

Airside Driver Authority: Rules for Drivers Operating Airside – Level 3 & 4

Handbook

AFO-AT-HAN-00-0003

Version 9

April 2025

MELBOURNE AIRPORT

Foreword

This **Handbook** has been prepared by Melbourne Airport to meet the applicable requirements of the *Melbourne Airport Manual*, the *APAC Safety Management Standard, Part 139 (Aerodromes) Manual of Standards 2019*, made under division 139.C.4 of the *Civil Aviation Safety Regulations (CASR) 1998 and the Airports (Control of On-Airport Activities) Regulations 1997*. Any external references made to regulations, standards and documents should be read in conjunction with this document. As these external references are in force from time to time and may be subject to change, the latest issues/amendments should be checked prior to using this document.

APAM will review this document regularly to ensure as far as possible that the information contained within is current, accurate and suitable for the intended purpose. Should any changes be found necessary, or where compliance with this **Handbook** becomes impractical or impossible, the Head of Airfield is to be advised immediately.

Head of Airfield
Aviation
Australian Pacific Airports Melbourne

Document Number	AFO-AT-HAN-00-0003		
Version Number	Version 9		
Originator	Airfield Standards Manager, APAM	Date	8 April 2025
Approver	Airfield Operations Manager, APAM	Date	8 April 2025

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Definitions

Please refer to the Aeronautical Information Package and the CASA Website for commonly used Aviation terms and abbreviations.

For additional definitions specific to Melbourne Airport, please visit www.melbourneairport.com.au/glossary.

References

Title
Airside Vehicle Control Handbook
ADA: Rules for Drivers Airside – Level 2
ADA: Rules for Drivers Airside - Endorsements
Ground Running of Aircraft Operational Safety Policy
Aircraft Turnaround Operational Safety Policy
Pedestrian Safety Operational Safety Policy
Airside Driver Penalty Infringement Notice (PIN) Booklet
Airfield Maps Melbourne Airport

The above documents can be accessed via the Melbourne Airport website.

Change Summary

Version	Date	Change Description
3	10 August 2022	<ul style="list-style-type: none"> Review and combination of Level 3 & Level 4 content. Addition of pre-contingency measures for stop bar faults.
4	6 September 2022	<ul style="list-style-type: none"> Minor corrections.
5	23 November 2022	<ul style="list-style-type: none"> Addition of endorsement handbook references. Removal of safety around aircraft content already captured in ADA Lvl 2 Handbook. Update to Low Visibility rules
6	13 June 2023	<ul style="list-style-type: none"> Section 4 - amendment to medical emergency response Section 9.2.7 - amendment to pattern B stop bars Section 9.2.10 - amendment to primary and secondary lead in lines Section 9.3.8 - inclusion of RUK2 run up position Editorial amendments
7	27 November 2023	<ul style="list-style-type: none"> Amendment to secondary lead in lines Addition of IHP lights, blue edge lighting and tug only relocations Section 9.3.9 inclusion of Apron Slopes
8	24 October 2024	<ul style="list-style-type: none"> Inclusion of Enhanced Taxiway Guidelines, Mandatory Instruction Markings, and Runway Threshold Indicator Lights
9	08 April 2024	<ul style="list-style-type: none"> Administrative changes to capture Taxiway Delta

Disclaimer

This Handbook has been designed as an **addition** to the Airside Driver Authority (ADA) Level 2 Handbook. ADA Level 3 & 4 drivers **MUST** ensure that they have read and understood the requirements of the ADA Level 2 Handbook as it applies to ALL drivers on airside, not just ADA Level 2 drivers. Content applicable to driving on aprons is not included in this Handbook. Content applicable to the ADA endorsements can be found in the *Rules for Drivers Operating Airside – Endorsements Handbook*.

The Handbook is issued as an addendum to the Airside Vehicle Control Handbook, which can be found on the Melbourne Airport website.

1. Introduction

It is recognised that there is an ongoing requirement for vehicles to operate on airside areas of the airport and this Handbook help ensures this is done as safely as possible.

Melbourne Airport issues the following categories of ADAs:

- **Perimeter (P):** Access to Perimeter Road only
- **Level 2:** Aprons Only
- **Level 3:** Aprons and Taxiways
- **Level 4:** Aprons, Taxiways and Runways

This Handbook has been developed for those drivers who are required to operate on Taxiway and Runway areas at Melbourne Airport.

The [Airside Road Map](#) can be located on the [Melbourne Airport website](#).

2. Background

Approved vehicles must display an Authority to Use Airside (AUA) (vehicle permit) for the area they are proposed to operate in. As an authorised driver you must ensure that you are driving an appropriately approved vehicle.

The operations of vehicles and equipment on airside may appear to be simple – but the reality is that the traffic system is a complex operation, and your knowledge of the airside rules and regulations and respect for your airside colleagues is vital. Everyone has a job to do and safely operating your vehicle in that work environment is only one part of your task.

Penalty points are imposed for any breach of these rules and regulations. Your ADA remains the property of Melbourne Airport and may be revoked for any behaviour that is hazardous to airfield operations. Refer to [Section 12 – Penalties](#) for further information.

3. Additional Resources

Airservices Australia (ASA) publishes the [Airside Drivers Guide to Runway Safety](#), another useful document that gives tips on how to:

- Avoid an airside incident or runway incursion;
- Improve airside driver safety;
- Speak to Air Traffic Control (ATC) and understand clearances and instructions; and
- Maintain situational awareness.

4. Accidents, Incidents and Other Emergencies

Various hazards and emergencies can occur on the airport. A major fuel or oil spill, aircraft or ground fire, vehicle accident, medical emergency, hazardous materials incident or terminal evacuation will require a planned response under the Airport Emergency Plan (AEP). Melbourne Airport has an emergency number that is manned 24 hours a day. In an emergency, the Integrated Operations Centre (IOC) will set in motion the response to the incident.

- If it is a medical emergency – call Ambulance Victoria on 000 first, then the IOC on 9297 1601. IOC will direct emergency services to the correct location and liaise with local responding agencies.
- Use an Apron Emergency Call Point, where the system operates as an intercom. Pressing the red button will automatically call the Integrated Operations Centre.
- Air Traffic Control (if applicable) via the applicable frequency.

For any other incident or safety hazard, drivers should notify the Senior Airside Safety Officer (Car 2).

It is a requirement of the Airport Conditions of Use that all incidents are reported to Melbourne Airport.

5. Reporting Incidents

Breaches of the airside safety rules, whether accidental or intentional, must be reported to Melbourne Airport. Melbourne Airport requires all airside incidents, unsafe acts and at-risk behaviours be reported via the [Melbourne Airport website](#). Please provide as much detail as possible. Where necessary, Car 2 or ATC can be contacted directly to be notified of an airside incident requiring immediate action.

6. Contact Numbers

Position/Service	Contact Phone Number
APAM IOC emergency number	9297 1601
Airport Fire Service	9286 3199
Senior Airside Safety Officer (Car 2)	0418 335 985
Airside Safety Officer – (Car 3)	0418 124 142
Integrated Operations Centre (general enquiries)	9297 1624
Airside Fault Reporting	9297 1002
Duty Manager	9297 1844

7. Level 3 and 4 Areas

7.1. Overview

As an airside driver, it is important to demonstrate a complete understanding of the entire airport geography, including all of the Runway, Taxiway and Concourse names and their locations.

- The Movement Area consists of the Aprons, Taxiways and Runways.
- The Manoeuvring Area consists of the Taxiways and Runways **only**.

7.2. Obtaining an Authority

7.2.1. ADA Level 3

To obtain your ADA Level 3, you must satisfy the following requirements:

- Have continuously held an ADA Level 2 for a minimum of 6 months (exemptions are contained in the Airside Vehicle Control Handbook (AVCH)).
- Complete the initial classroom training and assessment.
- Complete a CASA approved course for the Aeronautical Radio Operators Certificate (AROC) and can provide the certificate as proof.
- Complete a colour vision test and provide the results – refer to the [Airside Vehicle Control Handbook \(AVCH\)](#) for further information.
- Complete one 2-hour day familiarisation and one 2-hour night familiarisation with an Airside Safety Officer (ASO) or authorised person.
- Satisfactorily complete a practical airfield geography assessment with a Senior Airside Safety Officer or Melbourne Airport authorised personnel.
- Contact airdat support@melair.com.au to ensure that all mandatory requirements have been uploaded into the Airdat Passport profile.

After completing the ADA Level 3 initial classroom and assessment, the candidate has a maximum period of 6 months to complete all the familiarisations and geography test and obtain the ADA Level 3. Failure to do so will result in the removal of training records. The ADA Level 3 is valid for a period of up to 1 year from the date of issue.

7.2.2. ADA Level 4

To obtain your ADA Level 4, you must satisfy the following requirements:

1. Operational requirement that is approved by Melbourne Airport to hold an ADA Level 4.
2. Have held an ADA Level 3 for a minimum of 6 months (exemptions are contained in the Airside Vehicle Control Handbook (AVCH)).
3. Complete and the initial classroom training and assessment.
4. Complete two 2 hours day familiarisation and two 2 hours night familiarisation with an Airside Safety Officer or authorised person. Each familiarisation must include at least 4 runway crossings and 4 entry and exits from the runway during an inspection.
5. Satisfactorily complete a practical airfield geography assessment with Senior Airside Safety Officer or Melbourne Airport authorised personnel.

After completing the ADA Level 4 initial classroom and practical, the candidate has a maximum period of 3 months to complete all the familiarisations and geography test and obtain the ADA Level 4.

Failure to do so will result in the removal of training records.

The ADA Level 4 is valid for a period of up to 1 year from the date of issue

7.3. Renewing an Authority

Airside drivers are required to renew and complete the online course at least 1 day prior to expiry date. Failure to complete the online course prior to the expiry date will result in the loss of access to the course. To regain access, drivers will need to contact airdatasupport@melair.com.au.

If the ADA has expired for a period greater than 3 months, the driver must recomplete the classroom and practical components in order to renew the ADA.

Completing only the online modules, does not constitute as a re-issue of the driver authority. The ADA needs to be reprinted for it to be valid.

7.4. ADA Level 3 & 4 Authority Requirements

Before you enter any part of the manoeuvring area(s) you must have:

- An ADA Level 3 or 4 (as applicable).
- Approval from ATC on Melbourne Ground/Melbourne Tower.
- A serviceable VeeLo.
- A serviceable Operations Radio.
- A vehicle with a valid AUA for Level 3 or 4 (as applicable).
- A justifiable reason to access the manoeuvring area.
- A valid Australian State Driver's Licence.
 - Digital Driver's License is accepted, provided it is accessed via the VicRoads app.

8. Safety Rules

The following essential safety rules are in **addition** to the essential safety rules detailed in the Airside Driver Authority (ADA) Level 2 Handbook. It is expected that a Level 3 or Level 4 ADA holder is familiar with the content of the Level 2 Handbook and stays aware by:

- Reviewing the latest version upon renewing their ADA Level 3 or Level 4, and
- Monitoring updates from Melbourne Airport, such as those released through an Operations Advice, Safety Alert and through direct notifications via the AIRDAT system.

Important: offenders breaching the safety rules may have a Penalty Infringement Notice (PIN) issued. Refer to Section 13 - [Penalties](#) for further information on PIN issuing at Melbourne Airport.

8.1. Manoeuvring Area Speed Limits

8.1.1. Taxiway

The maximum speed limit on the Taxiways is 40 km/h.

When towing an aircraft, it is recommended that a speed limit of 15 km/h (determined by your company's Standard Operating Procedure) is maintained.

8.1.2. Runway

The maximum speed limit on the Runways is 60 km/h unless otherwise authorised.

8.1.3. Exceeding Airside Speed Limits

Under special circumstances, ASOs may exceed the normal airside speed limits. This is done in accordance with a separate internal Melbourne Airport procedure.

8.2. Air Traffic Control Directions

ATC manages all movements of aircraft and vehicles on the manoeuvring area. This means that you must follow their directions and respond promptly to any calls. On the taxiway system, ATC assumes that you will travel from point A to point B without stopping and that you take into account other aircraft and vehicle movements around you.

8.3. Veelo or Ground Surface Transponder

A device fitted onto a vehicle that emits a signal for ATC to geographically monitor all vehicle movements on the Manoeuvring Area. This signal is accompanied with an associated vehicle call sign (i.e. Tug Black One) approved and registered with ASA.

Important: If ATC informs you that your vehicle Veelo or Ground Transponder is not functioning correctly; complete the approved activity or vacate the Manoeuvring Area as directed by ATC.

Ensure the non-functioning Veelo or Ground Transponder is reported for repair or replaced before the vehicle is driven on the Manoeuvring Area again.

8.4. Runway Strips



Figure 1: Composition of a runway strip

A runway strip is the area surrounding the runway that is prepared and suitable for reducing damage to an aircraft in the event that the aircraft accidentally overshoots, overflies or runs off the runway.

The runway strip is comprised of the runway and associated stopways, a graded area around the runway and a fly-over area outside the graded area.

The runway strips at Melbourne Airport are all 300 metres wide and marked with orange markers (refer [Section 8.6 – Instrument Meteorological Conditions \(IMC\)](#)).

The graded portion of the runway strip is 150 metres wide and is marked for operations in Visual Meteorological Conditions (VMC), known as the VMC runway strip (refer [Section 8.5 - Visual Meteorological Conditions \(VMC\)](#)).

*Important: ADA Level 3 drivers are **not** permitted to enter the runway strip. Drivers must be aware of their proximity to the runway strip when operating on the taxiway network.*

8.5. Visual Meteorological Conditions



White gable markers are positioned to indicate the 150-metre-wide graded portion of the Runway strip – for operations during VMC.

Important: The width area of the runway strip up to the gable markers (the area between the orange markers and the white gable markers) is only accessible to Melbourne Airport vehicles in VMC.

8.6. Instrument Meteorological Conditions



Orange markers are positioned to indicate the 300-metre-wide full runway strip – for operations during Instrument Meteorological Conditions (IMC) and the Runway End Safety Area (RESA) at the ends of all Runways.

IMC has 2 stages:

1. Critical Area Protection.
2. Low Visibility.

Important: The area up to the orange markers is accessible to vehicles without special approval unless in Low Visibility.

8.6.1. Critical Area Protection

Critical Area Protection will be implemented when visibility is reduced to 2000 metres, or the cloud base reduces to 600 feet. This is the first stage of IMC. When this happens, the runway strip is extended to its full 300 metres width to protect the integrity of the Instrument Landing System (ILS). All vehicles, equipment and personnel must stay out of the area marked by the orange markers under these conditions. The Senior ASO (Car 2) will ensure works are restricted to outside the marked areas.

8.6.2. Low Visibility

When the visibility falls below 800 metres, or the cloud base reduces to 200 feet or less, the second stage of IMC – Low Visibility Procedures – will be implemented. Drivers will be informed of Low Visibility through Whispir text message sent via the IOC, FIDS screen and changed gate signage. In the event of low visibility while you are already on the airfield; you may observe that you are not able to see parts of the terminal or concourses normally visible in clear weather. If in doubt, drivers may contact Car 3 to verify the field condition.

Vehicles are not permitted to use Live Taxiway Crossings unless under escort from an ASO.

Restrictions apply to all except emergency vehicles and vehicles essential to the limited airport operations. Those exempted include:

- Airside Safety Officer vehicles,
- Aviation Rescue Fire Fighter (ARFF) vehicles:
 - Responding to emergency,
 - Transiting between main fire station and Gate 12,
- Bureau of Meteorology (BoM) staff transiting:
 - Between MET Station and Gate 12,
 - On foot between MET station and the meteorological recording instruments, and
- Airfield Lighting Officers responding to critical lighting failures.
- Ground Handlers undertaking pushback procedures.

When Low Visibility Procedures are in force, they apply to the whole airport even if low visibility conditions do not affect the whole airport.

Important: The only time you may access the manoeuvring area during low visibility, is when you have permission from Air Traffic Control (ATC). Retail deliveries, works escorts and works on the manoeuvring area are to cease during low visibility, unless permitted by the Senior ASO (Car 2).

8.7. Runway End Safety Area



A RESA is provided at the end of a runway strip and is designed to protect an aircraft which undershoots or overruns the runway. The area must be clear of any hazards, which includes any transient, temporary or permanent obstructions other than visual or navigational aids for aircraft or vehicles. When the runway is in use for take-off or landing, no mobile object may be on any part of the RESA. This area extends a minimum distance of 360 metres from the end of a runway.

Important: The RESA is delineated by the orange markers. You must hold or be under the escort of an ADA Level 4E with the approval of Air Traffic Control to access this area.

8.8. Unserviceable Works Area



Unserviceable or closed portions of the Movement Area to aircraft and vehicle traffic are identified by unserviceability cones, which are white with a painted red band, usually placed 3 metres apart. At night, these markings are supplemented with red and amber lights.

Do not enter these areas unless you are authorised and have an awareness of the work being undertaken and proceed with caution.



During night operations, the Taxiway Centreline leading into the closed portion of Taxiway, will either be deactivated or obstructed by tape. Any lighting inside the closed area, will also be obstructed by sandbags or tape.

Important: If you are instructed by ATC to enter into an area impeded by these markers, stop in a safe location and advise ATC before proceeding further.

8.9. Engine Jet Blast and Ingestion

If you are instructed by ATC or approved to proceed behind an aircraft on the taxiway, you must maintain a minimum distance of 75 metres behind operating aircraft engines.

Refer to the Rules for Drivers Operating Airside – Level 2 for further information on engine jet blast.

9. Taxiways

9.1. Overview

The purpose of the Taxiway system is to provide for the safe movement of aircraft from the Runways to the Aprons, and from the Aprons to the Runways. Melbourne Airport has four different types of Taxiways.

- **Taxiways:** The Taxiways permit both inbound and outbound aircraft safe access to and from our Runways.
- **Rapid Exit Taxiways:** A Rapid Exit Taxiway (RET) is a long radius Taxiway designed for an aircraft travelling at high speed (up to 60 knots), to expedite turning off the runway after landing, thus reducing runway occupancy time. Melbourne Airport has three RET – Taxiway November, Taxiway Foxtrot and Taxiway Golf.
- **Apron Taxiways:** The Apron Taxiways permit both inbound and outbound aircraft safe access to and from our Runways and Parking Stands.
- **Taxilanes:** The Apron Taxilanes are cul de sacs that permit both inbound and outbound aircraft safe access to and from our Taxiways and Parking Stands.

9.2. Taxiway Markers, Markings and Signs

9.2.1. Taxiway Centreline



The Taxiway Centreline marking is a solid yellow line that marks the centre of the taxiway. At night, the marking is supplemented by green centreline lights.

This line continues into the Apron to become the Apron Taxi Guideline line.

You must follow the taxiway centreline where possible to ensure minimum separation from aircraft and infrastructure, as well as visibility for other airfield operators.

Driving on the taxiway centreline will also help ensure that the driver is clearly visible to other operators utilising a Live Taxiway Crossing during VMC.

9.2.2. Taxiway Edge & Low Strength Pavement Markings



A solid double yellow line depicts the regular pavement strength limit or edge of the taxiway.

The low strength pavement portion of taxiway is located beyond the solid double yellow lines marking and is sometimes marked with yellow chevrons. Yellow chevrons are used to mark extended shoulders; painted on some wider shoulders to prevent jet blast to the adjacent areas.

Important: Never drive over low strength pavement.

9.2.3. Intermediate Holding Position



A broken yellow line across the full width of a taxiway is used to define the Intermediate Holding Point (IHP) at the intersection of two taxiways.

The marking designates the safe position to hold short, before entering the minimum clearance distance of aircraft on the intersecting taxiway.

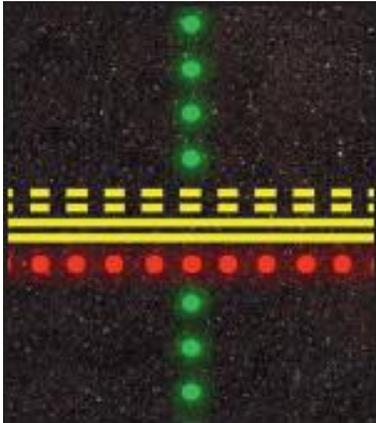
Communicate with ATC when towing an aircraft tail first, as this will affect your judgement to be in a safe position when being told to stop short of a Taxiway intersection.



It is critical to notify ATC if you believe you may have inadvertently entered the intersecting taxiway under the direction to hold short of it. It is also critical to proceed up to but not beyond the marking when instructed to hold short – in order to ensure the aircraft under tow (or vehicles under escort for an authorised escort driver) do not infringe the taxiway intersection located behind their position.

Intermediate Holding Point (IHP) Lighting to the majority of taxiway intersections. IHP Lights are 3 yellow lights at the IHP marking, providing pilots and drivers with positive identification when approaching a taxiway intersection and they are required to hold short. IHP lighting is mandatory to operate with RVR conditions less than 350 metres.

9.2.4. Stop Bars



Stop bar lights are red in colour when armed. When approval has been granted by ATC to cross a stop bar, the red lights will extinguish and green lights will illuminate to indicate the runway is safe to enter/ cross.

Stop bars are installed at every taxiway/runway intersection and consist of light fittings spaced at 3 metre intervals across the width of the taxiway. Stop bars operate 24 hours a day regardless of the runway mode(s) in operation.



Never drive across a row of illuminated red lights on a taxiway. This is a stop bar—do not proceed until the lights are turned off and ATC issues you with an instruction to cross.

ADA Level 3 drivers must not cross the stop bars unless under escort from an authorised ADA Level 4E holder.

Important: Avoid driving closer than 8 metres to a lit stop bar to prevent ATC receiving an imminent incursion alert.

9.2.5. Movement Area Guidance Signs



Movement Area Guidance Signs (MAGS) are provided at the majority of taxiway intersections. Signs provide either location or directional information. At night, MAGS are internally illuminated.

Location MAGS are yellow lettering on black background indicating the Taxiway you are on. Directional MAGS are black lettering on yellow background indicating the Taxiway you are approaching.

An Advisory MAGS (black writing and yellow background) contain relevant information for flight crews and vehicles on a Taxiway system (e.g. Take Off Runway Available).



Mandatory MAGS are white writing on red background. These MAGS are positioned at the approaches to all Runways. They signify the mandatory instruction for aircraft and vehicles to stop prior to the Runway Holding Position Marking and request permission from ATC to enter the VMC Runway strip.

9.2.6. Pattern A Runway Holding Position Marking and Stop Bar



The purpose of a runway-holding position is to define a point on the ground where an aircraft or vehicle is held prior to obtaining approval to enter a runway.

The Pattern A Runway Holding Position with stop bar markings are arranged to prevent an aircraft or vehicle from crossing the solid lines without clearance from Air Traffic Control (ATC), whereas those vacating the Runway, pass over the broken lines and do not require permission to do so.

ADA Level 3 drivers must never cross the runway holding position markings unless under escort from an authorised ADA Level 4E holder.

9.2.7. Pattern B Runway Holding Position Marking and Stop Bar



A Pattern B Runway Holding Position with stop bar (elevated stop bar lights included) can be used which allows for aircraft to be held clear of the Sensitive Protection Area.

The runway holding position marking in this location contains solid yellow vertical lines between the solid yellow horizontal lines. There are currently no active Pattern B Holding Position Markings in operation.

9.2.8. Runway Guard Lights



Runway Guard Lights (RGL) are installed at every taxiway/runway intersection. They are on each side of the taxiway at the taxi holding point and the fittings are elevated yellow lights that flash in a wig wag pattern. RGL operate 24 hours each day regardless of runway operation.

ADA Level 3 drivers must never pass the RGL unless under escort from an authorised ADA Level 4E holder.

9.2.9. Helicopter Aiming Point



The Helicopter Aiming Point is marked with a white circle with a letter 'H' in the middle. This is the position a helicopter will use as an aiming point before air taxiing to the apron.

Melbourne Airport has one Helicopter Aiming Point which is located at the intersection of Taxiway Whisky and Taxiway Whisky 3.

ATC will announce the imminent arrival of a helicopter to the aiming point, however, be aware that helicopters will also use the Taxiway system to reach their parking/departing point.

9.2.10. Primary and Secondary lead-in lines



The primary lead-in line is marked as a continuation of the Taxiway Centreline. This line leads to the aircraft parking positions designed for normal apron circumstances and demand.

The secondary lead-in line is marked by a yellow dashed or solid line on a black background (solid lines on secondary parking positions to be phased out in 2024). The line leads to the aircraft parking positions designed to provide alternative parking positions for use during abnormal circumstances or demand; or to allow smaller or larger aircraft than the primary aircraft parking position was designed for in normal circumstances or demand, to be parked.

9.2.11. Taxiway Edge Lights



Blue edge lighting is provided at the edges of a taxiway or a holding bay that is intended for use at night, and the centreline lighting is not available. Taxiway edge lights may also be used where additional visual cues are required to delineate apron edges at night.

9.2.12. Taxiway Strips

All Taxiways are located within a Taxiway strip to ensure the clearance distance to other aircraft operating nearby is met. The strips provide a cleared and graded obstacle free area should an aircraft run off a taxiway for any reason. They are not marked in the same manner as Runway strips.

At Melbourne Airport we use two standard taxiway codes:

AFO-AT-HAN-00-0001

Uncontrolled when downloaded or printed

- **Code E (i.e. A350-1000 aircraft):** the protected taxiway strip is 43.5 metres wide. This means you must remain a minimum of 43.5 metres from the centreline of the taxiway, in order to not infringe the strip.
- **Code F (i.e. A380 aircraft):** the protected taxiway strip is 51 metres wide. This means you must remain a minimum of 51 metres from the centreline of the taxiway, in order to not infringe the strip.

Important: Only the taxiway intersections have markings to indicate the strips.

9.2.13. Enhanced Taxi Guidelines

Enhanced Taxi guidelines are centrelines that are supplemented with dashed parallel yellow lines for a distance of 47m before the runway holding position. This marking is to strengthen visual cues to show an airside driver or a pilot that they are approaching a runway holding position.



9.2.14. Mandatory Instruction Markings

All runway holding positions have Mandatory Instruction Markings, as depicted below, to show an airside driver or a pilot that they are approaching a runway holding position. You must hold a Level 4 or be under the escort of an ADA Level 4E with the approval of Air Traffic Control to cross the runway.



9.3. Aircraft Towing Procedures

Towing is an important function for airlines and handling agents. It allows positioning of aircraft prior to loading, and relocation to and from the maintenance base. Performing this task is of utmost importance and must be done safely and efficiently.

Before any tow can be conducted an approval must be sought from ATC (refer to [ADA Level 3 Procedures](#) for further information).

Note: ATC does not issue a clearance to tow an aircraft, it is merely an approval. If the instruction has been given by ATC with an appended “tow approved” without any specific details, it is expected the driver will take the most direct path to their destination. At the completion of the tow or relocation, the driver is to contact ATC and advise “tow is complete”.

When towing an aircraft, it is essential the driver only follows the Taxiway Centreline. If a Centreline is not available, the path of travel is not available, then an escort is required.

Scenario: *If a tow is required to enter Whiskey 1 or Whiskey 2 from the east (Whiskey 3 or 4), specific instructions should be obtained as to the preferred path. For example, to use Kilo Run-up Bay or Alpha/Sierra Taxiways. There is no defined path (taxiway centreline or fillet) into Whiskey 1 or 2 if heading west on Whiskey Taxiway.*

9.3.1. Tow Bar Disconnect Point



Marked with a white bar(s) – an aircraft is pushed back and/or pulled forward to this marking to ensure minimum separation clearance from other aircraft and infrastructure. The tug disconnects from this position, returning to the apron, and the aircraft then departs under its own power. ATC approval to push to a disconnect point is typically accompanied with an aircraft tail direction.

In order that safe operation is assured, it is essential that flight and pushback crews are kept briefed by their operator on pushback procedures, including any changes. Current Melbourne Airport Pushback Procedures and Aircraft Pushback Towbar Disconnect Point Map are located at: <https://www.melbourneairport.com.au/corporate/pushback-procedures>

Important: *To prevent damage to taxiway centreline lighting, pushback operators must stop and disconnect on the tow bar disconnect point and ensure adequate ground clearance between the tug and the surface at all times.*

9.3.2. Pushback Guidance Line



The pushback guidance line is a broken white line that provides pushback operators with the required path to safely push an aircraft without any conflicts with other parked aircraft or infrastructure.

A pushback guidance line is usually found leading out from an aircraft parking position lead in line.

9.3.3. Pushback Limit Line



The pushback limit line is a double solid line situated at an end of a pushback guidance line. It is to provide a pushback operator with the limit the nose wheel should travel before the aircraft is required to be pulled forward.

The pushback limit line ensures aircraft tails do not come into conflict with other parked aircraft or infrastructure. A pushback guidance line usually extends past to assist a pushback operator with keeping the aircraft body/tail straight.

9.3.4. Aircraft Nosewheel Stop Line



An aircraft nosewheel stop line defines a position the nose wheel is guided to ensure correct parking. It is marked by a solid yellow line extending along or off to the side of the aircraft lead-in line, and specifies the aircraft type it is designated for.

Important: If the aircraft cannot be positioned on the specific stop line associated with the type aircraft, ATC will need to be advised so that clearance requirements behind the aircraft's position can be observed.

9.3.5. Aerobridge Retraction Light Signals and Parking Stand Readiness



Terminal aerobridges are provided with a retraction light system (red and green). The green light indicates that the aerobridge is in a safe position and the aircraft can proceed/be towed onto the parking stand. The red light will display when the aerobridge is not in the correct position and towing the aircraft onto the correct stop bar position could potentially cause contact.

It is important for any driver towing an aircraft into the correct parking stand, remains vigilant and cognisant of the aerobridge traffic retraction signal and any vehicles/equipment, which could be positioned outside of the correct staging/storage areas.

9.3.6. Tug Manoeuvring Area



The tug manoeuvring area is indicated by orange hatching and is an area that must be kept clear at all times so that a pushback tug has room to manoeuvre when towing aircraft on/off some remote parking stands on the northern apron.

This area is only accessible to an ADA Level 3 holder without the requirement to contact ATC and must only be used while there are no aircraft operations on Echo Taxiway to the north. Entering this area while Taxiway Echo to the north is in use, will breach minimum aircraft clearance distances.

9.3.7. Remote Parking (RP) Positions



Remote Parking positions exist on some of our Taxiways and consist of a white bar, and the associated white alpha numeric including a reference to the taxiway (i.e. RPS7). In future, the marking will be supplemented with a RP arrow. They define an aircraft parking position used for temporary parking like in the event of aircraft parking overflow on the parking stands.

Taxiway Centreline lighting will not be provided in closed areas and towing is at the risk of the operator. It is recommended that the operator utilising a Remote Parking position, provides a spotter for the rear of the aircraft. An ASO can provide spotlight assistance via their vehicles to support tow operations.

9.3.8. Run-up (RU) Positions



Aircraft engine ground running must be completed in the position marked by the stop bar and in the alignment specified at the designated run-up bay. These are:

- Taxiway Bravo – tail north on Stop Bar RUB1
- Taxiway Kilo – tail south on Stop Bar RUK1
- Taxiway Kilo – tail north on Stop Bar RUK2

It is important for all drivers towing to these positions understand and adhere to The Ground Running of Aircraft Operational Safety Policy, which is located at:

<https://www.melbourneairport.com.au/Corporate/Working-here/Operational-information/Airfield-Operational-Policies>

9.3.9. Contact Requirements

Prior to contacting ATC for towing of an aircraft, the ADA Level 3 holder or engineer is required to contact:

- IOC on 9297 1624 for general relocation
- Melbourne Jet Base on 8370 9614 for Whiskey relocation

9.3.10. Tug Only Relocations and Tow Bars



Tug operators are advised to drive slightly offset to the centreline of the taxiway when towing a tow bar and ensure the tow bar is raised as high as possible. This offset helps minimise the risk of causing damage to critical Airfield Ground Lighting (AGL) components as tow bars can bounce and if too low, they will impact AGL fittings.

While adopting an offset position, operators must maintain awareness of the taxiway centreline to ensure safe navigation and coordination with other ground operations.

Clear communication with Air Traffic Control and other relevant ground personnel is crucial. Tug operators should report their presence and intentions when transiting 'tug only' to facilitate coordination and enhance overall safety.

9.4. Airservices Australia Fire Fighting High Speed Testing

Occasionally ARFF Mechanics require acceleration and road tests along Whiskey Taxiway. Some of the tests will require them to exceed the published speed limit and an exemption is applied once the qualified driver informs ATC and the Senior Airside Safety Officer (Car 2). The driver must maintain a visual and listening watch while the test is being conducted, as well as monitor the live taxiway crossing on Taxiway Whiskey for any vehicle traffic. Once the test is completed, the driver will inform ATC and Car 2 that the test is complete.

10. Runways

10.1. Restricted Areas

Even when you have approval to enter a runway, there are still some restricted areas which you cannot enter without the express permission of ATC.

10.1.1. Runway Approach

The area in the runway approach is considered to be part of the operating strip even though it is outside the marked runway strip. The area extending 360 metres beyond the runway end must be kept clear of obstacles to maintain the required obstacle free gradient.

10.1.2. Localiser Aerial



The Localiser forms part of the ILS and produces a signal that guides aircraft to the extended centreline of the runway. A vehicle in front of the aerial can upset the accuracy of the transmitted signal. The Localiser aerals are located beyond the end of Runway 16 and Runway 27 and the critical zone extends from 5 metres behind, 300 metres in front of the aerial and 90 metres in total width, located in-line with the runway centreline. **The Localiser critical area is marked by small white posts with a red band warning sticker.**

10.1.3. Precision Approach Path Indicator



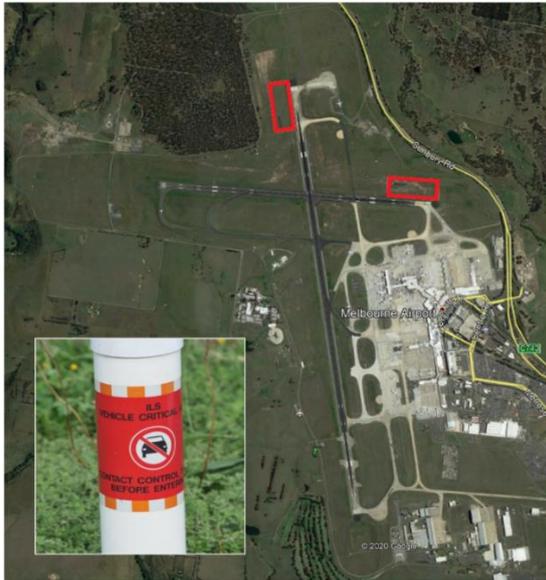
All runways at Melbourne are equipped with the Precision Approach Path Indicator (PAPI). The PAPI system is an approach guidance system made up of light boxes. By using different colour filters the PAPI gives the pilot visual indication of whether they are too high, too low or on the correct approach to the runway. Vehicles obstructing the view of these lights can provide flight crew with inaccurate information.

10.1.4. Glidepath Area



The Glidepath is the second part of the ILS and complements the signal being sent out by the localiser. It sends a radio signal to an aircraft, so it can approach the runway on the correct glideslope.

Vehicles must not enter the critical zone and not drive over the earth mat that is laid between the antenna and the monitor pick-ups. The Glidepath aerials are located outside the runway strip, adjacent to the fixed distance marking on Runway 16 and Runway 27.



The Critical zone extends 160 metres in width and 400 metres in length from the front of the antenna. **The Glidepath critical area is marked by small white posts with a red band warning sticker.**

10.1.5. VHF Omni-directional Radio/Distance Measuring Equipment



Objects will be tolerated adjacent to the DME, as long as they do not project above the height of the mast supporting the DME antenna.

However, as the DME at Melbourne Airport is located with the VOR, the VOR exclusion zones apply. Even though the VOR installation is placed on level ground to minimise the potential for an obstacle causing interference to the signal, obstructions and obstacles can occur. For these reasons, exclusion zones apply to VOR installations:

No vehicle or equipment is permitted within 100 metres of the VOR.



10.1.6. Ground Based Augmentation System



No vehicle or other mobile objects are permitted to stop within proximity of the Ground Based Augmentation System (GBAS) restricted area. Vehicles to a maximum height of 3 metres are permitted to stop in the area highlighted in green.

Other requirements are as follows:

- Vehicle no stopping zones on the unsealed airside road
- No stockpiling within 155 metres of the GBAS site



- Vehicles to a maximum height of 3 metres are permitted to park in the green coloured area
- Mowing in the area is permitted provided that the mower is not stationary for an extended period of time within 155m of the GBAS

10.1.7. Runway Visibility Range



Transmissometers are used to provide a measurement of the Runway Visibility Range (RVR) equipment is installed on all runways at Melbourne Airport.

The RVR value is calculated by a computer located at Airport Lighting Equipment Room (ALER) which receives data from field units located on the runways and from the control tower to indicate which runway is selected and the light intensities being used.



Vehicles must never drive in between any of the sensor pylons, otherwise the aid may receive erroneous data and shut down.

Vehicles must not get closer than 10 metres to the sensors, to avoid damaging the installation.

10.2. Runway Markers, Markings & Signs

10.2.1. Runway End Marking



Runway End Markings signify the physical end of the runway to pilots. The marking consists of a solid white line painted across the end of the runway. It is supplemented by a number of red lights across the end of the runway.

10.2.2. Runway Side Stripe



The Runway Side-stripe marks the edge of the runway. It is a solid white line painted along the full length of both edges. Where two runways or a runway and a taxiway intersect, the Runway Side-stripe is discontinued across the intersection. At night the Runway Side-stripe is marked with white lights.

10.2.3. Runway Threshold



The threshold is the point aimed at by pilots when approaching the airport. The marking consists of a set of painted lines that resemble piano keys.

At night the Runway Threshold is represented by a row of green lights across the runway.

Runway 34 also has Runway Threshold Identification Lights (RTILs), which are 2 flashing white lights positioned 12m outside each line of runway edge lights.

10.2.4. Displaced Thresholds

At times, Melbourne Airport may need to displace a runway threshold. A displaced threshold is a threshold located at a point on the runway other than the designated beginning of the runway. Displacement of a threshold reduces the length of runway available for landings. When a displaced threshold is in place, specific markings and lights will be put in place to identify the change. Refer the Part 139 (Aerodromes) Manual of Standards for details.

10.2.5. Runway Designation



The Runway Designation number refers to the magnetic bearing of the runway. It is a white painted marking that is close to the Runway Threshold.

There is no night marking for the Runway Designation.

10.2.6. Runway Centreline



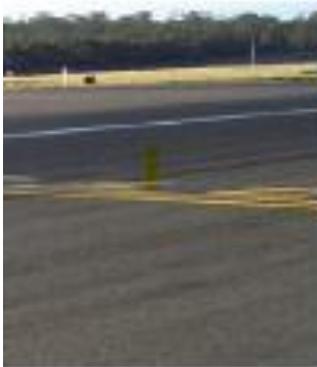
The Runway Centreline signifies pilots the centre of runway and is especially important in low visibility conditions. It is a broken white line along the full length of the runway. Only Runway 16, Runway 34 & Runway 27 have white centreline lights. All lights show white in the direction of arriving aircraft, except the for the last 900 metres where the pattern turns to alternating red and white lights before finally ending in red lights for the last 300m.

10.2.7. Runway Touchdown Zone and Aiming Point



These markings provide a visual clue to pilots of where they are on the runway. The Touchdown Zone (TDZ) consist of two sets of painted white boxes located on both sides of the runway before and after the Runway Aiming Point Markings for a distance of 900 metres from the threshold on Runway 16/34 and 750 metres for Runway 09/27. The Aiming Point is two larger white boxes located on both sides of the runway usually 400m from the threshold.

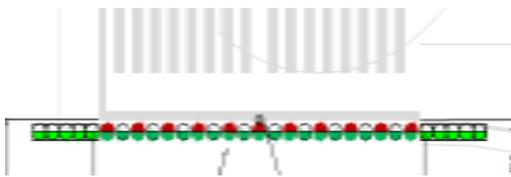
10.2.8. Runway Land and Hold Short Operations Marking



The Land and Hold Short Operations (LAHSO) marking is used to identify the end of the runway when the airport is using two runways for simultaneous operations (i.e. an aircraft can land on one runway whilst another can take off on the crossing runway).

The LAHSO marking consists of two solid yellow lines and two broken yellow lines across the width of the runway and six white occulting lights (lights that cycle through different intensities) for day and night operations. This position is also supplemented with white on red MAGS that mark the position of the crossing runway.

10.2.9. Elevated Runway Threshold Wing Bar Lights



Threshold wing bar lights are a supplementary lighting system used to increase the conspicuousness of a runway. They are installed for use on Runway 16 and Runway 34. Drivers must use caution when in the threshold to avoid striking these units.

10.2.10. Road Holding Position

A road holding position is established where a vehicle road intersects with a runway and is intended to be used as an entry point or crossing point. Currently there is one Road Holding Position at the Fire Access Track onto Runway 16/34.

A Road Holding Position has a stop marking and red stop bar that is extinguished by ATC when approval is given to enter/cross the runway. A Runway Holding Position light is also installed where when the red stop bar lights extinguish and single green light illuminates.



10.2.11. RTILS – Runway Threshold Indicator Lights

Runway Threshold Identification Lights (RTIL) are 2 flashing white lights positioned 12 meters outside each line of runway edge lights with the maximum height above ground not exceeding 1 meter, and 10.6 meters prior to the runway threshold. Each light unit is synchronised, with a normal flash rate of 100 to 120 flashes per minute and have a minimum effective intensity of 15,000 cd \pm 50%. The beam axis of each light unit aimed 15° outwards from a line parallel to the runway centreline and inclined at an angle of 10° above the horizontal. The lights are controlled such that an approaching pilot will not be dazzled by the flashing light.

11. Radio Procedures

11.1. Overview

Radio communications between your vehicle and Melbourne Ground are essential if you intend to proceed from the Apron, onto the Taxiway system. You are required to hold a Part 64 Aeronautical Radio Operator Certificate (AROC) or Part 61 Flight Crew Licence, and also have satisfactory colour vision. Once you have entered the Manoeuvring Area, you must keep a constant radio listening watch – staying alert to what is happening around you by listening to radio communications and associating the aircraft and vehicle movements with your location. It is important to remember that when you are on an operational taxiway, you should **never move outside the hearing distance of radio communication with ATC.**

Any instructions from ATC must be followed immediately and compliance reported to ATC through readbacks and reporting. Communications via any radio (either operational radio talking to ATC or the non-operations radio talking to your company), should avoid use of the word ‘Clear’. This particular word should only be used by ATC and pilots when they communicate with each other. The word that should be used over the radio is ‘Vacate or Vacated’.

11.1.1. Melbourne Airport Radio Frequencies

Radio frequencies in use at Melbourne Airport are as follows:

- Melbourne Ground – 121.7 MHz
- Melbourne Tower – 120.5 MHz
- Melbourne Clearance Delivery – 127.2 MHz
- Automatic Terminal Information Service (ATIS) – 118.0 MHz

Note: When driving within the Manoeuvring Area, you must maintain a listening watch, which means having an awareness of ATC transmissions in order to increase situational awareness.

11.2. Standardised Language

11.2.1. Phonetic Alphabet

Letter	Word	Pronunciation
A	ALPHA	Al-fah
B	BRAVO	BRAH-voh
C	CHARLIE	CHAR-lee
D	DELTA	DELL-tah
E	ECHO	ECK-ho
F	FOXTROT	FOKS-trot
G	GOLF	GOLF
H	HOTEL	Hoh-TELL
I	INDIA	IN-dee-A
J	JULIET	JEW-lee-ETT
K	KILO	KEY-loh
L	LIMA	LEE-mah
M	MIKE	MIKE
N	NOVEMBER	No-VEM-ber
O	OSCAR	OSS-cah
P	PAPA	Pah-PAH
Q	QUEBEC	Keh-BECK
R	ROMEO	ROW-me-oh
S	SIERRA	See-AIR-rah
T	TANGO	TANG-go
U	UNIFORM	YOU-nee-form
V	VICTOR	VIK-tah
W	WHISKEY	WISS-key
X	X-RAY	ECKS-ray
Y	YANKEE	YANG-key
Z	ZULU	ZOO-loo

The international phonetic alphabet is used to assist in voice transmission of call signs, runway and taxiway designators, and the spelling of proper names and unusual words.

Due to interference, communication can be unclear at times. To aid in the reliable transmission of vital words and phrases, the use of the phonetic alphabet and phonetic numerals come into play when communicating via two-way radio.

The phonetic alphabet is made up of particular words to denote letters. When used, pronunciation as shown are to apply.

11.2.2. Phonetic Numerals

Number	Pronunciation
0	ZE-RO
1	WUN
2	TOO
3	TREE or THREE
4	FOW-er
5	FIFE
6	SIX
7	SEV-en
8	AIT
9	NIN-er
DECIMAL	DAY-SEE-MAL
THOUSAND	TOUSAND or THOUSAND

The phonetic alphabet also has a guide for using numbers, made up of particular words to denote each number. Use the pronunciation as shown.

Numbers containing decimals are transmitted with the decimal point, in appropriate sequence, indicated by the word 'decimal' – **DAY-SEE-MAL**.

For example, 121.7 – **WUN TOO WUN DAY-SEE-MAL SEV-EN** or 118.0 would be **WUN WUN AIT DAY-SEE-MAL ZE-RO**

Ground vehicles are to be identified by the type of vehicle, then company 'colour' (if required), followed by the assigned vehicle number spoken in group form. For example, **Tug Silver WUN** or **Tug Blue NIN-er**.

11.2.3. Commonly Used Phrases

Phrase	Meaning
ABEAM	Parallel or 90 degrees to an object
AFFIRM	Yes
APPROVED	Permission for proposed action granted
CONFIRM	Have I correctly received the following (see also "say again")
CORRECT	That is correct
CORRECTION	An error has been made in this (or other) message - the correct information is ...
DISREGARD	Consider that message/instruction as not sent
EXPEDITE	To complete a task with minimal delay
REPORT	Proceed with your message (normally only after "stand by")
HOLD POSITION	Stop / do not proceed until advised

Phrase	Meaning
HOLD SHORT	Stop before a specified location
HOW DO YOU READ	What is the readability of my transmission (or how well can you hear my transmission - normally 'radio check' is used)
NEGATIVE	No / permission not granted / that is not correct
RADIO CHECK	I wish to know how well you can hear me (please advise your readability of my transmission)
REQUEST	Request permission to ... / I would like to know ...
ROGER	I have received all of your last message (see also "WILCO")
SAY AGAIN	Repeat all, or the following part of your message
STAND BY	Wait and I will call you back
VACATE	Leave the Manoeuvring area stated immediately
VACATED	I have left the Manoeuvring area stated (not required after crossing a runway or taxiway unless asked by Air Traffic Control)
WILCO	I (fully) understand your message / instruction and will comply

11.2.4. Transmission Techniques

The efficient use of two-way radio equipment is greatly dependent upon a number of common principles, including microphone technique, voice control and the vocabulary of the operator. These are:

- Think before you talk, be concise and speak clearly
- Avoid hesitant sounds such as "Er" and "Um"
- Maintain a professional manner by avoiding slang terms or colloquial expressions.

11.2.5. Escorts

ADA holders with the Escort (E) endorsement are permitted to escort other vehicles on the manoeuvring area. The escort driver must be directly in front of the vehicle they are escorting, when calling ATC for access. When contacting ATC, the escort driver must use their call sign and 'company'. The use of this word notifies ATC that more than one vehicle will be entering the manoeuvring area.

The driver being escorted ('company') must enter the runway with the escort.

11.3. Standard Blanket Clearance

A 'Standard Blanket Clearance' applies to authorised airside drivers, meaning they have the authority to move on the taxiway system under their own listening watch, and without the need to obtain clearance to proceed from ATC on each occasion.

Only Melbourne Airport vehicles and those from ARFF have this agreement with Air Traffic Control. Restrictions apply to this agreement during periods of Low Visibility.

11.4. Radio Serviceability

11.4.1. Radio Signal Readability Check

The standardised format for reporting the strength of the radio signal and the readability (quality) of the radio signal transmitted by another station, as received at the reporting station's location and by their equipment. They are categorised as follows:

1. Unreadable
2. Readable now and then
3. Readable but with difficulty
4. Readable
5. Perfectly readable

11.4.2. Radio Failure

In the event of a radio failure on the manoeuvring area, the following procedure applies:

- Proceed as far as ATC has approved. ATC will send an ASO to escort if they cannot communicate with the vehicle.
- If engaged in towing or pushing an aircraft, have the engineer or pilot contact ATC for instructions.
- If driving under a stand blanket clearance vacate the Manoeuvring Area immediately.

Radio failure can be identified by observing aircraft movement either pushing back, starting to taxi or exiting the runway system and not hearing any radio transmissions on an operational radio.

11.4.3. Tower Light Signals

ATC may try to communicate with a vehicle using the ATC light signals, this may be due to a radio failure. ATC will flicker the taxiway centrelines to draw the attention of a driver and use the following light signals:

STEADY RED	Stop immediately
RED FLASHES	Move off the taxiway and watch out for aircraft
WHITE FLASHES	Vacate the Manoeuvring Area and contact ATC
GREEN FLASHES	Proceed as far as approved by ATC

11.5. ADA Level 3 Procedures

Before transmitting, be sure the channel is clear (i.e. there are no other communications in progress) by listening out. You can then proceed to transmit using the following procedures.

11.5.1. Movement Request

1. Identify who you are calling	"MELBOURNE GROUND"
2. Tell Melbourne Ground who you are	"CAR 2 & COMPANY"
3. Tell Melbourne Ground where you are	"ON TAXIWAY WHISKEY 1"
4. Tell Melbourne Ground what you wish to do	"REQUEST TO ESCORT TUG TO THE SOUTHERN APRON"
5. Melbourne Ground responds	"CAR 2 AND COMPANY, PROCEED VIA TAXIWAYS WHISKEY, SIERRA, JULIET TO THE SOUTHERN APRON"
6. Acknowledge Melbourne Ground's instructions with full readback	"PROCEED VIA TAXIWAYS WHISKY SIERRA & JULIET TO THE SOUTHERN APRON, CAR 2 & COMPANY"

11.5.2. Aircraft Pushback

1. Aircraft calls Melbourne Ground for pushback clearance	"MELBOURNE GROUND, QANTAS 9 ON BAY DELTA 9 REQUEST PUSHBACK"
2. Melbourne Ground responds	"QANTAS 9, PUSHBACK APPROVED, TAIL WEST TO DISCONNECT POINT SIERRA 1"
3. Pilot acknowledge Melbourne Ground's instructions with a read back	"PUSH BACK APPROVED TAIL WEST, TO SIERRA 1, QANTAS 9"
4. IMPORTANT: Pushback drivers are only required to contact Melbourne Ground to vacate an aircraft when crossing a live taxiway that differs from the current taxiway they are on.	
5. To vacate Disconnect Point Sierra 1 requires the crossing of Taxiway Tango. Therefore, when push is complete, tell Melbourne Ground what you wish to do	"MELBOURNE GROUND, TUG YELLOW 1 REQUEST TO VACATE DISCONNECT POINT SIERRA 1"
6. Melbourne Ground responds	"TUG YELLOW 1, PROCEED"
7. Acknowledge Melbourne Ground's instructions by giving your call sign	"TUG YELLOW 1"
8. When you have vacated the taxiway back onto the apron inform Melbourne Ground by saying	"TUG YELLOW 1 HAS VACATED TAXIWAYS"

11.5.3. Aircraft Tow

1. Entering the Manoeuvring Area from the Apron	"MELBOURNE CLEARANCE DELIVERY, TUG - BLUE 4 AT BAY C7, REQUEST TO TOW B737 TO WHISKEY 1"
2. Melbourne Clearance Delivery responds	"TUG BLUE 4 MONITOR MELBOURNE GROUND"
3. IMPORTANT: The instruction is to monitor, not contact Melbourne Ground. The Controller on Melbourne Clearance Delivery will pass on your request to Melbourne Ground, who will contact you when he/she has time. You're not required to repeat your message on Melbourne Ground. If you fail to actively monitor Melbourne Ground and miss your instruction, you will have to wait until the Controller has another chance to contact you.	
4. Melbourne Ground, when ready, responds	"TUG BLUE 4 PROCEED VIA TAXIWAY TANGO, ALPHA & WHISKY TO WHISKEY 1"

5. Acknowledging instruction	“PROCEED VIA TAXIWAYS TANGO, ALPHA & WHISKY TO WHISKEY 1, TUG BLUE 4”
6. Tell Melbourne Ground when vacated the taxiway system	“MELBOURNE GROUND, TUG BLUE 4 TOW COMPLETE”
7. Melbourne Ground responds	“TUG BLUE 4”

11.6. ADA Level 4 Procedures

11.6.1. When Entering a Runway

You must stop your vehicle close but at least 8 metres short of the stop bar lights and contact Melbourne Ground on 121.7 MHz. The runway incursion alerting system used by Melbourne Airport ATC has been upgraded to reduce the number of false alarms.

1. Identify who you are calling	“MELBOURNE GROUND”
2. Tell Melbourne Ground who you are	“CAR 19”
3. Tell Melbourne Ground where you are	“ON TAXIWAY JULIET”
4. Tell Melbourne Ground what you wish to do	“REQUEST TO ENTER RUNWAY 34 ON IMMEDIATE RECALL”
5. Melbourne Ground responds	“CAR 19, HOLD SHORT OF RUNWAY 34 AND CONTACT TOWER”
6. Acknowledge Melbourne Ground’s instructions with full readback	“HOLD SHORT OF RUNWAY 34 AND CONTACT TOWER, CAR 19”.

NOTE: You should only state your recall time to Melbourne Tower 120.5 MHz if greater than IMMEDIATE RECALL.

SWITCH OPERATIONAL RADIO TO TOWER FREQUENCY	
7. Identify who you are calling	“MELBOURNE TOWER”
8. Tell Melbourne Tower who you are	“CAR 19”
9. Tell Melbourne Tower where you are	“ON TAXIWAY JULIET”
10. Tell Melbourne Tower what you wish to do	“REQUEST TO ENTER RUNWAY 34”
11. Melbourne Tower responds	“CAR 19 ENTER RUNWAY 34”
12. Acknowledge Melbourne Tower’s instructions with full readback	“ENTER RUNWAY 34, CAR 19”

Melbourne Tower will then deactivate the Stop bar and you are then free to enter the runway. **You must not enter the runway until the stop bar is deactivated.**

If you are entering the active runway with ‘company’ during a runway inspection, the trailing vehicle (or the escorted vehicle) MUST cross the deselected stop bar within 2 medium sized car lengths of the lead car. This is to prevent the runway incursion alerting system from activating.

11.6.2. When Vacating a Runway

If requested to vacate the runway by Melbourne Tower the following is the correct procedure:

1. Melbourne Tower	"CAR 19 VACATE RUNWAY 34"
2. Acknowledge Melbourne Tower's instructions	"VACATE RUNWAY 34, CAR 19"

NOTE: When vacating the runway you must ensure you are not within 8 metres from the stop bars before you re-establish contact with Melbourne Tower:

3. Confirm with Melbourne Tower that instructions have been completed	"MELBOURNE TOWER CAR 19 HAS VACATED RUNWAY 34"
4. Melbourne Tower's acknowledges	"CAR 19"
SWITCH OPERATIONAL RADIO BACK TO GROUND FREQUENCY (If there is no further requirement)	"MELBOURNE GROUND, CAR 19 IS ON GROUND"

11.6.3. When Crossing a Runway

1. Identify who you are calling	"MELBOURNE GROUND"
2. Tell Melbourne Ground who you are	"TENDER THREE"
3. Tell Melbourne Ground where you are	"ON THE FIRE ACCESS TRACK"
4. Tell Melbourne Ground what you wish to do	"REQUEST TO CROSS RUNWAY 16"
5. Melbourne Ground responds	"TENDER THREE, HOLD SHORT RUNWAY 16"
6. Acknowledge Melbourne Ground's instructions with full readback	"HOLD SHORT RUNWAY 16, TENDER THREE"
7. Melbourne Ground provides approval	"TENDER THREE, ON THE FIRE ACCESS TRACK CROSS RUNWAY 16"
8. Acknowledge Melbourne Ground's instructions with full readback	"CROSS RUNWAY 16, TENDER THREE"

The vehicle may cross the road once the stop bar has been extinguished.

11.7. Pre-Contingency Measures for Stop Bar Faults

11.7.1. Background

The purpose of pre-contingency measures to provide APAM Level 4 ADA holders with instruction on what actions are to be taken when a fault occurs on a stop bar where it is deactivated by ATC however one or more lights do not extinguish.

The following procedure outlines the initial measures which are intended to prevent **stop bar contingency procedures** from being required. ATC will not typically implement stop bar contingency procedures in the first 15 minutes following recognition of the fault, to provide an opportunity for rectification.

NOTE: Under ATC procedures, disabling power, obscuring the stop bar (e.g. with tape) or closing the affected taxiway (for a fault on an individual stop bar) is preferable to implementing such contingency procedures.

11.7.2. Instruction

If clearance is given by ATC to enter or cross a runway, but a fault occurs on a stop bar where it is deactivated by ATC and one or more lights do not extinguish, the following actions are required:

1. **Do not enter the runway. Hold position.**
2. Advise ATC over the operational radio that a fault has occurred which is preventing all the lights from being extinguished.
Note: Upon notification, ATC will cancel any issued clearance to cross the affected stop bar and will instruct the vehicle to hold at the runway-holding position.

Note: If detailed information needs to be conveyed regarding the status of the stop bar, make the radio notification first and then contact Car 2 for assistance.
3. Notification must also be made to Car 2 about the fault and the location.
4. ATC will commence their fault reporting actions, normally by cycling the stop bar deactivation again. If this resolves the fault, advise ATC of the restored status of the stop bar and revert to normal procedures.
Note: ATC will not typically implement stop bar contingency procedures in the first 15 minutes following recognition of the fault.
5. If the fault is unable to be quickly rectified, ATC will request one or more of the following:
 - a. Power to the stop bars is disabled,
 - b. The stop bar lights are obscured (e.g. with tape), or
 - c. For a fault affecting an individual stop bar, the associated taxiway is closed.
6. Car 2 will direct the requested actions, however the Airfield Lighting Team can self-respond provided they keep Car 2 apprised of their actions.
7. Once the correct function of the stop bar is restored, advise ATC and revert to normal procedures.
8. **Should stop bar contingency procedures be implemented by ATC, or another instruction issued, this procedure is superseded as applicable.**

11.7.3. Stop Bar Contingency Procedures

Stop bar contingency procedures are published by Airservices Australia in AIP Australia.

2.4.3 Stop Bar Contingency Procedures

- 2.4.3.1 If stop bar lighting cannot be deselected, the activation of stop bar contingency procedures will be notified via voice or the ATIS. ATC may instruct pilots and drivers to cross an illuminated stop bar when stop bar contingency procedures are in force.

When stop bar contingency procedures are in force, ATC will use the following phrase when the driver is ready to enter the runway:

“AT (holding point), CROSS THE ILLUMINATED STOP BAR, ENTER (or CROSS) RUNWAY (number)”

12. Penalties

A Penalty Points System applies for airside drivers that breach the rules for drivers operating airside. Melbourne Airport publishes the [Airside Driver Penalty Infringement Notice \(PIN\) Booklet](#) on the Melbourne Airport website.

Airside drivers must make themselves aware of the penalty points system within this booklet as it details the following:

- How drivers are notified that they have been issued a PIN;
- The process to appeal a PIN; and
- PIN classification.

Melbourne Airport Airside Safety Officers issue cautions or points to airside drivers in accordance with the PIN Booklet.

13. Summary

Obtaining an Airside Driver Authority comes with considerable responsibility.

Airside driving requires concentration and focus much higher than you will have ever experienced before. Aircraft movement and traffic patterns are constantly changing. You must expect the unexpected.

Professional driving skills expected of an Airside Driver are:

- Be vigilant around aircraft operations
- Stick to the speed limit
- Be situationally aware
- Know the markings
- Know the radio procedures
- Drive safely

As the holder of an Airside Driver Authority you are expected to drive in a safe manner and contribute to a safer airside environment.

14. Further Information

For further information with regards to this **Handbook**, please contact:

learningandcapability@melair.com.au



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