Australian Government

Civil Aviation Safety Authority

www.casa.gov.au

ARCHERFIELD

VISUAL PILOT GUIDE 2010

CASA'S VISUAL PILOT GUIDES

– the pilot's must have

As a visual pilot, you are encouraged to use this visual pilot guide (VPG) for planning flights in the class D and non-towered environment. In doing this, you will join thousands of pilots who have benefited from the information these guides provide.

Since the VPGs were introduced in 1998, they have become an integral part of the visual pilot's flight bag. Originally developed in response to the rising number of violations of controlled airspace in the Brisbane area, their popularity grew to the point that CASA decided to produce them for all the former GAAP aerodromes.

They undergo a process of continual improvement made possible only through feedback from industry, and the dedication of a number of industry participants. The VPGs are a must-have item for any pilot wishing to fly into or out of the featured aerodromes.

NOTE: The information contained in this guide was correct at the time of publishing, and is subject to change without notice. CASA makes no representation as to its accuracy. It has been prepared by CASA Safety Promotion for information purposes only.

Plan your route thoroughly, and carry current charts and documents. Always check ERSA, NOTAMs, and the weather, BEFORE you fly. The VPGs do not replace current operational maps and charts.

The Visual Pilot Guide (VPG) is an aid for pilots to use when flying into, out of and around Brisbane aerodromes. It is designed to help you in planning and conducting your flight.

The guide was developed with the assistance of operators based at Brisbane aerodromes.

For comments and suggestions on improving this guide, contact:

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1003.1251 (a)

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Map Key

CURRENT

Medical current? — no → **Do not fly solo.**

yes

Flight review current? — no → **Complete before flying in command.**

yes

Three or more take-offs and landings in the past 90 days? — no → **Do not carry passengers. (CAR 5.82.)**

yes

Maps and charts current? — no → **Obtain before flight planning.**

yes

Weather forecast and NOTAM — no → **Obtain forecast**

Website **www.airservicesaustralia.com**
Briefing **1800 805 150**
Helpdesk **1800 801 960**

yes

yes

FLIGHT PLAN

- **Choose suitable route and complete calculations**

  e.g. heading, groundspeed, ETI, etc…
  (Refer to back section of Airservices Australia Flight Notification Form.)

  www.airservicesaustralia.com/pilotcentre

- **Appropriate height**

  Check CTA and restricted area boundaries.

- **Flight fuel**
- **Last light**
- **Applied aircraft loading system**
- **Take-off and landing performance**
- **Survival equipment**

yes

SARTIME flight or flight into CTA

no

Leave flight note with a responsible person

yes

SUBMIT FLIGHT NOTIFICATION FORM:

NAIPS **www.airservicesaustralia.com/brief/fn.asp** (browser access)

NAIPS **www.asa.com/brief/iecs.asp** (NAIPS Windows application)

Fax **1800 805 150**

Briefing **1800 805 150**

Helpdesk **1800 801 960**

Radio to ATS on appropriate frequency is the last preference.

yes

yes

CHECK AIRCRAFT AND PERSONAL DOCUMENTS

Are you carrying?

- Pilot's licence
- Medical certificate
- Approved checklist
- Aircraft flight manual and/or pilot operating handbook
- Aircraft maintenance release

yes

Plan for contingencies

- Deteriorating weather
- Radio failure
- Diversions
- Arrival procedures (For example, 'Clearance not available, remain outside class D airspace')

yes

AIRCRAFT PRE-FLIGHT INSPECTION

Maintenance release valid

- Check for unserviceabilities
- Check sufficient hours remaining
- Check for required maintenance

Daily inspection certified

- Daily inspection or pre-flight inspection as per aircraft system of maintenance or pilot operating handbook

Fuel

- Check for correct grade, quantity, and contamination

Oil

- Check quantity

PRE-FLIGHT PLANNING

- Determine total fuel capacity and usable fuel (refer aircraft flight manual/POH).
- Determine fuel consumption rates (refer pilot's operating handbook).
- Re-familiarise yourself with the aircraft's fuel systems.
- Check fuel availability en route (note suppliers and operating hours).
- Plan to arrive with all fuel reserves intact.
  Never plan to use fixed or variable reserve fuel.
- Weight versus fuel. Keep in mind that you may not be able to carry full tanks.
- Check weather to determine holding and/or alternate fuel requirements.

PRE-FLIGHT INSPECTION

- Try to refuel on level ground to avoid inaccurate fuel measurements and unwanted fuel transfer.
- Dip each tank to check the amount of fuel. If a tank cannot be dipped, fill at least one tank (weight permitting) so there is a known fuel quantity.
- Cross-check fuel amounts by at least two separate methods. Use the lowest figure if they vary by more than three per cent.
- Ensure drains are closed and vents are unobstructed.
- If using avgas, rock the aircraft to move trapped water over the drain point before carrying out a fuel drain (refer to the aircraft manufacturer's recommendations).
- Check for contaminants, particularly water; and correct fuel type.
- Ensure the fuel filler cap is secure and sealed.

IN-FLIGHT FUEL MANAGEMENT

- At regular intervals (at least every 30 minutes and at turning points) compare fuel remaining from gauges with planned figures/ fuel log and monitor tank selection.
  Caution: Gauge readings as per aircraft's fuel calibration card.
- Use planned power settings and correct mixture leaning technique.

POST-FLIGHT FUEL MANAGEMENT

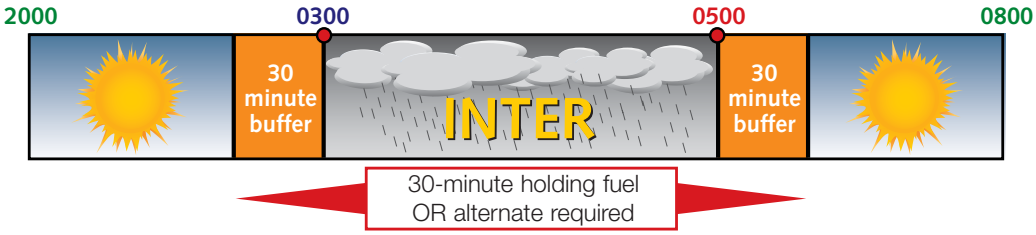
- Compare actual fuel used against planned fuel usage when next refuelling.

ALTERNATE DUE TO WEATHER SUMMARY (VFR)

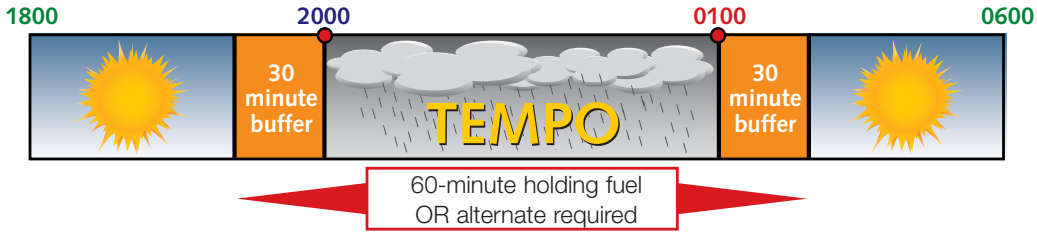
refer AIP ENR

1. **Cloud:** More than SCT (3 to 4 OKTAS) below ceiling of 1,500ft; or
2. **Visibility:** Less than 8km or forecast probability of fog, mist, dust, etc; or
3. **Wind:** Crosswind or downwind more than aircraft maximum. (Wind gusts must be considered.); or
4. **Thunderstorms:** Forecast or probability.

TAF YGEL 011835Z 0120/0208 09010KT CAVOK
INTER 0203/0205 16015KT 6000 SHRA BKN005 SCT030
FM 020500 16010KT CAVOK
T 15 19 24 20 Q 1008 1007 1005 1007



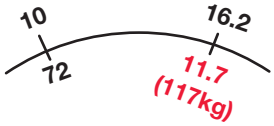
TAF YPJT 271648Z 2718/2806 33015G28KT 9999 SHRA FEW010 OVC100
TEMPO 2720/2801 1000 +TSGR BKN005 SCT040CB
T 14 13 13 11 Q 1016 1015 1013 1016



AVGAS FUEL CONVERSIONS

(Conversions are approximate)

162 litres avgas = 117kg



litres	÷ 0.72	x 0.72	kilograms
US gallons	÷ 3.8	X 3.8	litres
US gallons	÷ 2.72	X 2.72	kilograms

Example: Conversion from litres to kg using navigation computer.

SCENARIO - CESSNA 172RG

Category: **PVT**

From: **Geraldton (YGEL)**

To: **Jandakot (YPJT)** ETA **0500**

Distance: **208nm** Wind: **Nil**

Climb: **90kt** Cruise: **130kt**

Fuel capacity: **235 litres**

Cessna 172RG typical fuel flow:

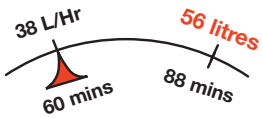
Climb: **11 min/10 litres/18nm**
Cruise: **38 litres/hr**
Holding: **28 litres/hr**

Use figures from your aeroplane's pilot operating handbook

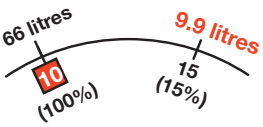
1 CLIMB

Fuel burn calculated using 'time, Fuel and Distance to Climb' chart in pilot's operating handbook

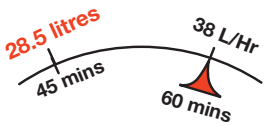
2 CRUISE



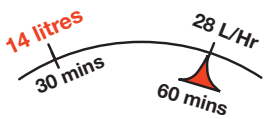
3 VARIABLE RESERVE



4 FIXED RESERVE



5 HOLDING



6 TAXI

NB: Allow appropriate fuel for aircraft (time calculation not applicable).

	Fuel Calculation	Min	L/Kg/...
1	**Climb**	11	10
2	**Cruise**	88	56
	Alternate	-	-
	Sub total	**99**	**66**
3	**Variable reserve**	15	10
4	**Fixed reserve**	45	29
5	**Holding**	30	14
6	**Taxi**	-	10
	Fuel required	**189**	**129**
	Margin	**167**	**106**
	Endurance	356	235
	From	YGEL	

FUEL RESERVE RECOMMENDATIONS

refer CAAP 234-1(1)

Type	Category	Flight	Variable Reserve	Fixed Reserve
PISTON	Private & aerial work	IFR & VFR	not mandatory	45 minutes
	Charter RPT	IFR & VFR	15%	45 minutes
TURBINE	Private & aerial work	IFR & VFR	not mandatory	30 minutes
	Charter RPT	IFR & VFR	10%	30 minutes
HELICOPTER	Private & aerial work	VFR	not mandatory	20 minutes
	Public transport & charter	IFR	15%	30 minutes

NOTE: Good airmanship dictates a higher margin than these recommended minimums.

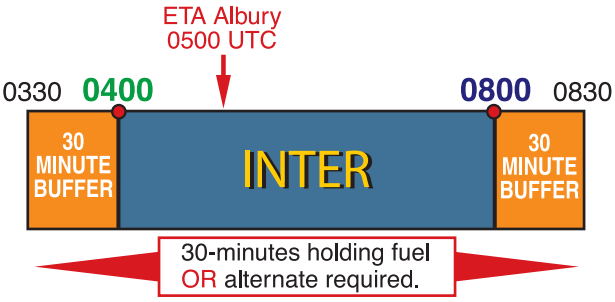
HOLDING FUEL

TAF YMAY 021830Z 0220/0308 35010KT CAVOK

FM 030400 30015KT OVC100

INTER 0304/0308 30020G40KT 3000+TSRA BKN010 SCT040CB

T 23 24 28 33 Q 1012 1013 1014 1009



CLASS D

INTRODUCTION

On 3 June 2010, the six existing general aviation aerodrome procedures (GAAP) locations adopted the International Civil Aviation Organization's (ICAO) class D airspace classification, along with procedures broadly aligned with those of the American Federal Aviation Administration (FAA).

The new class D procedures at the former GAAP aerodromes now also apply in all existing class D airspace.

Australia has adopted FAA class D procedures such as abbreviated clearances and distances from cloud, including:

- VMC criteria
- Parallel runway operations
- Abbreviated clearance by establishing two-way communications
- Maximum speeds, and
- Entry not constrained by a particular tracking point.

[Although under the new rules, you no longer have to proceed VFR within a class D control zone, IFR pilots are encouraged to proceed VFR whenever possible, and to advise ATC. Such action will remove delays that may be caused by separation requirements for IFR flights within the zone and adjoining airspace.]

ENTERING CLASS D

Entry points

One of the main changes pilots flying into former GAAP aerodromes should understand is that GAAP approach points are now VFR approach points, and are no longer mandatory. However, using VFR approach points, marked on the visual terminal charts with a shaded diamond, is recommended because they:

- provide an orderly path for entering the circuit
- help with noise abatement
- help to keep you out of nearby controlled airspace
- and avoid the flow of outbound traffic.

The VFR approach points are selected because they are prominent landmarks, which help with visual navigation, and make it easier for ATC to segregate traffic.

Under the new rules, ATC may still exercise the right to instruct you to enter class D airspace via a particular point.

Clearances

You must receive a clearance before operating in a class D control zone. This could be clearance to take off, instructions for circuit entry, or transit.

Individual clearances are required for:

1. Take-off and landing;
2. Entering, crossing or taxiing along all runways;
3. Taxiing on a manoeuvring area;
4. **Note**: An instruction to 'Hold short of runway … [number] left [or centre or right]' requires you to hold at a marked holding point.
5. Turns in a direction contrary to the circuit for a particular runway;
6. **Note**: An ATC circuit entry instruction acts as a clearance for a contrary turn, if required to comply with this instruction.
7. Circuits at a height other than 1,000ft; and
8. Operations on routes or at altitudes different from those published in ERSA.

Establishing two-way communications

When an aircraft contacts air traffic control at a class D aerodrome and provides sufficient information about track or position, level, and intentions for ATC to make an informed decision, ATC may clear the aircraft to enter the airspace by simply acknowledging the transmission with the aircraft's callsign. Alternatively, and more usually, ATC will provide brief instructions to the pilot.

Such instructions include 'join crosswind', 'overfly', or 'report at [position]'. The acknowledgment authorises the aircraft to enter the class D airspace following the stated track and level, or alternative instruction given by ATC. Once clearance to enter the class D airspace is given, the pilot is required to maintain two-way communications and to comply with any subsequent ATC instructions.

This shortened procedure does not eliminate the availability of a 'traditional' airways clearance where indicated, but it provides an abbreviated clearance option for use where both pilot and ATC understand the proposed course of action.

Readback requirements

There are no changes to readback requirements except in relation to taxi instructions. If you get a taxi instruction which includes a holding point, you must read back the name of the holding point.

You must read back:

- Any airways clearance, in full
- Any clearance or instruction to hold short of, enter, land on, conditional line-up on, wait, take-off from, cross, taxi or backtrack on, any runway
- Assigned runway, QNH directed to a specific aircraft, SSR codes, radio frequency instructions
- Altitude instructions, direction of turn, heading and speed restrictions.

Pilot responsibilities

When operating in class D airspace, you must:

1. Sight and maintain separation from other aircraft;
2. Comply with ATC instructions while ensuring you maintain separation from other aircraft;
3. Immediately advise ATC if unable to comply with a control instruction; and
4. Advise ATC if unable to sight, or if you lose sight of, other aircraft notified as traffic.

VMC in class D airspace

- Flight visibility at least 5,000m
- Horizontal distance from cloud of at least: 600m
- Vertical distance from cloud minimum of:
  1,000ft when above cloud;
  500ft when below cloud.

Special VFR (SVFR)

You must not conduct a VFR flight in class D airspace when VMC do not exist. VMC criteria have changed from the previous 'clear of cloud' prescription that applied under GAAP. In class D, VMC exists when you are able to maintain a separation of at least 500ft vertically below cloud.

Special VFR, with visibility of as low as 1600 metres, is now available. However, this procedure is intended to be used to recover inbound or circuit aircraft suddenly encountering reduced visibility (because of a rain shower, for instance) and won't be given to allow you to conduct circuits in reduced visibility. And you won't be given an SVFR clearance to depart the zone - remember that the visibility required in class G airspace is still 5000 metres!

Separation requirements for SVFR flights differ depending on whether the non VMC is caused by reduced visibility or low cloud. Under class D rules, SVFR flights will be separated from IFR flights at all times, and SVFR will be separated from other SVFR flights when visibility is the limitation.

SVFR is only available by day and cannot be initiated by ATC. It will only be given in response to a 'request special VFR' by the pilot. If you don't request SVFR, you will not be given clearance to enter class D airspace. Be sure to advise the tower of the reason for your request - either low cloud or poor visibility. Your request must be co-ordinated with Brisbane Air Traffic Control so that your SVFR flight can be separated from all IFR flights operating within the surrounding class C airspace and from SVFR fights in the case of reduced visibility.

There will generally be no specific tracking instruction given with a SVFR clearance because the pilot must be able to manoeuvre the aircraft around cloud in accordance with the SVFR criteria. Similarly, an altitude may not be given, although there is always the option available to ATC assign an altitude such as 'not above 1500'.

A special VFR clearance only applies within the class D control zone.

When operating under a special VFR clearance, you are responsible for ensuring that:

1. The flight is conducted clear of cloud;
2. Visibility is not less than 1,600 metres for fixed wing aircraft and 800m for helicopters; and
3. The flight is conducted in accordance with CAR 157 with regard to low flying.

Maximum speed within a class D control zone

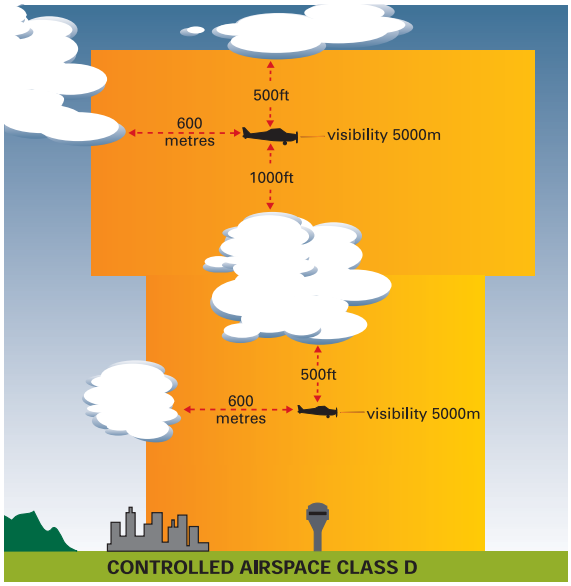
Unless ATC authorises otherwise, your indicated airspeed should not exceed 200kt within 4nm and 2500ft above the elevation of the aerodrome.

Separation

In class D airspace, ATC will provide the following air traffic services to aircraft:

- IFR flights will be separated from IFR and special VFR flights
- Special VFR flights will be separated from other special VFR flights when the visibility is less than VMC
- IFR flights will receive traffic information about VFR flights
- VFR flights will receive traffic information about IFR and other VFR flights
- Traffic avoidance advice and sequencing will be available on request.

You must keep a vigilant lookout for other aircraft even if you have received traffic information.



Under the new procedures, if you're flying VFR, you are entirely responsible for **avoiding the wake turbulence** from heavier aircraft ahead, including when you are landing. The same applies if you're flying IFR and you accept responsibility to follow or maintain own separation with a heavier aircraft ahead. For these circumstances, ATC assistance will be limited to issuing a wake turbulence caution.

Surface movement control

Surface movement control (SMC) has been re-introduced at the former GAAP aerodromes and is now provided at ALL controlled aerodromes.

On initial taxi

Before taxiing or calling surface movement control, check that your radio receiver is functioning correctly and obtain the current ATIS. The preferred method for checking your radio is to monitor the ATIS.

When ready to taxi, make a taxi call to SMC, giving the following details:

1. callsign and aircraft type;
2. number of POB (not required for VFR flights);
3. identification of ATIS code received;
4. location on aerodrome;
5. flight rules (not required for VFR flights);
6. intentions (crosswind circuit training, first intended landing point, etc); and
7. first tracking point (if no flight plan submitted);
8. for training flights, whether dual or solo.
9. 'request taxi'.

If an airways clearance is required follow the ERSA for correct request procedures.

To minimise delays to your departure, you should notify flight details using the national aeronautical information processing system (NAIPS) as the preferred option. You can also telephone, fax or, as a last resort, radio SMC.

Where possible, you should carry out your pre-take-off checks in a run-up bay. A taxi clearance to a particular runway holding point entitles you to conduct your pre-take-off checks using an en-route run-up bay.

Never enter or cross a runway en route to the holding point or run-up bay unless specifically cleared to do so by ATC.

When vacating a holding bay, you must give way to aircraft on the taxiway.

Ready for take-off

When you are ready for departure and first in line at the holding point, select the relevant tower frequency, and report:

- [Callsign] 'ready', and
- The designator of the departure runway.
- Departure direction or intentions for example, 'ABC, Ready runway [*Left/Centre/Right*] For [*Upwind/Crosswind/Downwind*] departure.'

After landing

Before landing, plan your taxi route to your parking position. After landing, vacate the runway as soon as practicable. Remember that aircraft on a taxiway must give way to aircraft vacating a runway.

If you have landed on a runway that intersects another runway, you may cross the intersecting runway, but you must not vacate onto the intersecting runway unless ATC has cleared you to do so.

After vacating a runway, you must not enter, re-enter, cross or taxi along any runway unless ATC has cleared you to do so. Contact SMC; advise your current location and your intentions or destination on the aerodrome.

Consult ERSA for any additional location specific procedures.

Flying in the circuit

ATC may issue a sequencing instruction with a take-off or touch-and-go clearance. When issued with a sequencing instruction, you must follow the aircraft you have been sequenced to follow.

Unless otherwise instructed by ATC, you must report downwind when starting or joining the downwind leg. This report should include callsign, 'downwind' and intentions [full-stop or touch-and-go].

If there is too much radio traffic for the call to be made in this position, report mid-downwind or late-downwind as appropriate. ATC will issue a sequencing instruction based on your position in the circuit.

ATC approval is required before conducting non-standard circuit operations such as practice glide approaches, or simulated engine failure training in single and multi-engine aircraft. Such an approval may be issued on a one-by-one basis or, traffic permitting, as a blanket clearance for a specified period of time. (Note: local aerodrome procedures may preclude such operations). You must also obtain tower approval before conducting simulated engine failure training in a multi-engine aircraft within 5nm of a controlled aerodrome.

In sequencing aircraft, ATC will indicate the position of the preceding aircraft by reference to a leg of the circuit or as a clock bearing, and describe it either as a specific type or in general terms (e.g., Cessna or twin). Unless ATC instructs otherwise SSR Transponder should be turned to ON/ALT code 3000.

ATC may issue a sequence number. Sequence numbers specify the landing sequence position of an aircraft with respect to any preceding aircraft.

The instruction 'follow' requires you to sight the preceding aircraft, and regulate your speed and approach path to achieve separation. If you cannot see and identify the preceding aircraft, you must advise the tower.

A landing clearance does not diminish your responsibility to maintain sufficient separation from the preceding aircraft during landing.

Advise whether dual or solo for training flights with taxi call.

Inbound call

You must establish and maintain two-way communications with the class D tower before entering the control zone from class G airspace.

You should make your inbound call approaching the relevant VFR approach point. Alternatively, you may establish initial contact with the tower when you are around eight to 10 miles from the aerodrome.

Your inbound call should include: callsign, type, position, level, ATIS code received, and intentions (for example, 'inbound').

You should squawk code 3000 and ALT just prior to contacting the tower with your inbound call.

DEPARTURES

Into class G airspace

When departing the control zone into class G airspace, you should do so on **upwind, crosswind** or **downwind** by extending the relevant leg of the circuit and then tracking clear of VFR approach points and associated routes.

As a VFR flight, you do not need to make a departure call when departing the control zone directly into class G airspace. Nor do you need to request approval to change frequency when transiting from the class D control zone into class G airspace.

Into class C airspace

If you are departing directly into class C airspace, the airways and departure clearances issued by ATC will authorise you to operate in both class D and class C airspace.

Transit of a class D control zone

If you intend to overfly the class D control zone from class G airspace without landing, it is recommended you plan to do so via a VFR approach point.

You must establish two-way communications with ATC before reaching the control zone boundary, so you should make your call approaching the relevant VFR approach point. Alternatively, you may establish initial contact with the tower when you are around eight to10nm from the aerodrome.

Your call should include: callsign, type, position, level, ATIS code received and intentions (for example, 'overflying for [next tracking point]'.

Flight near class D airspace

When flying in class G airspace near a class D control zone boundary, you should consider monitoring the tower frequency to assist awareness of traffic entering and leaving the control zone.

Licensing

A private pilot licence holder who has the logbook entry to fly an aircraft as pilot in command (PIC) in a control zone at a GAAP aerodrome, may, on or after 3 June 2010 fly an aircraft as PIC in class D non-radar airspace.

In addition, a licensed private pilot will be eligible for the log book entry to fly an aircraft as PIC in a control zone which has no radar service.

DISCLAIMER

This information is a brief outline of the practices and procedures adopted at class D aerodromes on 3 June 2010, and is designed to provide insight into the general philosophy behind the procedures. This information is not necessarily definitive and the information should not be used operationally without first cross-referencing with the appropriate documentation.

Noosa Heads - Coastal 1

Between Noosa Heads and Peregian Beach, when over water stay below 1500ft. Past Peregian Beach a clearance is required inland and over water.

Northwest of Sunshine Coast 2

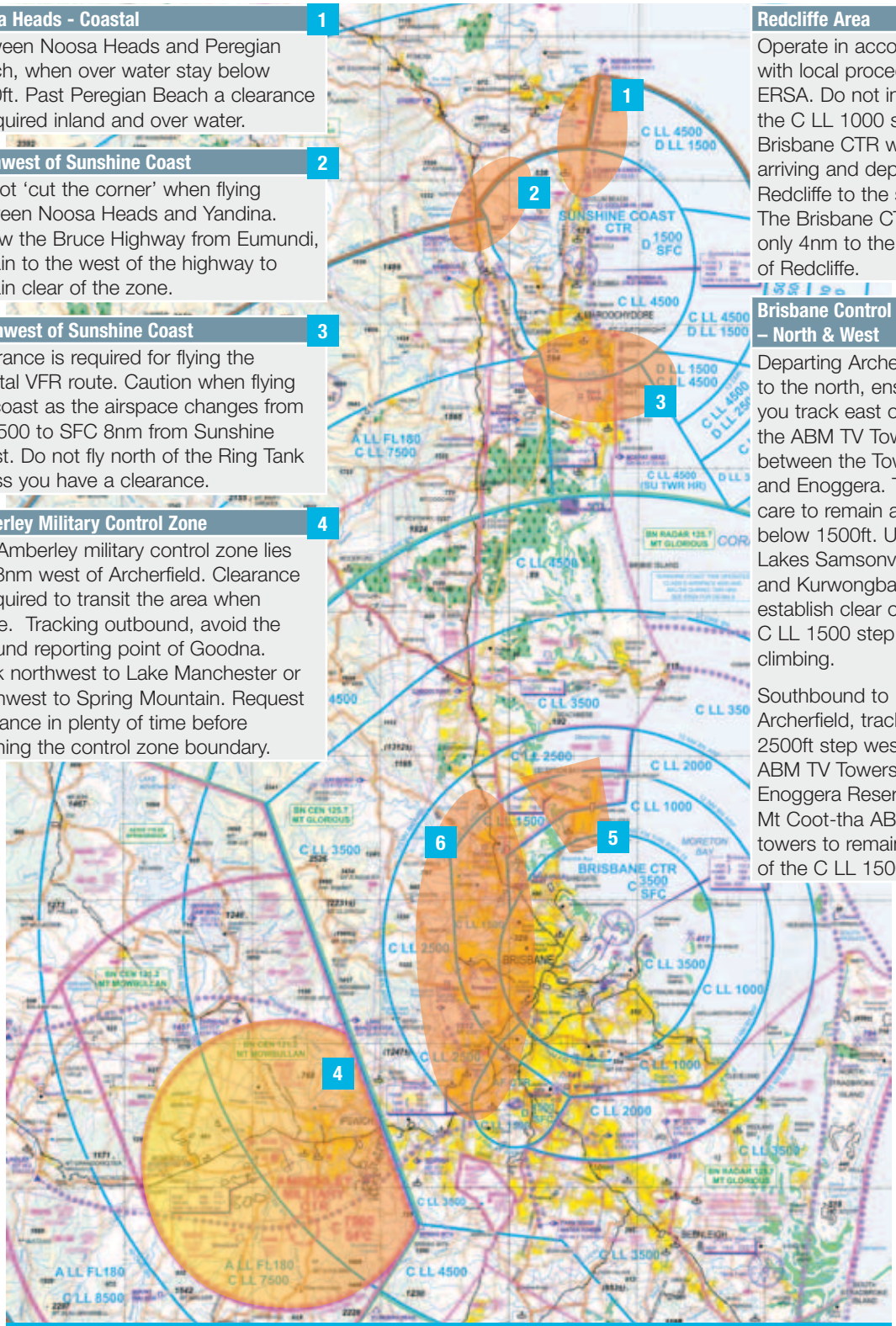
Do not 'cut the corner' when flying between Noosa Heads and Yandina. Follow the Bruce Highway from Eumundi, remain to the west of the highway to remain clear of the zone.

Southwest of Sunshine Coast 3

Clearance is required for flying the coastal VFR route. Caution when flying the coast as the airspace changes from LL 4500 to SFC 8nm from Sunshine Coast. Do not fly north of the Ring Tank unless you have a clearance.

Amberley Military Control Zone 4

The Amberley military control zone lies just 8nm west of Archerfield. Clearance is required to transit the area when active. Tracking outbound, avoid the inbound reporting point of Goodna. Track northwest to Lake Manchester or southwest to Spring Mountain. Request clearance in plenty of time before reaching the control zone boundary.



Redcliffe Area 5

Operate in accordance with local procedures in ERSA. Do not infringe the C LL 1000 step or Brisbane CTR when arriving and departing Redcliffe to the south. The Brisbane CTR is only 4nm to the south of Redcliffe.

Brisbane Control Zone – North & West 6

Departing Archerfield to the north, ensure you track east of the ABM TV Towers, between the Towers and Enoggera. Take care to remain at or below 1500ft. Use Lakes Samsonvale and Kurwongbah to establish clear of the C LL 1500 step before climbing.

Southbound to Archerfield, track in the 2500ft step west of the ABM TV Towers. Use Enoggera Reservoir and Mt Coot-tha ABM TV towers to remain clear of the C LL 1500 step.

Monitor Brisbane Radar 125.7

USING YOUR GPS

GPS should not be used as a sole means of navigation

Ensure your GPS plan has been cross-checked against your written plan.

GPS is **not** a substitute for thorough flight planning.

Become familiar with the operation of your GPS unit before the flight.

Use **caution** with the 'GO TO' function. Check for CTA and restricted areas.

Always apply commonsense checks to GPS information. For example: Where should the sun be relative to your position? Should the coast be on your left or right?

GPS LATITUDE AND LONGITUDE

ABM TV TOWERS (TVT)	S27	28.5	E152	55.0
AMBERLEY (YAMB)	S27	38.4	E152	42.7
ARCHERFIELD (YBAF)	S27	34.2	E153	00.5
BOND UNIVERSITY (BUVY)	S28	04.6	E153	24.6
BRISBANE (YBBN)	S27	23.0	E153	07.1
BROMELTON (BML)	S27	58.0	E152	54.0
BURLEIGH HEADS (BLGH)	S28	05.5	E153	27.5
CABOOLTURE (YCAB)	S27	05.3	E152	57.0
DAYBORO (DBO)	S27	12.0	E152	49.3
DREAMWORLD (DRLD)	S27	51.9	E153	19.0
FLINDERS PEAK (FPK)	S27	49.0	E152	48.5
GOODNA (GON)	S27	37.0	E152	53.3
JACOBS WELL (JCW)	S27	46.0	E153	20.0
JUPITERS CASINO (JUP)	S28	01.9	E153	25.8
KILCOY TOWNSHIP (KLCY)	S26	56.5	E152	33.8
KILCOY NDB (KCY)	S26	55.1	E152	34.4
LAKE MANCHESTER (LMC)	S27	29.0	E152	46.0
LARAVALE (LAV)	S28	05.0	E152	56.0
MALENY (MLY)	S26	45.0	E152	46.0
MOFFET HEAD (MFH)	S26	48.0	E153	08.5
MT COTTON (MCOO)	S27	37.3	E153	13.0
MT GRAVATT (MVT)	S27	33.0	E153	04.5
NERANG (NEN)	S27	59.3	E153	20.3
PARK RIDGE WATER TOWER (PKR)	S27	42.7	E153	02.4
PETRIE (PTI)	S27	16.0	E152	58.5
PORPOISE POINT (PRP)	S27	56.2	E153	25.5
REDLAND BAY (REDB)	S27	36.0	E153	18.0
SOMERSET DAM (SMD)	S27	07.3	E152	33.0
TARGET (TAR)	S27	37.0	E153	07.0
THE PINES (PIN)	S28	08.5	E153	28.0

AT A GLANCE

Elevation	63ft
Location	S 27 34.2 E 153 00.5
Tower	118.1 123.6
Ground	119.9
ATIS	120.9 419
FIA	125.7
FUEL	121.65 BP ('Air BP')
	128.95 Mobil ('Archerfield Refuelling Services')
	128.95 Shell ('Archerfield Refuelling Services')

ARCHERFIELD AERODROME

Archerfield is a general aviation aerodrome operating to class D control zone procedures. You must not enter the Archerfield control zone (CTR) until Archerfield Tower has responded to your report which must include your track/position, level and intentions. The air traffic control (ATC) response may simply be your call sign which indicates that you are cleared via your stated intentions, or a more specific instruction (clearance) statement.

Operator: Archerfield Airport Corporation

a: PO Box 747, Archerfield, Queensland 4108

t: 07 3275 8000

f: 07 3275 8001

w: www.archerfieldairport.com.au

ARCHERFIELD CLASS D PROCEDURES

For more detailed information, refer to AIP ENR 1.1 and ERSA

Pilots unsure of the procedures at Archerfield should advise ATC on first contact using the phrase 'unfamiliar with Archerfield'.

The circuit altitude is 1000ft on Archerfield QNH. There are special departure procedures and tracking requirements notified in the ERSA for VFR aircraft and IFR aircraft wishing to make a VFR departure.

Archerfield is equipped with parallel runways; simultaneous contra-circuits may be conducted by day utilising separate tower frequencies. Operations are regulated independently in each circuit, with ATC clearance required to enter the opposite circuit or airspace.

Where operations are confined to a single runway, ATC will specify the circuit direction.

When arriving at Archerfield, you must provide sufficient notice to ATC if you wish to enter the control zone via other than one of the VFR approach points.

Control zone entry and circuit joining instructions from ATC are generally given to you at Target, Goodna, Centenary Bridge (via ABM TV Towers) and Logan Motorway (via Park Ridge Water Tower).

Archerfield control zone dimensions

The Archerfield class D control zone is shown on both the Brisbane and Gold Coast visual terminal charts (VTC). The control zone upper limit is 1500ft.

CAUTION: Brisbane class C airspace adjoins the Archerfield control zone above 1500ft, and on the north eastern side of the control zone above 1000ft.

Archerfield operating hours

Refer to ERSA

Closed Christmas Day

Outside these hours non-towered procedures apply within the control zone boundary.

Check NOTAM and ATIS to confirm operating hours.

Tower frequencies

There are two tower frequencies in use at Archerfield; 123.6 and 118.1.

Information on the frequency to be used (or any alternative frequency arrangements) will be broadcast on the automatic terminal information service (ATIS).

Readback requirements

As in any ATC environment, certain items of a clearance or instruction must be read back. Those items applicable to Archerfield are:

1. Any airways clearance in full;
2. Any clearances or instructions to hold short of, enter, land on, take-off on, cross, or backtrack on any runway;
3. Assigned runway, altimeter setting directed to specific aircraft, SSR codes, radio and radio navigation aid frequency instructions;
4. ATC route and approach clearance, and
5. Level instructions, direction of turn and heading, and speed restrictions.

Provision of separation

In class D airspace, IFR and VFR flights are permitted and all flights are provided with an air traffic control service. IFR flights are separated from other IFR and special VFR flights, and receive traffic information in respect of VFR flights. VFR flights receive traffic information in respect of all other flights. Special VFR flights are separated from other special VFR flights when visibility is less than VMC.

Pilot responsibilities

When operating in the Archerfield CTR, you must:

1. Sight and maintain separation from other aircraft;
2. Comply with ATC instructions while ensuring that separation is maintained from other aircraft.
3. Immediately advise ATC if unable to comply with a control instruction; and
4. Advise ATC if you are unable to sight, or if you lose sight of, other aircraft notified as traffic.

ATC responsibilities

Air traffic control (ATC) will:

1. Apply runway separation standards;
2. Issue instructions and/or traffic information to regulate traffic;
3. Provide relevant traffic information to regulate traffic;
4. Where practical, maintain surveillance of aircraft activity within the CTR and on the aerodrome.

Traffic information

ATC will provide traffic information when:

1. You must give way to, follow, or otherwise adjust your aircraft's flight path relative to that flown by another aircraft; or,
2. The relative positions of aircraft cannot be established, and a collision or near miss may be likely unless one or both aircraft adjust their flight paths. In this case, ATC will begin an alerting service with the cautionary word 'Alert'.

(Remember: just because ATC provides this traffic information does not mean that you don't have to keep a good lookout and manoeuvre as required to avoid other traffic.)

Clearances

You must obtain a clearance before operating in the Archerfield CTR when the tower is active. A clearance to take-off or instructions for circuit entry or transit constitute this clearance. You need individual clearances for:

1. Take-off and landing;
2. Entering, crossing or taxiing across all runways;
3. **Note:** An instruction to, 'Hold Short of Runway (number) left (or right)' means you must hold at a marked holding point or hold short of the runway strip.
4. Turns in a direction contrary to the circuit for a particular runway;
5. **Note:** An ATC circuit entry instruction constitutes a clearance for a contrary turn if that is required to comply with the instruction.
6. Circuits at a height other than 1000ft;
7. Operations on routes or at altitudes different from those published in ERSA.

Special VFR clearance

You must only conduct VFR flight in the Archerfield control zone when there are visual meteorological conditions. However, at your request, ATC may authorise you to conduct operations within the zone in conditions less than VMC. In this case you would be issued with a special VFR clearance (AIP ENR 1.2, 1.2) which is only applicable within the Archerfield CTR.

When operating under a special VFR clearance, you must ensure that:

1. The flight is conducted clear of cloud;
2. Visibility is not less than 1600 metres; and
3. The flight is conducted in accordance with CAR 157 with regard to low flying (AIP ENR 1.2-1).

Aerodrome information

Automatic terminal information services (ATIS) is broadcast on 120.9, and on the NDB frequency 419.

When ATIS is not available, ATC will provide terminal information. This will include runway-in-use information, traffic patterns and QNH. You can request landing information with the inbound report.

When the control zone is deactivated and non-towered procedures are in use, the ATIS will broadcast information ZULU.

Aerodrome weather information service (AWIS) is available by phoning 07 3239 8720.

Circuit operations

Whenever parallel runways are utilised for simultaneous contra-circuits the circuit direction must be determined as follows:

1. Where runway Right is nominated the circuit is right-hand;
2. Where runway Left is nominated the circuit direction is left-hand.

The **circuit altitude** is 1000ft on Archerfield QNH, unless otherwise instructed by ATC or notified on the ATIS.

Unless ATC instructs you otherwise, you must **report downwind** when starting the downwind leg, and must advise your callsign and intentions (i.e. full stop, or touch-and-go).

If there is **frequency congestion**, and you can't make the call in this position, you must report mid-downwind or late-downwind, as appropriate.

If you wish to conduct **non-standard circuit operations**, such as glide and flapless approaches, you must advise ATC with the downwind report (or a taxi call). This advice will also alert other circuit traffic.

Simulated engine failures after take-off in single-engine aircraft require ATC approval and recovery must be initiated prior to the departure end of the runway.

When appropriate, ATC will issue a **sequencing instruction**. In sequencing aircraft, ATC will indicate the position of the preceding aircraft by reference to a leg of the circuit as a clock bearing, and describe it either as a specific type or in general terms (e.g. Cessna or twin).

ATC may issue a **sequence number**. Sequence numbers specify the landing sequence position of an aircraft with respect to any preceding traffic.

The instruction '**follow**' requires you to sight the preceding aircraft, and regulate your circuit speed and approach path to achieve longitudinal separation. If you cannot sight and identify preceding aircraft, you must advise ATC.

ATC will advise when **wake turbulence** may be a hazard.

A landing clearance does not diminish your responsibility to maintain sufficient separation from the preceding aircraft during landing.

Note: An aircraft can be cleared to land while a preceding aircraft is still on the runway provided ATC is satisfied that no collision risk exists.

If ATC instructs you to **go around**, or you initiate a missed approach, you must:

1. Commence climb to circuit height.
2. Position the aircraft on the active side and parallel to the runway you are using, while maintaining separation from other aircraft.
3. Follow ATC instructions or re-enter the circuit from upwind.

Caution: There may be other aircraft on simultaneous approaches to Archerfield's parallel runways.

You MUST:

- Identify any traffic on the opposing base leg and monitor their position while you are turning final;
- Not overshoot when turning final; and
- Not drift off the extended runway centreline once established on final.

Operating within proximity to Archerfield

When operating in class G airspace in proximity to the Archerfield control zone boundary, you should consider obtaining the ATIS and monitoring the relevant tower frequency - 118.1 or 123.6 - to enhance your situational awareness of traffic entering and leaving the control zone.

Maintain a continuous lookout for other aircraft.

Arrivals

The tower frequency to report on will be advised on the ATIS, and will be dependent on the runway in use, and the direction that you are arriving from.

Arriving aircraft should track via and report at one of the VFR approach points (Target, Goodna, abeam ABM TV Towers and Park Ridge Water Tower at a recommended altitude of 1500ft.

Aircraft arriving from abeam ABM TV Towers must also report abeam Centenary Bridge and aircraft arriving from Park Ridge Water Tower must also report crossing the Logan Motorway.

Your inbound report should state that you intend to enter the zone at 1500ft. However, ATC may instruct you to enter at another altitude. If you are instructed to 'overfly' or 'join upwind', enter the zone at the altitude specified by ATC.

Departures

Start approval is required for all circuit operations, and for other operations if notified on the ATIS.

Aircraft planning to depart into adjoining class C airspace must contact Brisbane Radar on 125.7 for a discrete transponder code immediately prior to taxiing.

Aircraft planning to transit the Amberley control zone must contact Amberley Approach by phone on 07 5361 3349 prior to departure (preferred), or Amberley Delivery on 134.6 crossing the Centenary Highway for a discrete transponder code.

Depart by extending the relevant leg of the circuit to track clear of the VFR approach points. Climb to not above 1000ft.

Departing to remain in class G airspace:

No departure report required.

If departing to the north (DEP north) track via Walter Taylor Bridge.

If departing to the east (DEP east), track via overhead Gateway Motorway/Pacific Motorway intersection (085M/5.5nm Archerfield).

Note: DEP east is not available when runway 22 is active except for aircraft requiring clearance into class C airspace.

If departing to the south (DEP south) track 135 degrees magnetic. If departing from runway 28L, track 135M from the crosswind leg.

If departing to the west (DEP west) depart to the west remaining clear of parallel circuit traffic. If runway 10 is in use, extend the downwind leg but avoid crossing the final approach to runway 10.

Any other departure tracks must be as cleared by Archerfield Tower.

If you are departing to remain in class G airspace, change to and monitor Brisbane Radar (125.7) when clear of the Archerfield control zone (when the tower is active). ATC will not issue specific transfer instructions.

Departures intending to enter class C airspace or to transit Amberley CTR

If you are departing directly into class C airspace a departure report is required.

Follow the departure procedures and routes in ERSA.

Transponder

If you are engaged in circuit training in the Archerfield control zone, you must set your transponder to code 3000 and standby. If you are departing or arriving at Archerfield you should set your transponder to 3000 and ALT when in the zone, and when you are clear of the Archerfield CTR, set 1200 and ALT.

Radio failure

If possible, land at a suitable aerodrome in class G airspace and arrange a 'no-radio' arrival by phone with Archerfield Tower on 07 3275 8230.

Otherwise carry out general COM failure procedures in ERSA.

Track via an appropriate VFR approach point.

Enter the control zone at 1500ft AMSL and maintain that altitude until overhead the aerodrome.

Ascertain the runways in use. For runway 10/28 join the southern circuit for landing runway 10R or 28L. For runway 04/22 join the eastern circuit for landing runway 04R or 22L.

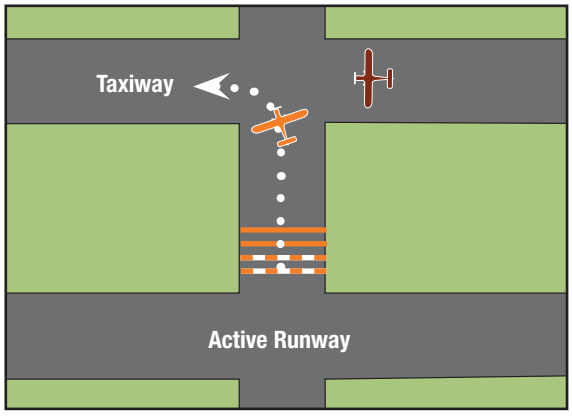
When ready, descend to 1000ft while remaining clear of the other circuit.

Proceed with a normal circuit and landing.

Maintain separation from other aircraft and watch for light signals from the tower.

Notices

1. Archerfield Airport is not available to aircraft above 5700kg maximum take-off weight (MTOW) without prior permission from the aerodrome operator.
2. There is a possibility of large numbers of flying foxes and birds on and in the vicinity of the aerodrome. Significant numbers of flying foxes are observed on the western boundary of the aerodrome.
3. Ground signal circle located adjacent to the central wind direction indicator operates only outside tower hours.
4. You should taxi only via sealed taxiways or natural surface taxiways marked by yellow cones.



After landing, you should vacate the runway as soon as possible. Aircraft on the taxiway must give way to aircraft vacating the active runway. After vacating the runway, you must not cross, enter or taxi along a runway unless you obtain a clearance to do so.

1. Contact Archerfield Ground (119.9 MHz) immediately after vacating the landing runway. Advise your location and your destination on the aerodrome. An instruction to hold short of a runway (e.g. 'Hold short of runway 22L') means you must hold at a marked holding point, or hold short of the runway flight strip.
2. If taxiing on a runway, look for painted holding points, or look left and right for a line of gable markers and hold behind them until ATC gives you a taxi clearance.

ARCHERFIELD NON-TOWERED AERODROME PROCEDURES

Operating hours

CTAF procedures apply within the Archerfield control zone lateral and vertical limits (1500ft AMSL) during non-towered hours.

Refer to ERSA for Archerfield non-towered operating hours.

Check NOTAM and ATIS to confirm these non-towered hours.

Caution: Class C airspace above and adjacent to Archerfield remains active during non-towered hours. Do not operate above 1500ft without an airways clearance.

Non-towered frequency

The non-towered frequency is 118.1 MHz.

Preferred runway

Runway 28R is the preferred runway for take-off when conditions permit.

Runway 04R/22L available HJ only – circuits left hand.
Runway 10L/28R available H24 – circuits left hand.

Runways 04L/22R and 10R/28L are not available during non-towered hours.

Non-towered arrivals (by day).

Even when the control zone is deactivated, it is good practice to use the VFR approach points Target, Goodna, ABM TV Towers (then via abeam Centenary Bridge) and Park Ridge Water Tower when entering the Archerfield circuit area.

Circuit entry

Confirm that Archerfield is non-towered via the ATIS, (information 'Zulu'), or NOTAM.

Wind and QNH can be obtained via Archerfield AWIS on phone 07 3239 8720.

Broadcast your intentions on 118.1 before reaching 10nm Archerfield.

Observe the runway in use via the wind sock, or by listening to other traffic currently in the circuit.

Remember that left-hand circuits are required for runways 04R and 28R when the control tower is not active.

Make a radio broadcast announcing your intentions (IAW ENR 1.1-42).

Join downwind and fly a normal circuit. You should fly at least three legs of the circuit unless you can comply with the requirements for a straight-in approach. Depending on traffic, it may be appropriate to broadcast 'turning base'.

Always keep a good lookout, especially for any aircraft making straight-in approaches. (IAW ENR 1.1-86 (64.6))

Refer to circuit entry procedures and broadcast intentions (IAW ENR 1.1-42.)

Departures (by day)

Leaving the circuit

Confirm that Archerfield is non-towered, via the ATIS (information 'Zulu'), or other traffic. AWIS information available by phone on 07 3239 8720.

Make a taxiing broadcast with your intentions on 118.1.

If you require clearance into class C airspace, immediately prior to engine start contact Brisbane Radar on 125.7 (primary) or by telephone on 07 3866 3694 for an 'expect clearance time' and discrete transponder code.

Make other broadcasts as necessary (IAW ENR 1.1-42).

Depart Archerfield on climb to 1000ft and depart the zone by extending a leg of the circuit.

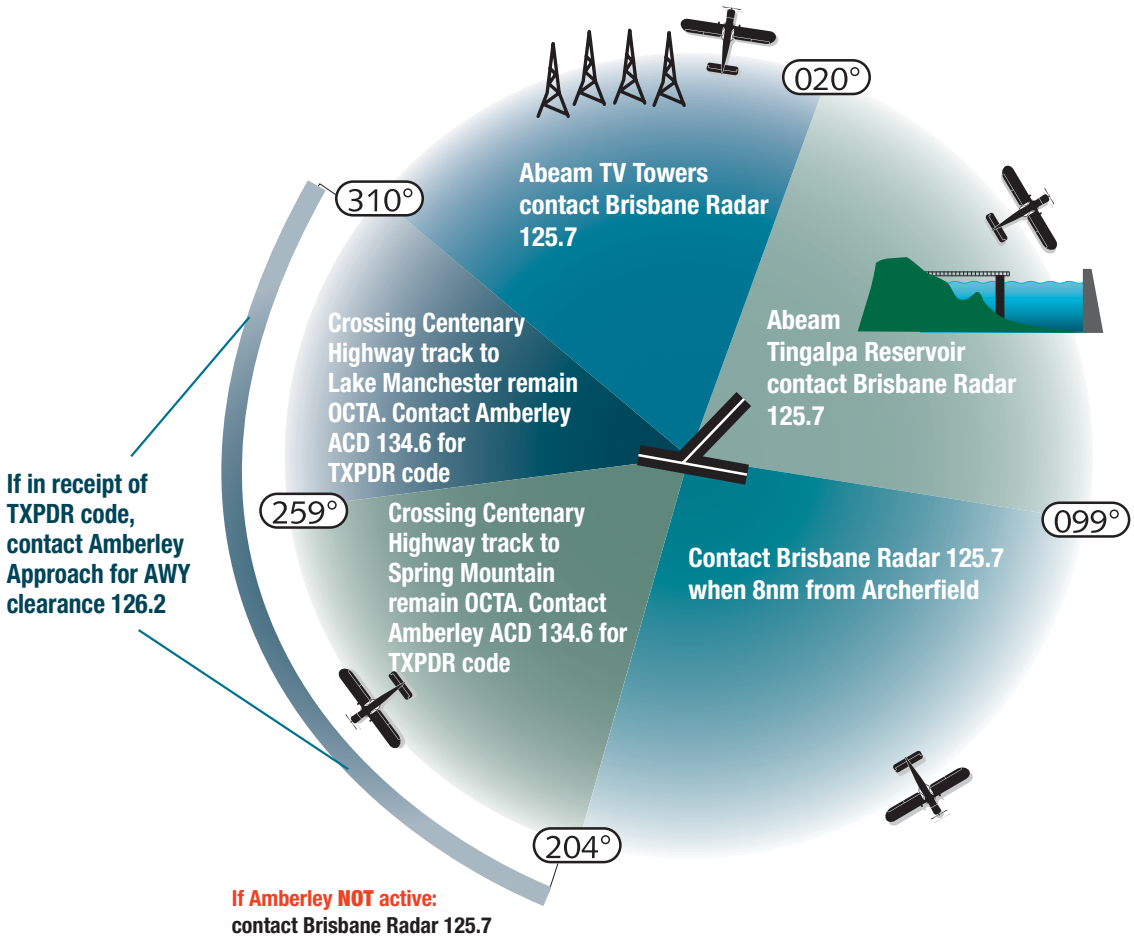
Even when the control zone is deactivated, it is good practice to keep clear of VFR approach points when tracking outbound. You are recommended to follow the standard tracking routes published for leaving the zone during class D control zone procedures. You should change frequency to Brisbane Radar 125.7 MHz at the control zone boundary, but consider monitoring the CTAF frequency (if able using a second VHF radio) until beyond the VFR approach points.

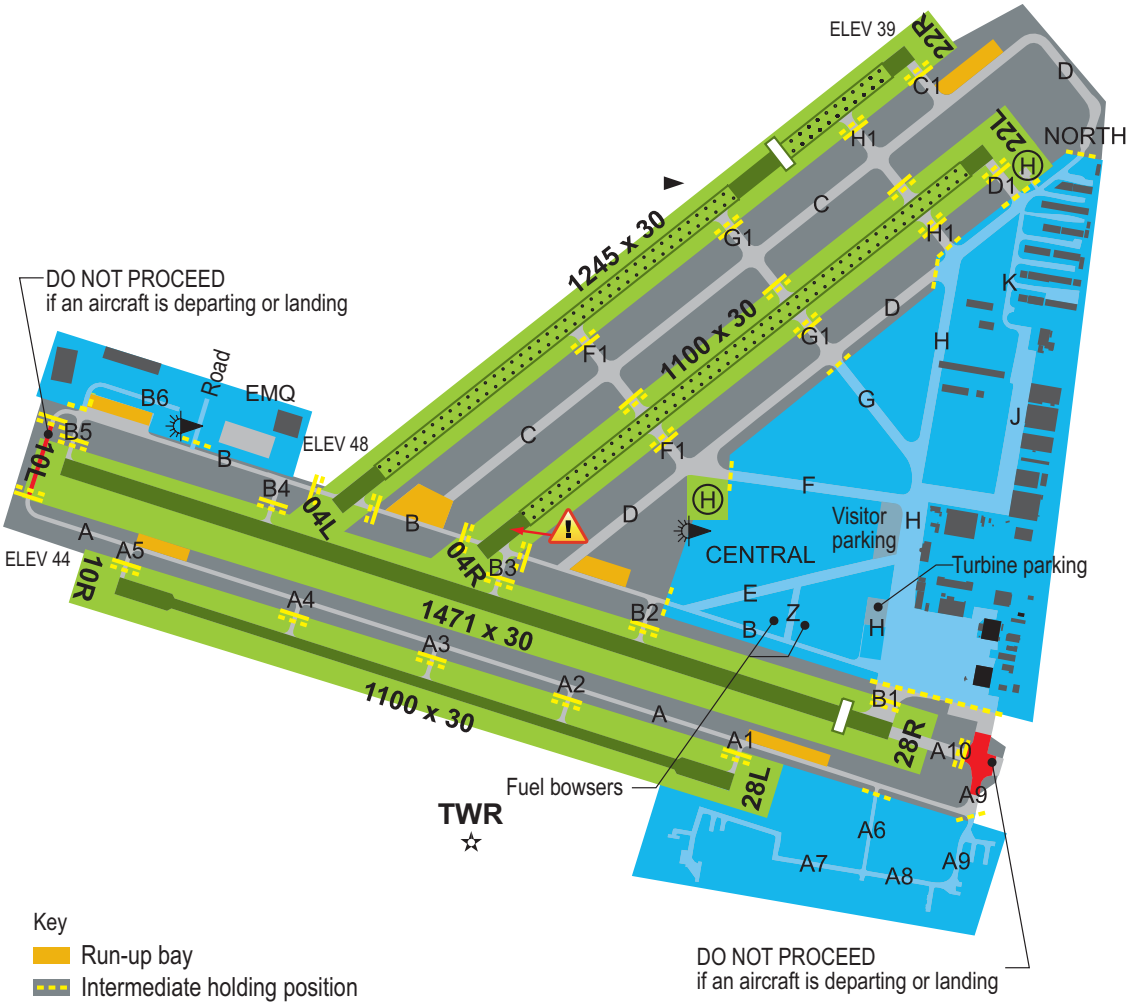
Arrivals & departures (at night)

The following differences apply under night VFR:

- Maintain LSALT until within 3nm of the aerodrome, and with the runway lights in sight;
- Depart on climb to LSALT as per your airways clearance.

DEPARTING ARCHERFIELD ENTERING CTA (by day in VMC)





Key

- Run-up bay
- Intermediate holding position
- Runway holding position
- Runway incursion hotspot

Definitions

Apron area – An area on the aerodrome intended to accommodate aircraft for the purpose of loading or unloading passengers, cargo, fuelling, parking, or maintenance.

Manoeuvring area – That part of the aerodrome to be used for take-off, landing and taxiing of aircraft, excluding aprons.

Movement area – That part of the aerodrome to be used for take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the aprons.

Operation on the aerodrome

Apron area – no taxi clearance required. Monitor Ground on 119.9 MHz.
Taxiway – taxi clearance from Ground required before entering this area.
Runway – specific clearance required from ATC before entering this area.

<table>
<tr><th>Departure into CLASS G (VFR)</th><th>Departure to CTA/CTR (VFR)</th><th>Non-towered departure (VFR)</th></tr>
<tr><td></td><td>Submit flight notification by fax, NAIPS or briefing.

Contact Brisbane Radar on 125.7 for transponder code.</td><td>If entering CTA: Submit flight notification by fax, NAIPS or briefing. Contact Brisbane Radar on 125.7 for transponder code.</td></tr>
<tr><td colspan="2">Obtain ATIS on 120.9 or 419

‘Archerfield Terminal Information Bravo’

Runway _____ Wind _____ Crosswind _____

Visibility_____ Cloud _____ Temp/QNH _____</td><td>Obtain ATIS on 120.9 or 419 to confirm Archerfield is non-towered procedures.

(Should be broadcasting terminal information ‘Zulu’).

If transiting through Amberley obtain ATIS on NDB 359.</td></tr>
<tr><td colspan="2">Taxi call (and Monitor 119.9)

‘Archer Ground

Callsign _____

Aircraft type _____

Received [ATIS]_____

For (destination or intentions)_____

Runway _____

Request clearance.’</td><td>Taxi call (Monitor 118.1)

‘Archerfield Traffic

Callsign _____

Aircraft type _____

Taxiing Archerfield
For (destination or intention)_____

Runway _____

Archerfield’

Note: Listen out for other traffic in the Archerfield area</td></tr>
<tr><td>Transponder (3000)

Set code 3000 and select ALT when READY for take-off. When leaving the CTR select 1200 and ALT.

(If you are flying circuits at Archerfield set 3000 and select ‘standby’).</td><td>Transponder (allocated code)

Set allocated SSR code and select ALT when READY for take-off.</td><td>Transponder

Departing into class G: set code 1200 and ALT when entering the runway.

Departing into class G then class C: set allocated SSR code and ALT when entering the runway.</td></tr>
<tr><td colspan="2">VFR fixed wing aircraft to depart as per the following routes.

DEP NORTH Depart via Walter Taylor Bridge

DEP EAST Depart east to overhead Gateway Motorway/Pacific Motorway intersection (088°M/5.5nm Archerfield)

DEP SOUTH Track 135° from Archerfield

DEP WEST Depart west remaining clear of other parallel runway operations

Any other DEP track (e.g. southwest) must be ‘as cleared’ by the tower</td><td>Take-off (118.1)

Make a broadcast when entering the runway for take-off.

Make radio calls as necessary.</td></tr>
<tr><td colspan="3">During class D CTR operations depart Archerfield CTR boundary at 1000ft, clear of inbound VFR approach points</td></tr>
<tr><td>Departure

Depart by extending the relevant leg of the circuit while maintaining 1000ft. Monitor tower frequency until clear of Archerfield CTR. Then monitor Brisbane Radar (125.7).</td><td>Departure

Depart the Archerfield CTR at 1000ft via the DEP NORTH track to Walter Taylor Bridge unless otherwise cleared by Archerfield Tower. Contact Brisbane Radar 125.7 abeam ABM TV Towers for airways clearance.</td><td></td></tr>
</table>

<table>
<tr><th colspan="2">CLASS D arrival (VFR)</th><th>Non-towered arrival (VFR)</th></tr>
<tr><td colspan="2">Obtain ATIS (120.9 or 419)
Archerfield Terminal Information Bravo
Runway _____ Wind _____ Crosswind _____
Visibility _____ Cloud _____ Temp/QNH _____</td><td>Obtain ATIS (120.9 or 419)
ATIS Should be broadcasting terminal information ‘Zulu’.</td></tr>
<tr><td colspan="2">Inbound call (118.1/123.6) at about 8–10nm
‘Archer tower
Callsign _____
Aircraft type _____
Position _____
Altitude _____
Received [ATIS]_____
Inbound & intentions’</td><td>Inbound call (118.1) at about 8-10nm
or abeam ABM TV Towers, Goodna, Target or Park Ridge Water Tower
‘Archerfield traffic
Callsign _____
Aircraft type _____
Position _____
Altitude _____
Inbound Archerfield’</td></tr>
<tr><td colspan="2">Arrival altitude
Enter the zone at 1500ft, unless another altitude is specified by ATC.</td><td>Arrival altitude
Not above 1500ft
Refer AIP ENR 1.1-75(48)</td></tr>
<tr><td>Downwind call (118.1/123.6)
Callsign _____
Downwind _____
Intentions _____</td><td>Straight-in approach/base
Callsign _____
final. ‘[base’, or position.]</td><td>Circuit joining and circuit calls
Refer AIP ENR 1.1-42</td></tr>
<tr><td colspan="2">After landing (119.9)
Call Archer Ground immediately after vacating the landing runway. ‘Archer Ground, [callsign]’ location (on aerodrome) for (destination on aerodrome). Ask for ‘taxi guidance’ if required.</td><td>After landing (118.1)
Remain on 118.1 after landing.</td></tr>
<tr><td colspan="3">Cancel SARTIME through CENSAR on 1800 814 931, or Brisbane Radar (125.7) during non-towered hours when phone is not available.</td></tr>
</table>

Common class D readbacks		
1. Route clearance	**5. QNH**	**9. Speed**
2. Runway clearances	**6. Transponder code**	**10. Holding instructions**
3. Assigned runway	**7. Radio frequency**	
4. Level/altitude	**8. Turns/headings**	[Refer AIP GEN 3.4-12 (4.4)]

Dayboro

climb to 3,500ft FREQ 125.7

Dayboro
S27 12.0 E152 49.3

CAUTION
Brisbane class C
CTA 1500ft step

C LL 3500

TR 292° M

12nm BN

C LL 1500

15nm BN

Lake Samsonvale

Dam Wall

ALT 1,500ft FREQ 125.7

C LL 1500 **C LL 1000**

Mt Samson

C LL 2500

If unsure of your position request assistance from BN Radar 125.7

Lake Samsonvale

ALT 1,500ft FREQ 125.7

Track to Dam Wall

Samford

TR 344° M

C LL SFC

Quarry

ALT 1,500ft FREQ 125.7

Track to Dayboro

ABM TV Towers/Mt Coot-tha Lookout

ALT 1,500ft FREQ 125.7

Walter Taylor Bridge

ALT 1,500ft FREQ 123.6

When past Walter Taylor Bridge
Track to east of ABM TV Towers

If unsure of your position request assistance from BN Radar 125.7

Prior to take-off, transponder-equipped aircraft squawk 3000 and ALT

School/Cemetery

ALT 1,500ft FREQ 125.7

TR 344° M

S27 26.0 E152 57.0

Enoggera

ABM TV Towers

Brisbane CBD

Story Bridge

C LL SFC

7nm FM THR RWY 01

Walter Taylor Bridge

Centenary Bridge

C LL 1000

CLASS D CTR SFC-1500ft

10 22 04 28

ARCHERFIELD

S27 34.2 E153 00.5

N

Logan Motorway

Inala

C LL 1500

C LL 3500

During class D CTR hours

ARCHERFIELD **INBOUND FROM NORTH VIA ABM TV TOWERS**

Goodna

ARCHERFIELD
S27 34.2 E153 00.5

28 04 10 22

CLASS D CTR
SFC-1500ft

C LL 1500

Centenary Bridge

ALT 1,500ft FREQ 123.6

'callsign Abeam Centenary Bridge altitude '

Optional: 'Unfamiliar with Archerfield.'

Centenary Bridge

ABM TV Towers

ALT 1,500ft FREQ 123.6

'Archer Tower, callsign type ABM TV Towers altitude received ATIS inbound intentions.'

Optional: 'Unfamiliar with Archerfield.'

C LL 2500

C LL 2500

ABM TV Towers

CAUTION
Check current VTC for CTR and CTA steps

C LL 1500

C LL SFC

Enoggera

Enoggera Reservoir
S27 28.5 E152 55.0

TR 153° M

Enogerra Reservoir

ALT 1,500ft FREQ 125.7

If unsure of your position request assistance from BN Radar 125.7

Samford

ALT 1,500ft FREQ 125.7

Samford

If unsure of your position request assistance from BN Radar 125.7

15nm BN

C LL 2500

Mt Samson

CAUTION
Brisbane class C
CTA 1500ft step

Lake Samsonvale

ALT 1,500ft FREQ 125.7

At or below 2500ft to remain OCTA, descend to 1500ft after Samford.

Lake Samsonvale

Transponder-equipped aircraft squawk 3000 and ALT

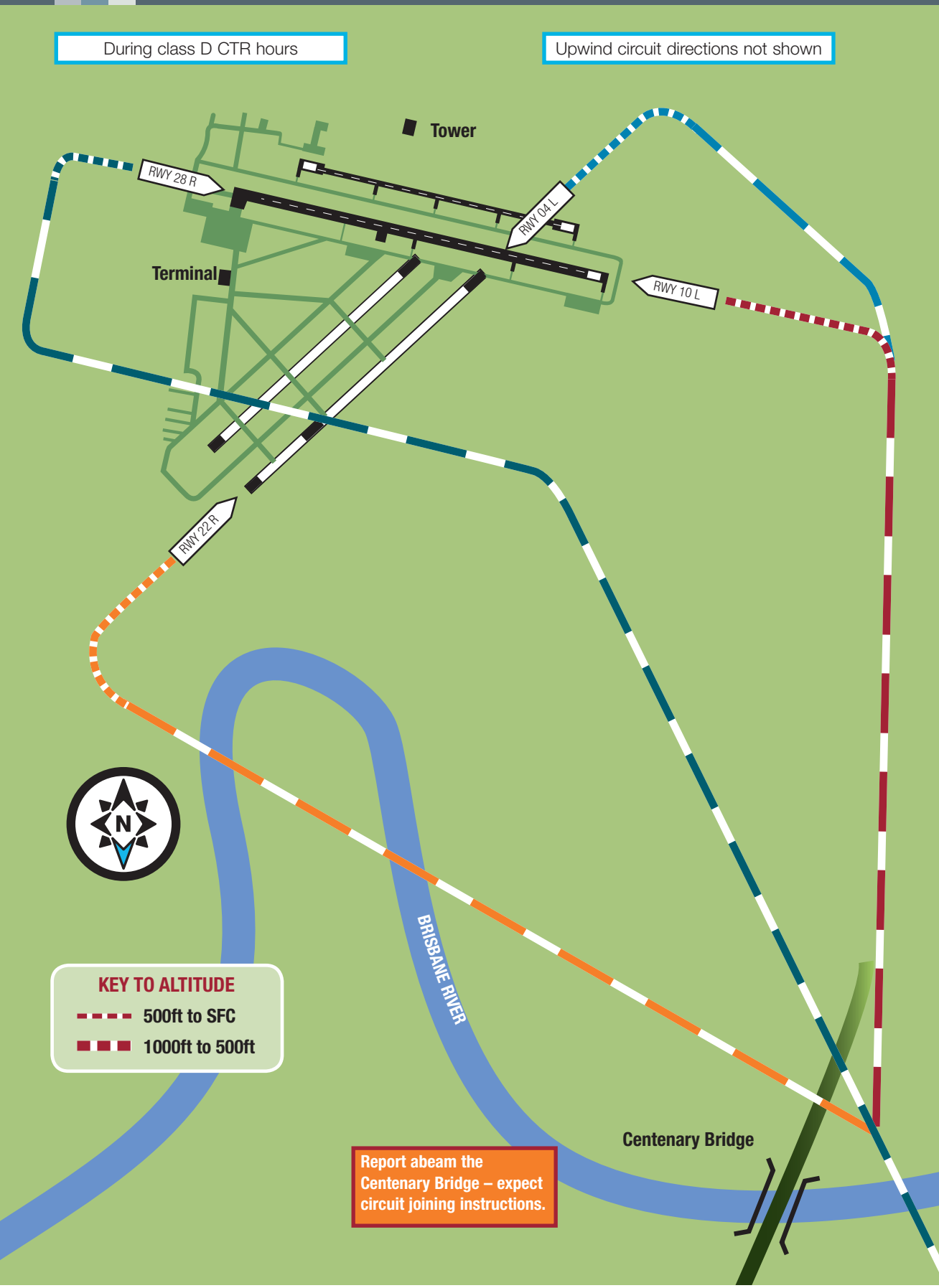
C LL 3500

TR 158° M

Dayboro

ALT 1,500ft FREQ 125.7

Dayboro
S27 12.0 E152 49.3


During class D CTR hours
Upwind circuit directions not shown
Tower
RWY 28 R
RWY 04 L
Terminal
RWY 10 L
RWY 22 R
N
BRISBANE RIVER
KEY TO ALTITUDE
500ft to SFC
1000ft to 500ft
Centenary Bridge
Report abeam the Centenary Bridge – expect circuit joining instructions.

ABM TV TOWERS

The ABM TV Towers can usually be seen from Dayboro and care must be taken to avoid class C controlled airspace overlying the route. Be sure to be established at or below 2500ft prior to Lake Samsonvale. Track to the west of the ABM TV Towers and contact Archerfield Tower on 123.6 abeam the ABM TV Towers. From there, track towards the Centenary Bridge which can be seen to the northwest of Archerfield. Report crossing the Brisbane River at Centenary Bridge to Archerfield Tower and expect a circuit-joining instruction.

CIRCUIT JOINING INSTRUCTIONS

1. A **circuit joining instruction** is a clearance to enter the control zone. It also tells the pilot how to enter the circuit. For example: 'ZFR join final, RWY 10 left, report final.'
2. **If your initial clearance included an altitude to maintain**, you are only permitted to leave that altitude when ATC has cleared you for a visual approach.
3. In **sequencing aircraft**, ATC will indicate the position of the preceding aircraft by reference to a leg of the circuit, or a clock bearing. ATC may describe the aircraft as a specific type, or in general terms (e.g. Cessna or twin). For example: 'ZFR, follow the Cessna on late downwind'. ATC may issue a sequence number, which specifies the landing order with respect to any preceding traffic.
4. **You should take care to maintain your position** in the sequence and ensure you do not 'cut inside' other traffic. If instructed to 'Follow', you must sight the preceding aircraft, and regulate your speed and approach path to achieve longitudinal separation. You must advise ATC if you cannot see and identify the preceding aircraft. If in doubt, tell the tower.
5. **Radio calls should only include the mandatory readbacks**, due to the large number of movements at Archerfield [refer AIP GEN 3.4-12 (4.4)].
6. **Exercise caution on base and final.** Other aircraft may be on simultaneous final approaches to Archerfield's parallel runways.

You must:

- Identify any traffic on the opposing base leg and monitor their position while you are turning onto final;
- Not overshoot when turning final; and
- Not drift off the extended runway centreline once established on final.

NON-TOWERED PROCEDURES

Make all necessary radio calls as per AIP, ERSA and those recommended in the new Civil Aviation Advisory Publication on non-towered aerodromes (CAAP 166) and page 19 of this guide.

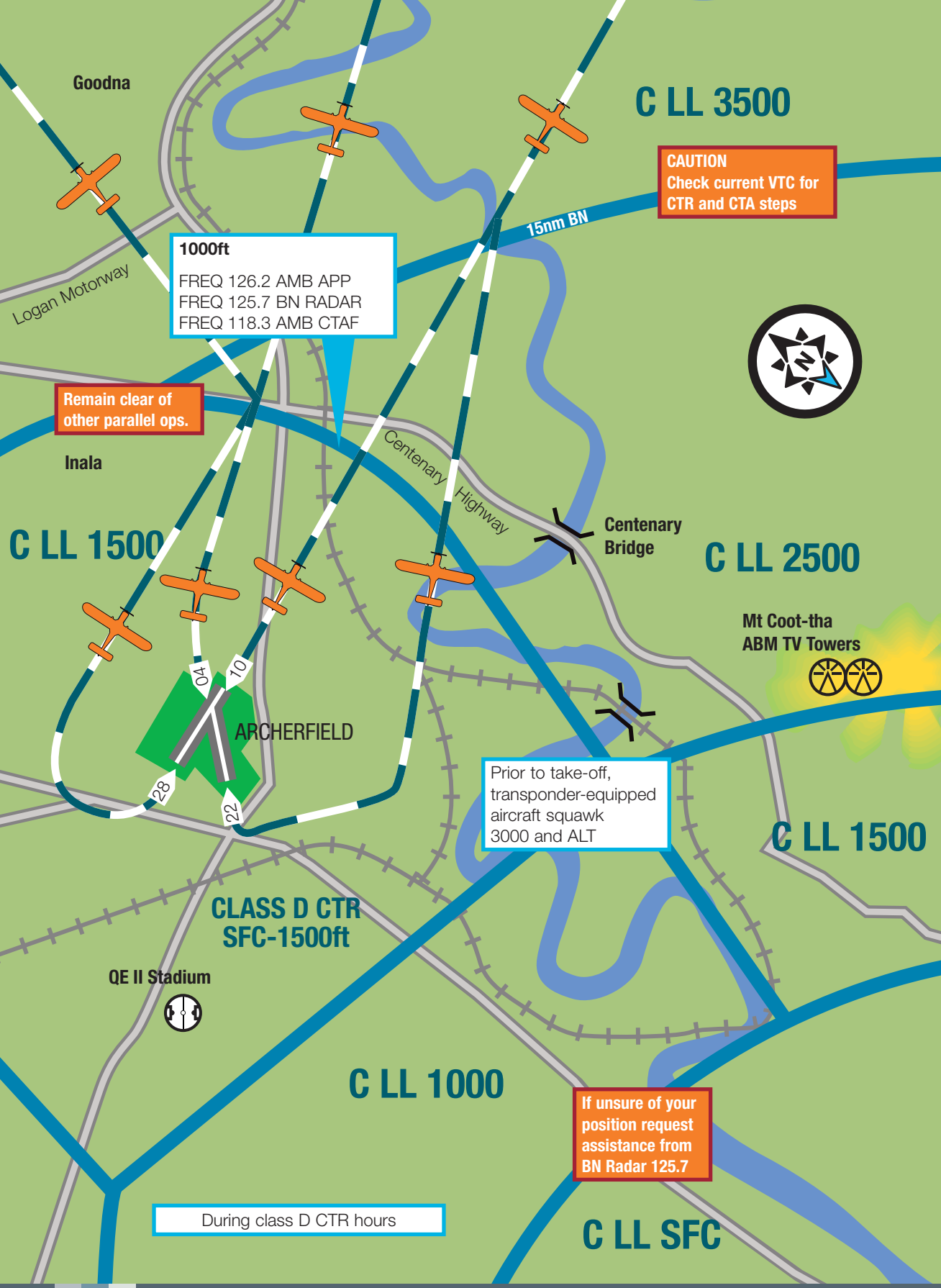
Once you have selected the appropriate runway, fly at least three legs of the circuit.

Runways 04L/22R and 10R/28L are not available during non-towered hours.

Runway 28R is the preferred runway for take-off when conditions permit.
Runway 04R/22L available HJ only – circuits left hand.
Runway 10L/28R available H24 – circuits left hand.

Refer to AIP ENR 1.1-79 (48.6.7) for the requirements for making straight-in approaches and joining on base at uncontrolled aerodromes. AWIS is available by phone on 07 3239 8720.


C LL 4500
AMBERLEY
If AMB non-towered, airways clearance required for climb above 4500ft.
If unsure of your position request assistance from BN Radar 125.7
CAUTION Jet aircraft in CTA above
AMB
MIL CLASS C CTR
SFC-7500
Mt Crosby
Swanbank Powerstation
Ipswich
Amberley ACTIVE
AMB APPROACH 126.2
Amberley non-towered
Below 3500ft - CTAF 118.3
Above 4500ft - Requires airways clearance
BN Radar 125.7
Mt Crosby
C LL 3500
Railway workshops



ARCHERFIELD INBOUND **FROM WEST VIA GOODNA**

C LL SFC

C LL 1000

C LL 1500

C LL 1500

C LL 2500

C LL 3500

Archerfield

ALT 1,500ft FREQ 118.1/123.6

QE II Stadium

ARCHERFIELD

22

28

10

04

Mt Coot-tha
ABM TV Towers

BRISBANE RIVER

Centenary
Bridge

Centenary Highway

CLASS D CTR
SFC-1500ft

Inala

15nm BN

Logan Motorway

Goodna
S27 36.7 E152 53.3

Railway
workshops

Goodna

ALT 1,500ft FREQ 123.6/118.1

'Archer Tower, callsign type
Goodna altitude received ATIS
inbound intentions.'

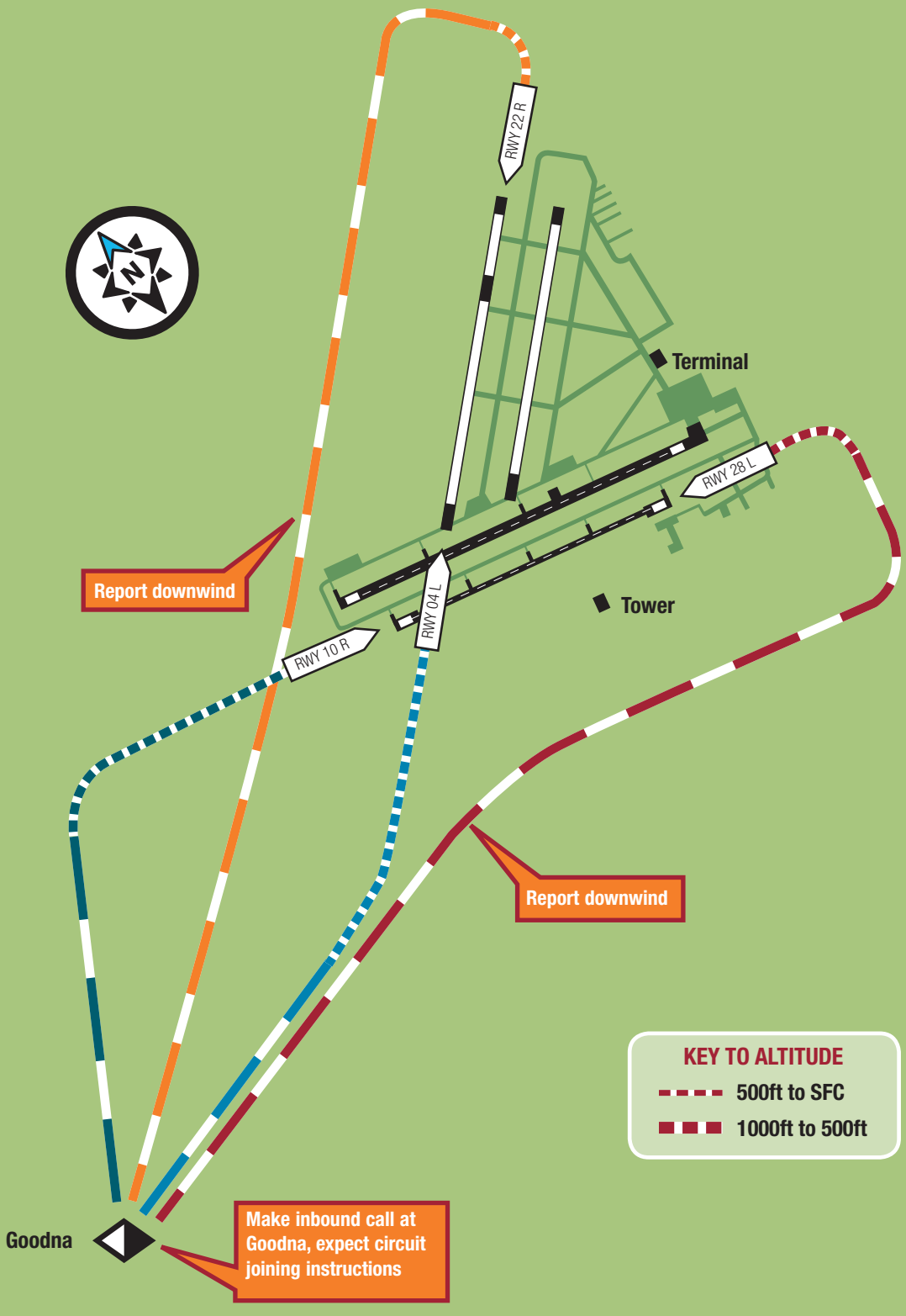
Optional: 'Unfamiliar with Archerfield.'

If unsure of your position request assistance from BN Radar 125.7

JOINING THE CIRCUIT **FROM WEST VIA GOODNA**

During class D CTR hours

Upwind circuit directions not shown



GOODNA

Goodna is a VFR approach point that can be easily mistaken. The railway workshops at Redbank can be used to identify the position of Goodna which is situated on a bend of the Brisbane River to the east of the workshops.

CIRCUIT JOINING INSTRUCTIONS

1. A **circuit joining instruction** is a clearance to enter the control zone. It also tells the pilot how to enter the circuit. For example: 'ZFR join final, RWY 10 left, report final.'

2. **If your initial clearance included an altitude to maintain**, you are only permitted to leave that altitude when ATC has cleared you for a visual approach.

3. In **sequencing aircraft**, ATC will indicate the position of the preceding aircraft by reference to a leg of the circuit, or a clock bearing. ATC may describe the aircraft as a specific type, or in general terms (e.g. Cessna or twin). For example: 'ZFR, follow the Cessna on late downwind'. ATC may issue a sequence number, which specifies the landing order with respect to any preceding traffic.

4. **You should take care to maintain your position** in the sequence and ensure you do not 'cut inside' other traffic. If instructed to 'Follow', you must sight the preceding aircraft, and regulate your speed and approach path to achieve longitudinal separation. You must advise ATC if you cannot see and identify the preceding aircraft. If in doubt, tell the tower.

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You must:

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Runway 10L/28R available H24 – circuits left hand.

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Mt Tamborine

ALT 3,500ft FREQ 125.7

Track towards Mt Tamborine once clear of inbound tracks, then take up planned track

If unsure of your position request assistance from BN Radar 125.7

Transponder-equipped aircraft squawk 1200 and ALT

TR 135° M

C LL 4500

Beenleigh

Logan Village

C LL 3500

TR 135° M

Outbound South East

ALT 1,000ft FREQ 118.1

Depart AF tracking 135° M and then track between Park Ridge & Target

Logan Motorway

Climb to not above 2,000ft FREQ 118.1

TR 135° M

Logan Motorway

Mount Lindsay Hwy

CAUTION:
Check current VTC for CTR and CTA steps

If unsure of your position request assistance from BN Radar 125.7

Gateway Motorway

C LL 2000

C LL 1500

CLASS D CTR SFC-1500ft

Inala

Mt Gravatt

QE II Stadium

28

22

04

10

C LL 1000

ARCHERFIELD

Aircraft departing from RWY 28L shall take up track 135 from the crosswind leg

Prior to take-off, transponder-equipped aircraft squawk 3000 and ALT

C LL 2500

During class D CTR hours

C LL 2500

During class D CTR hours

C LL 1500

Logan Motorway

ALT 1,500ft FREQ 118.1

Report position over the motorway.
Expect circuit joining instructions

R633 Greenbank Restricted Area

ALT 1,500ft FREQ 118.1

Looking left to Greenbank Restricted Area (west of the track)

10 22 04 28

ARCHERFIELD

CLASS D CTR SFC-1500ft

DO NOT PROCEED UNTIL CTR ENTRY or CIRCUIT JOINING INSTRUCTIONS RECEIVED

C LL 2000

Logan Motorway

TR 335° M

Mount Lindsay Hwy

Park Ridge Water Tower

ALT 1,500ft FREQ 118.1

'Archer Tower, callsign type Park Ridge altitude received ATIS inbound intentions.'

Optional: 'Unfamiliar with Archerfield.'

If unsure of your position request assistance from BN Radar 125.7

C LL 3500

JOINING THE CIRCUIT **FROM SOUTH VIA PARK RIDGE**

PARK RIDGE WATER TOWER

Park Ridge Water Tower is the only water tower in the area with a strobe light and is east of the Mount Lindsay Highway. Do not confuse with the more prominent water towers west of the Highway bordering the Greenbank Restricted Area.

Find the Park Ridge Water Tower by either:

1. Tracking 353° M from over Jimboomba towards the Brisbane City high rise. Park Ridge Water Tower will appear before you.
2. Fly from Coolangatta via the Pine Forest parallel to the power lines until the Logan River almost touches the lines. From here track towards the Brisbane City high rise. Park Ridge Water Tower will appear before you.

On the PKR track 335° M, R633 (Greenbank Military Restricted Area) is west of the train line on the edge of the housing estate. The large shopping centre at Browns Plains is 1.5nm east of the track. The Logan Motorway is north of the powerlines. FREQ 118.1.

CIRCUIT JOINING INSTRUCTIONS

1 A **circuit joining instruction** is a clearance to enter the control zone. It also tells the pilot how to enter the circuit. For example: 'ZFR join final, RWY 10 left, report final.'

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Outbound East

ALT 3,500ft FREQ 125.7

C LL 3500

If unsure of your position request assistance from BN Radar 125.7

Mt Cotton

ALT 2,000ft FREQ 125.7

Do not commence climb to above 2000ft until south of Mt Cotton.

CAUTION:
Beware of jet aircraft above. Stay below 2000ft

Mt Cotton

C LL 2000

Tingalpa Reservoir

Tingalpa Reservoir

ALT below 2,000ft FREQ 125.7

Tingalpa Reservoir looking left

Motorway Intersection

Climb to not above 2,000ft FREQ 125.7

Track between Tingalpa Reservoir & Mt Cotton.

C LL 2000

Target Department Store

Pacific Motorway

Gateway Motorway

If unsure of your position request assistance from BN Radar 125.7

Track north of Target

C LL 1000

Mt Gravatt

QE II Stadium

Outbound East

10L/28R FREQ 123.6 04R/22L FREQ 118.1

Track to intersection of Pacific Motorway & Gateway Motorway.

CAUTION:
Check current VTC for CTR and CTA steps

C LL 1500

QE II Stadium

ARCHERFIELD

28

22

04

10

CLASS D CTR SFC-1500ft

Inala

Prior to take-off, transponder-equipped aircraft squawk 3000 and ALT

During class D CTR hours

ARCHERFIELD INBOUND **FROM EAST VIA TARGET**

During class D CTR hours

Inala

C LL 1500

ARCHERFIELD

S27 34.2 E153 00.5

10

04

22

28

CLASS D CTR
SFC-1500ft

QE II
Stadium

C LL 1000

Mt Gravatt

Target Department Store

ALT 1,500ft FREQ 123.6

'Archer Tower, callsign type
Target altitude received ATIS
inbound intentions.'

Optional: 'Unfamiliar with Archerfield.'

Pacific Motorway

Gateway Motorway

If unsure of your position request assistance from BN Radar 125.7

Target Department Store

S27 37.0 E153 07.0

Tingalpa Reservoir

C LL 2000

Target Department Store

ALT 1,500ft FREQ 118.1

Ikea

ALT 1,500ft FREQ 118.1

Loking north-west to Ikea

Mt Cotton

C LL 2000

CAUTION:
Check current VTC for CTR and CTA steps

Transponder-equipped aircraft squawk 3000 and ALT

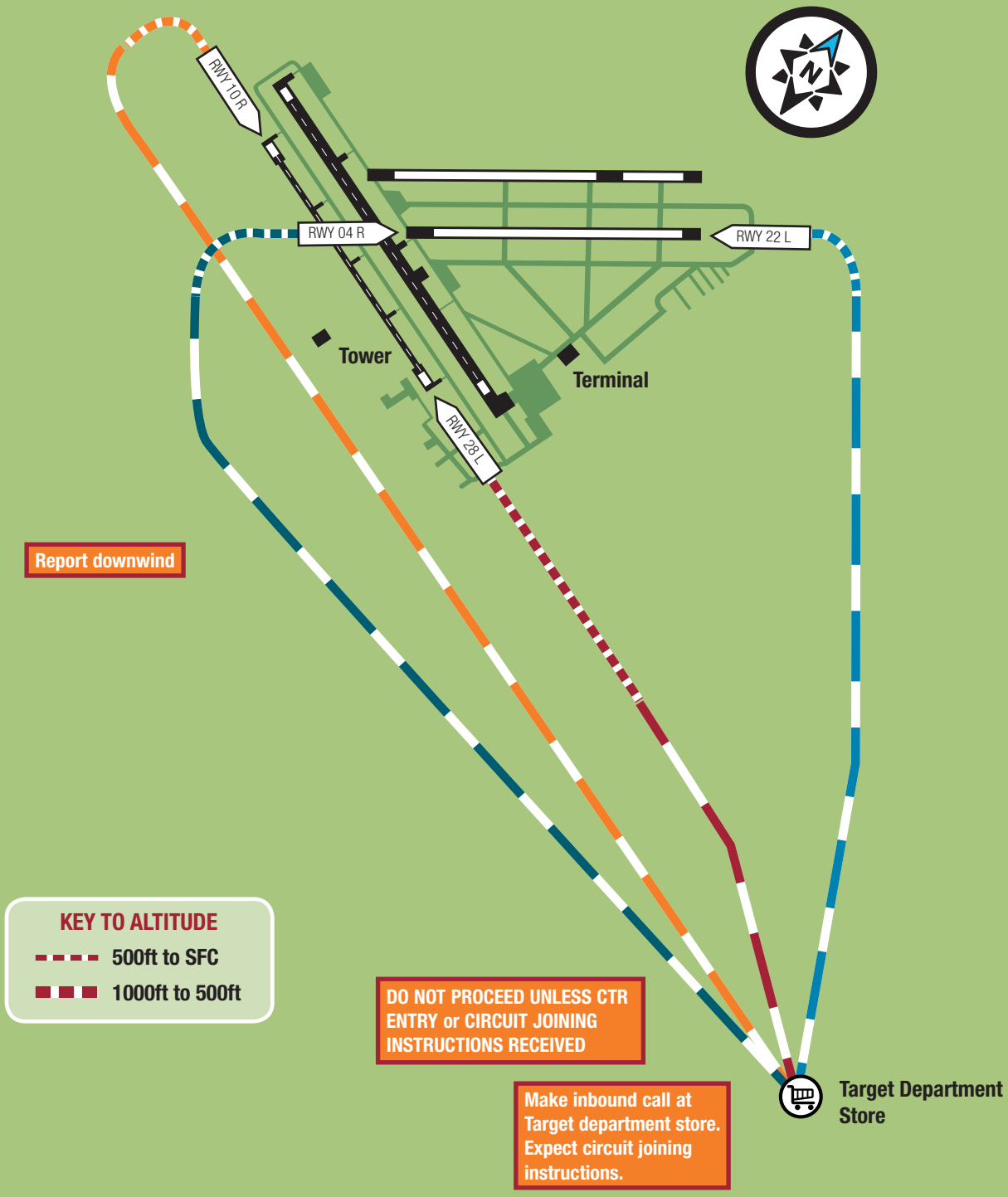
If unsure of your position request assistance from BN Radar 125.7

C LL 3500

JOINING THE CIRCUIT **FROM EAST VIA TARGET**

During class D CTR hours

Upwind circuit directions not shown



TARGET

Target has a huge red and white bullseye painted on the roof of the Target department store. The store is on the east of the Pacific motorway and on a direct line from Mt Cotton to Archerfield. If arriving from the south, stay to the east of the freeway from Logan Hyperdome and follow the motorway until arriving at Target. Archerfield can usually be seen from Target. FREQ is 118.1.

CIRCUIT JOINING INSTRUCTIONS

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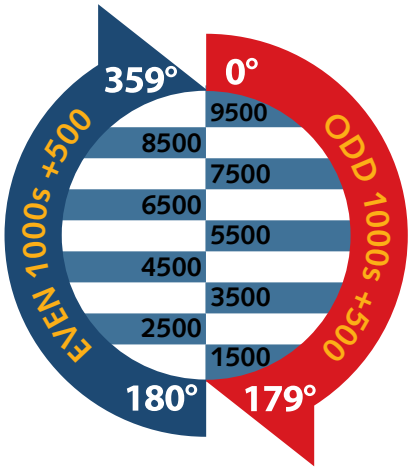
Frequencies		
Archer Tower	**118.1**	**123.6**
Archer Ground	**119.9**	
ATIS (Archer)	120.9	419
Archer CTAF	118.1	
Brisbane Radar	125.7	
Amberley Approach	**126.2**	
Amberley ACD	134.6	
Amberley CTAF	118.3	
Archer PAL (Non-towered hrs)	**125.1**	

Phone Numbers	
CENSAR	1800 814 931
Archer Tower	07 3275 8230
Contact tower only in an emergency.	

Navigation Aids	
Archer NDB	419 (range 30nm)
Caution: excessive bearing fluctuations between 180° and 200°	

VFR CRUISING ALTITUDES



Based on magnetic track

Radio Failure

Squawk 7600. Stay in VMC and broadcast intentions. Precede all radio calls with: 'Transmitting blind'.

If possible, avoid class C and class D airspace and land at a CTAF aerodrome.

CTAF: When joining the circuit stay at least 500ft above circuit height. When you have selected the runway, descend on the non-active side of the circuit. Cross the upwind threshold at circuit height. Fly a normal circuit. Check AIP ENR 1.1-76 (48.5-7) for circuit entry requirements at an aerodrome in class G airspace and ERSA EMERG 1 for general emergency procedures.

At Archerfield aerodrome: Carry out general COM failure procedures. Track via an appropriate VFR approach point. Enter the control zone at 1,500ft AMSL and maintain that altitude until overhead the aerodrome. Ascertain the landing direction. For Runway 10/28 join the southern circuit for landing Runway 10R or 28L. For Runway 04/22, join the eastern circuit for landing Runway 04R or 22L. When ready, descend to 1,000ft AMSL remaining clear of the other circuit and join the appropriate circuit on crosswind for the runway selected. Proceed with a normal circuit and landing. Maintain separation from other aircraft and watch for light signals from the tower (see page 52 of this guide). Listen out on NDB FREQ for instructions. Mobile phones can be used in emergencies.

photo courtesy of: cessna aircraft company

Plan your route thoroughly, and carry current charts and documents. Always check the weather, NOTAMs and ERSA before you fly.

Turn on your transponder

Transponders provide an essential defence against violations of controlled airspace and mid-air collisions.

As well as helping air traffic controllers to prevent potential conflicts, transponders are detected by aircraft fitted with traffic alert and collision avoidance systems (TCAS), allowing them to 'see' other aircraft and take evasive action if necessary.

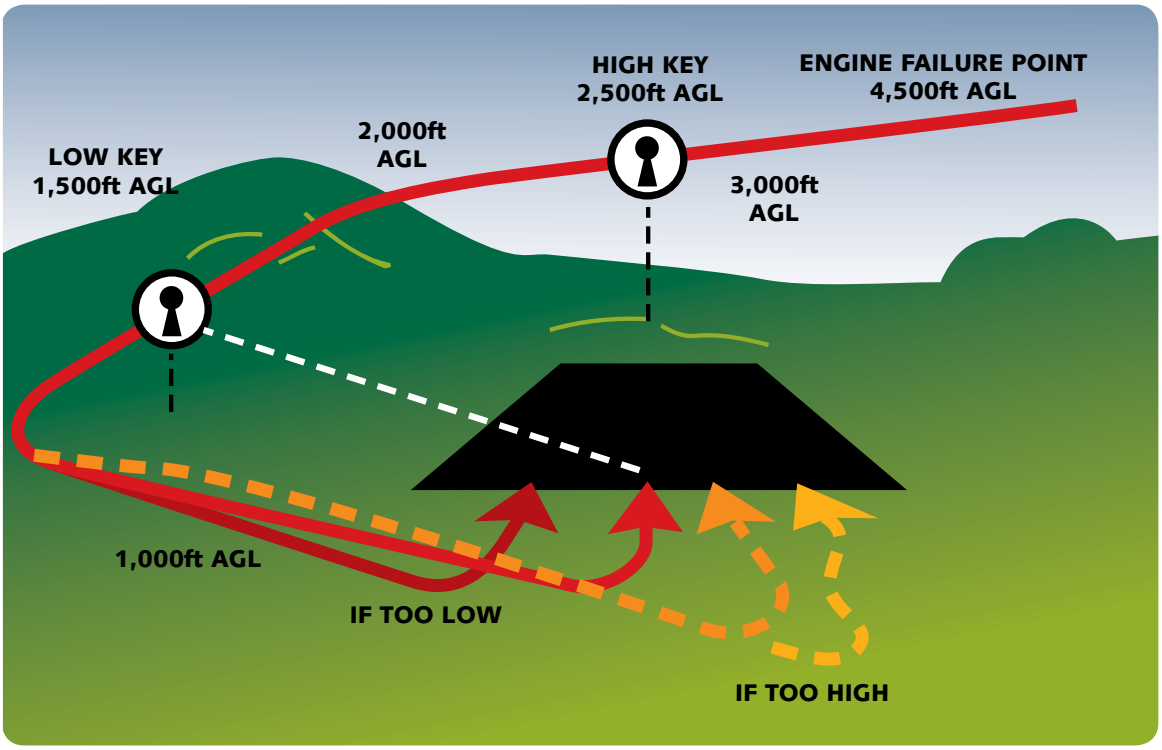
But TCAS will not work if your transponder is unserviceable, switched off, or not transmitting altitude information (ALT).

So, if you have a transponder:

- Select:
  - Code 1200 if you are in class G airspace
  - Code 3000 if you are in class C or D airspace
  - The assigned code in all other situations.
- Switch it to ON/ALT (Mode C) when lining up for take-off.
- Leave it switched to ON/ALT until after landing

(For more information see AIP ENR 1.6-7, 8 and 9).

EMERGENCY LANDING PROCEDURES



INITIAL CHECK

Hold altitude	Aim for best glide speed
Mixture	Rich
Carburettor	Full hot
Fuel	On
Pump	On
Change Tanks Trim	To best glide speed

FIELD SELECTION

Wind - determine direction.
Surroundings: power lines, trees, etc.
Size & shape - in relation to wind.
Surface and slope.
S(c)ivilisation - close proximity if possible.

FMOST CHECK

Fuel	Contents, pump on, primer locked.
Mixture	Up & down range, leave rich.
Oil	Temps & pressures green range.
Mag switches	Left, then right back to both.
Throttle	Up & down range then close.

MAYDAY CALL & SQUAWK 7700

'Mayday Mayday Mayday: Brisbane, Piper ZFR, engine failure, 13nm west of Archerfield 4500ft, attempting to land in paddock.'

Any other useful information such as number of persons on board, (POB) dangerous cargo, fuel remaining etc (if time permits).

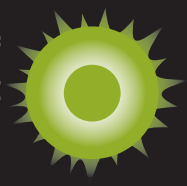
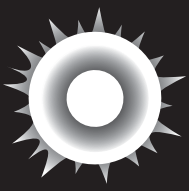
BRIEF YOUR PASSENGERS

FINAL ACTIONS

Fuel	Off
Mixture	Idle cut-off
Mags	Off
Harness	Tight
Door	As required
Master Switch	Off

Caution if flaps are electrically operated set flaps before master switch is switched off.

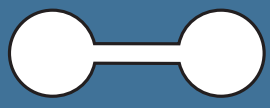
LIGHT SIGNALS

ON GROUND		IN FLIGHT
Authorised to **TAKE-OFF** if pilot is satisfied that no collision risk exists		Authorised to **LAND** if pilot is satisfied that no collision risk exists
Authorised to **TAXI** if pilot is satisfied that no collision risk exists		**RETURN** for landing
STOP		**GIVE WAY** to other aircraft **CONTINUE CIRCLING**
TAXI CLEAR OF LANDING AREA in use		**DO NOT LAND** Aerodrome unsafe
Return to starting point on aerodrome		

SYMBOLS NEAR WIND DIRECTION INDICATOR

AERODROME UNSERVICEABLE

GLIDING OPERATIONS IN PROGRESS



OPERATIONS ARE CONFINED TO HARD SURFACE RUNWAYS, APRONS AND TAXIWAYS ONLY

AERODROME SIGNS

Know the colour-coding and meanings of runway signs

Mandatory instruction signs

White inscription on a red background.
Identifies the entrance to a runway, or critical area, and areas prohibited for use by aircraft.
Red and white: runway in sight

Information signs–location

Yellow inscription on a black background.
Identifies the taxiway you are located on.
Black square: you're there

Runway markings are white... although yellow taxiway centrelines may lead on to, or lead off, or cross, the runway). Taxiway markings are yellow.

Information signs–destination

Also black inscription on a yellow background.
Arrow identifies direction to specific destinations on the airfield, such as runways, terminals.
Yellow array: points the way

Information signs–direction

Black inscription on a yellow background.
Identifies taxiway leading out of an intersection with an arrow indicating direction required to align the aircraft on that taxiway.
Yellow array: points the way

SIGNS

DIRECTION / LOCATION / DIRECTION

LOCATION / DIRECTION

DIRECTION / LOCATION / DIRECTION / DIRECTION

DESTINATION

RUNWAY EXIT

RUNWAY HOLDING POINTS (OR TAXI-HOLDING POSITION MARKINGS)

NEW TAXI HOLDING POSITION

OLD TAXI HOLDING POSITION

HOLDING POSITION WHEN CAT I, II or III PRECISION APPROACHES ARE BEING USED. ONLY APPLICABLE WHEN NOTIFIED BY ATC OR ATIS.

At night, taxi holding position is indicated by three yellow lights (or two when taxiway sidelighting is provided) showing in the direction of the approach to the runway.