conditional on wind direction and strength.

Due to the low impact of aircraft noise actual noise readings have not been accurately plotted. Figure R gives an indication of a typical noise envelope for an airport such as Meekatharra.

There is no anticipated change in aircraft types or operating patterns during the

period covered by this plan.

Future intensifying of aircraft movements may require a full survey in accordance with the four types of noise chart indicators used in Australia:

- Australian Noise Exposure Index (ANEI), which depicts the actual noise exposure over a previous period of time, usually a year;
- Australian Noise Exposure Concept (ANEC), which is a planning tool used to test possible changes to noise exposure resulting from possible changes to airport operations;
- Australian Noise Exposure Forecast (ANEF), which is endorsed for technical accuracy by Airservices Australia and is the official land use planning reference. There can only be one ANEF in force at a particular time. Under the Act, Jandakot Airport's ANEF is required to be updated at least every five years, in conjunction with the Master Plan update;

and

- Noise Above Contour (N60/65/70) charts, which calculate the average daily noise events above 60, 65 or 70 decibels (dbA). The Noise Above Contours represent the frequency of the expected aircraft noise impact and provide a more readily understood measure of noise exposure for the general public.

Figure R - *Atypical noise footprint*

8. Staffing

The airport is currently staffed under a tendered contract that was awarded in September 2022 to the current incumbent. The contract requires the functions of airport management, reporting officer and airport fuel representative to be carried out. Cobham Aviation engage the services of a local agent for ground handling and check-in functions. VIVA Shell will provide fuel services to RFDS and engage the services of AVICOM as a separate agent. The only other employer located on the airport is the Royal Flying Doctor Service. Staffing varies in accordance with their operational needs. Current staffing levels meet the airports requirements noting an expansion of activity may require this level to be reviewed.

9. Conclusion

The Meekatharra airport infrastructure and facilities are meeting current demand. This plan serves to highlight possible development opportunities and provides a guide as to the locations that are available for future activities and infrastructure.

There are no short term demands that need to be addressed.

10. Appendices

10.1 Aerodrome Asset Management Plan.

10.2 Meekatharra Airport Environment Management Strategy 2016 – 2021.

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