



TIPS FOR FLYING AT MOORABBIN

Moorabbin is a complex metropolitan Class D airport used by a diverse range of fixed and rotary wing pilots—ranging from students to commercial operations.

The aerodrome layout, with multiple runways, is essential for the type of operations at Moorabbin. However, this design coupled with varying pilot experience levels can lead to a range of common errors made by pilots.

Here are some tips for pilots to reduce the chances of errors when operating at Moorabbin.

AIR TRAFFIC CONTROL (ATC) CLEARANCES

Points to consider:

- Start approval is required for circuit training—it is important that you start and taxi (or proceed to the run-up bay) within a reasonable time of the start approval to avoid unnecessary delays to other aircraft.
- Taxi clearance is required prior to taxi anywhere on the manoeuvring area (ie. not the apron). For example, after landing, a taxi clearance is required to go anywhere on the aerodrome once you have vacated the runway. If you require to cross a runway, include this in your taxi request.
- At Moorabbin the run-up bay is part of the apron and aircraft may taxi from the main apron to the run-up bay after obtaining start approval without obtaining a taxi clearance. You will need a taxi clearance prior to taxiing from the run-up bay. Aircraft leaving the run-up bays are required to give way to aircraft on the taxiways.
- If you need to use taxiway A to access the run-up bay you must obtain a separate taxi clearance
- If a run-up is not required, obtain a taxi clearance before leaving the apron.
- It is recommended that you include your position on the aerodrome, including which run-up bay you are in, to assist ATC and other pilots or airside drivers to identify you.
- Make sure you include your intentions so that ATC can give you appropriate instructions.

- You need a specific clearance from ATC to enter, cross, taxi along, line up on, backtrack on or take off from ANY runway (even if that runway is not the runway in use).
- Never cross or enter any runway unless in receipt of a specific clearance addressed to you that includes your callsign and the words “CROSS/ ENTER RUNWAY XX”.
- A landing clearance includes authorisation to cross any runway intersecting your landing runway during the landing roll. Do not stop on a runway after landing on it. For example: if cleared to land on RWY 31L and unable to vacate prior to RWY 35L, you do not need another clearance to cross it. Roll through and vacate via A2.

There are several runway incursion hotspots at Moorabbin. These are detailed in ERSAs and on Airservices Moorabbin Runway Incursion Hotspot map available at www.airservicesaustralia.com/flight-briefing/pilot-and-airside-safety/runwaysafety or from the tower.

COMMUNICATIONS AND READBACKS

Using non-standard radio calls or readbacks affects the ability of ATC to understand your intentions and confirm that you have understood your clearance.

If your readback is incorrect or incomplete, ATC will need to confirm your understanding; leading to additional conversation, complexity, workload and frequency congestion. This may affect you, or other aircraft, by increasing the chances of incorrect information being passed or received.

Points to consider:

- Always read back:
 - the words “HOLDING POINT” and the holding point identifier
 - the runway designator

For example (“HOLDING POINT GOLF THREE, RUNWAY ONE THREE LEFT, ABC”).

- For situational awareness, always maintain a listening watch on the radio. This includes ensuring that you are on the correct frequency, your radio is working and that the volume is not turned down.
- When making your 'Ready' calls, you need to include: the word 'READY'; your first tracking point or circuit leg that you are departing on and your runway number (when parallel runways are in use). For helicopters, it is recommended that you specify the HLS from which you are operating.
- A 'Downwind' call is mandatory whether operating in or arriving into the circuit. This provides ATC with the trigger to issue sequencing instructions and other pilots with situational awareness.
- If you are unable to comply with (or don't understand) any ATC instruction or clearance, inform ATC immediately.

HOLDING POINT is the final destination of a taxi clearance for departure. This is where you make your 'Ready' call, before being cleared to enter the runway and take off.

HOLD SHORT OF is an intermediate holding point on your taxi route. You will need to get further taxi clearance from this location, including a clearance to enter or cross any runways.

COMPLIANCE WITH ATC INSTRUCTIONS

ATC issues clearances and instructions to ensure the safe and efficient management of all traffic. Air traffic controllers also provide traffic information to aircraft when the information is warranted by the proximity of the aircraft. This will allow you to adjust your speed or track to avoid the traffic by a safe distance.

Points to consider:

- If ATC pass traffic information, you must sight the traffic so that you can comply with ATC instructions and maintain separation from the traffic. If you lose sight of the traffic, you must inform ATC immediately.
- When ATC instructs you to 'TURN LEFT/RIGHT', ATC expects you will commence the turn as soon as practicable (unless the instruction is preceded with 'WHEN READY').

- When ATC instructs you to descend, you must commence descent within one minute of receiving that instruction from ATC (unless the instruction specifies a later time or place). If you want to delay your descent to assist in avoiding traffic, or are unable to comply with a descent instruction or clearance, advise ATC immediately.

Following aircraft

- If ATC gives you an instruction to 'FOLLOW' another aircraft, it requires that you sight the preceding aircraft and regulate your speed and approach path to maintain separation from that aircraft. If you can't sight and identify the preceding aircraft within a reasonable period of time, you must advise ATC immediately. You are not required to advise ATC that you are looking.
 - For example: CWA turns downwind 17L and is instructed to follow a Cessna joining base. If traffic is not sighted by mid downwind, advise ATC that the Cessna is not sighted.
- You must continue to follow the aircraft until that aircraft lands or ATC approves you to overtake.
- Advise ATC if you are in any doubt as to which aircraft you are required to follow.
- Ensure that all legs of your circuit are to the correct runway. It is particularly important not to inadvertently 'drift' towards the upwind or final leg of the other runway.

PROCEDURES

Refer to ERSA for details on local procedures for Moorabbin. Some tips include:

Arrivals

- VFR aircraft by day should report inbound at one of the published VFR approach points.
- Generally, aircraft arriving from the east will be instructed to join the eastern circuit and aircraft arriving from the west, the western circuit.
 - Regardless of the runway in use, CARRUM is considered to be a western arrival point.
- Moorabbin Tower will issue an abbreviated clearance, usually comprising an instruction to enter the CTR on a specific leg of the circuit, or an instruction to overfly or join upwind.
- When an entry instruction does not specify a level, enter the CTR at 1000 feet.

- An instruction to overfly or join upwind will normally be issued when the traffic is such that ATC cannot sequence you directly onto a leg of the circuit. Your instructions will include a specified level.
 - For example: “DEF, MOORABBIN TOWER, MAINTAIN 1500, JOIN UPWIND RUNWAY XX” or “[OVERFLY THE FIELD, CONTACT TOWER ON (freq) OVERHEAD]”.
- With an instruction to overfly, ATC will instruct you to contact the appropriate frequency for the circuit. When overhead report on that frequency.
- After reporting overhead, the tower will issue you with relevant traffic to follow or avoid and clear you for a visual approach. Depending on the disposition of the traffic, commence your descent to circuit altitude and track to the circuit position as instructed. If descent is not immediately available, ATC will reiterate the level to maintain as well as tracking instructions.
 - For example: “GHI CLEARED VISUAL APPROACH JOIN LATE DOWNWIND RUNWAY 35 L FOLLOW THE CESSNA ON FINAL”, or “GHI, MAINTAIN 1500, CONTINUE TRACKING WEST, REPORT SIGHTING” etc.
- You must not land without a landing clearance. If you haven’t received a landing clearance by your decision height, commence a go around. Notify ATC as soon as you can and be aware of helicopters that may be operating just outside the flight strip or overflying the landing threshold not below 500 FT to land on one of the HLS.
- Do not commence your crosswind turn until you have crossed:
 - RWY 17 – Lower Dandenong Road
 - RWY 35 – Centre Dandenong Road
 - RWY 31L – The Kingston Centre.
- When the circuit is busy, advise Tower when you are on downwind for your second last touch and go. This will allow them to start taxiing the next aircraft waiting to join the circuit.

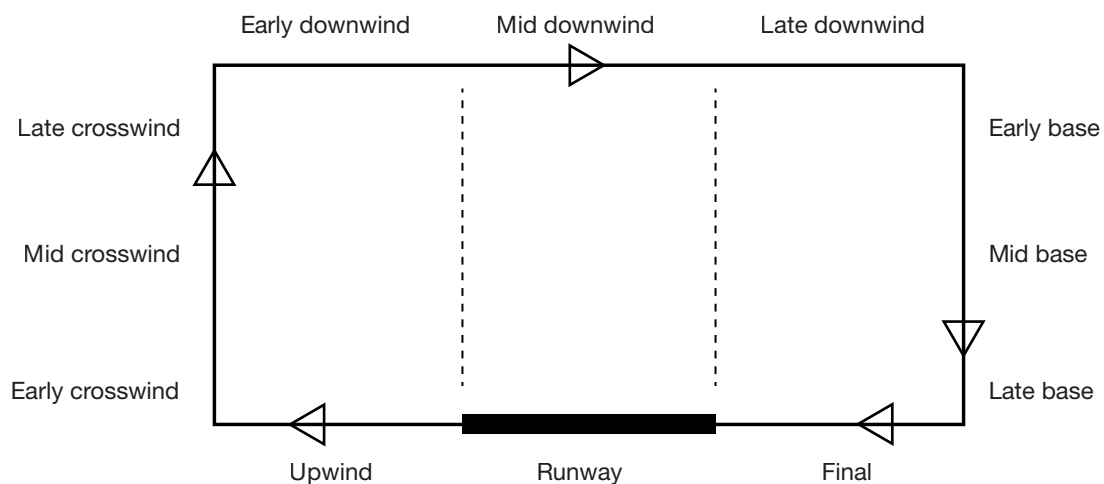
MORE INFORMATION

Airservices has a range of information to assist pilots on topics including runway safety, airspace infringements, operating in Class D airspace and working with ATC. These products are available at: www.airservicesaustralia.com/flight-briefing/pilot-and-airside-safety

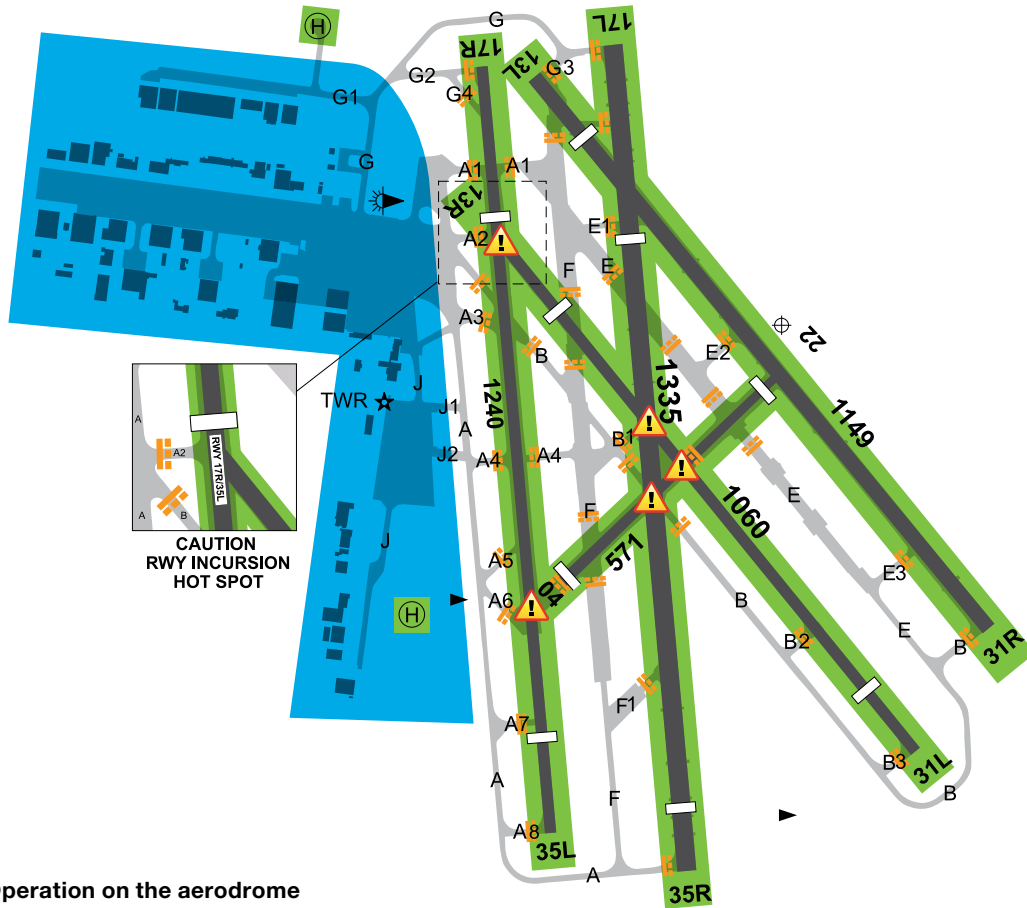
CASA’s OnTrack program provides pilots with information on operating at Moorabbin and other aerodromes. OnTrack is available at: ontrack.casa.gov.au

Information correct at time of printing. Refer to AIP, ERSAs, DAP and NOTAM for current, authoritative information. For more information contact safety.promotions@airservicesaustralia.com

Diagram 1: Moorabbin CCT



RUNWAY INCURSION HOTSPOTS



Operation on the aerodrome

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



Exercise caution at these hotspots and on all runways:

- RWYs 17R and 13R are immediately to the East of the Run-up Bay. Look for, and comply with Holding Points and ATC instructions.
 - When entering RWY 13R for Departure, be careful not to line up on RWY 17R
- You must vacate the runway at the earliest suitable taxiway unless ATC instructs you to use another taxiway, or you request to vacate at another taxiway and ATC has approved this.
- Do not stop on the runway after landing.
- Do not exit a runway unless you are following a lead-in line except when landing 17L and vacating onto taxiway B (speed permitting).
- Do not vacate onto a crossing runway without an explicit clearance from ATC
 - For example: if landing on 31/13(L/R) do not exit on 22/04 or 35R/17L unless cleared by ATC.
- When vacating RWY 17L/35R via F1 expect a left turn onto F to taxi back to the apron. This route crosses no runways.
- Remain on Tower frequency while on the landing runway but transfer to SMC as soon as practicable after vacating.
- After vacating the landing runway, do not enter or cross any runway without a specific clearance to "CROSS RUNWAY...", even if you are instructed to taxi to the apron or parking.

Data sourced from incident reports 1/5/10-30/11/11

Not for navigation. This information is current at the time of publication. Refer to DAP, ERSAs and NOTAMs for latest Aerodrome Charts and operational information. For more information on this or other Airservices safety publications, please email: safety.promotions@airservicesaustralia.com