



## **Foreword**

This handbook has been prepared by Melbourne Airport to meet the applicable requirements of the Melbourne Airport Aerodrome Manual, the APAC Safety Management Standard and also the Part 139 (Aerodromes) Manual of Standards 2019, made under regulation 139.095 of the Civil Aviation Safety Regulations (CASR) 1998. 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



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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 <a href="https://www.melbourneairport.com.au/glossary">www.melbourneairport.com.au/glossary</a>.

## References

Title		
Airside Vehicle Control Handbook		
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.

## **Disclaimer**

This Handbook has been developed for those drivers who are required to operate on the Apron areas airside at Melbourne Airport. ADA Level 2 drivers MUST ensure that they have read and understood the requirements of 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.

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# **Change Summary**

Version	Date	Change Description
2	4 November 2021	<ul> <li>Added live taxiway crossing closure during Low Visibility         Operations</li> <li>Editorial changes</li> <li>Addition of taxilane crossing roadway information</li> <li>Update of traffic warning system</li> <li>Definitions moved out of document into centralised Melbourne         Airport glossary</li> <li>Amended apron limit line and taxilane crossings to reflect new         markings</li> </ul>
3	23 November 2022	<ul> <li>Addition of "Stop for Taxiing Aircraft" marking. Removal of superseded markings.</li> <li>Update to mobile phone and radio transceivers restrictions.</li> <li>Reformatting of existing content</li> <li>Addition of Perimeter Road as a standalone licence.</li> </ul>
4	13 June 2023	<ul> <li>Amendment to section 4 – medical emergency response</li> <li>Addition of unattended vehicles section</li> <li>Amended requirements for obtaining a level 2 authority</li> <li>Addition of note for aircraft arrivals under power</li> <li>Amended ADA level 2 maps</li> <li>Editorial amendments</li> </ul>
5	27 November 2023	<ul><li>Amendment to secondary lead in line</li><li>Apron slopes advisory</li></ul>
6	23 October 2024	<ul> <li>Clarification of restrictions for bicycles and e-scooters</li> <li>Update to Apron markings</li> </ul>
7	08 April 2025	Administrative changes to capture Taxiway Delta
8	02 June 2025	<ul> <li>Obtaining a Level 2 Authority to Drive Airside</li> <li>Level 2 Authority Requirements</li> </ul>



## 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 apron areas airside 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 13 – <u>Penalties</u> for further information.



## 3. 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 resourced 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.

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.

## 4. 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 <u>Melbourne Airport website</u>. 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.

## 5. 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



## 6. Level 2 Areas

#### 6.1. 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.

The limit of the Level 2 area is marked by the <u>Apron Limit Line</u>. Drivers must never cross this marking unless when under escort by an authorised escort driver who holds the ADA Level required for that area.

## 6.2. Level 2 Authority

### 6.2.1. Obtaining a Level 2 Authority

To obtain a Level 2 ADA, the following process flow must be followed:

- 1. Read the Level 2 Driver Guide;
- 2. Complete the e-learning module online "ADA Level 2 Step 1: Initial";
  - a. This is a prerequisite to booking the Melbourne Airport on-site delivery. The e-learning module must be completed at least 48-hours prior to the commencement of the on-site delivery.
- 3. Attend the Melbourne Airport on-site delivery in classroom;
  - a. The on-site delivery must be booked via AIRDAT "ADA Level 2 Step 2: Classroom, Famil, and iPad Assessment"
- 4. Attend the Melbourne Airport situational awareness airside tour; then
- 5. Undertake the assessment in consideration of all learning completed to this point.

The driver is then to complete 10 hours of supervised airside driving, utilising the logbook available on the <u>Melbourne Airport website</u> to record all hours. The driver must log at least 10 hours of driving, recorded by the supervising driver within the practical observation log, which must be sent to airdatsupport@melair.com.au once completed. AIRDAT will then issue the ADA Level 2.

A Level 3 ADA is required if aircraft relocation/towing is to be performed outside the apron area. In addition, candidates must also:

- 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.

Melbourne Airport recommends that Level 2 ADA candidates complete the aforementioned requirements regardless of whether or not they intend to apply for a ADA Level 3 in the future. It is the responsibility of the ADA holder's employer to ensure that records of the above are maintained.



After satisfying all of the above requirements to obtain an ADA Level 2, the candidate has a maximum period of 3 months to collect their ADA. Failure to do so will result in the removal of training records.

The ADA Level 2 is valid for a period of up to 2 years from the date of issue. The candidate must ensure that their AIRDAT profile <u>Login - PASSPORT (airdat.org)</u> is up to date as reminders are sent to the email provided at 90 days <u>prior</u>, 30 days <u>prior</u>, and on expiry.

#### 6.2.2. Renewing a Level 2 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 airdatsupport@melair.com.au.

If the ADA has expired for a period greater than 3 months, the driver must satisfy all the requirements for the initial issuance of an ADA in order to complete an ADA renewal. In unique circumstances, this requirement may also apply when the ADA has expired for a period of less than 3 months, at the discretion of the Airfield Operations Manager.

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

#### 6.2.3. Level 2 Authority Requirements

Before you enter any part of the movement area(a) you must have:

- ADA Level 2, unless driving under supervision in accordance with the ADA Level 2 driver training.
  - o A Practical Observation Logbook must be carried by all drivers under training.
- A vehicle with a valid AUA for Level 2, 3 or 4.
- A valid Australian State Driver's Licence.
  - o Digital Driver's Licenses are accepted, provided they are accessed via the VicRoads app.

# 7. Types of Roadways

At Melbourne Airport there are three different types of roadways on which an ADA Level 2 authorised driver can operate.

- Apron Service Roads
- Taxilane Crossings
- Live Taxiway Crossings

### 7.1. Apron Service Roads



Apron Service Roads are provided on the majority of aprons to ensure that any vehicle movements are kept clear of aircraft using the adjacent taxilane and/or parking bays. Apron Service Roads are marked similarly to landside roads — white edge lines with a broken centreline. Drivers must maintain situational awareness whilst operating on these roads to ensure that they remain clear of aircraft movements and jet blast. Always stay on these roadways where possible to ensure a safe and predictable flow of traffic.

Figure 1 - Apron Service Road



## 7.2. Taxilane Crossings

Taxilane Crossings are provided on some apron areas and are marked with staggered black lines each side. Drivers utilising designated taxilane crossings will interfere with aircraft operations when the taxilane is in use. Taxilane crossings that sit beside a Taxiway will have red/white staggered lines on the Taxiway side of the crossing. **Do not** cross the red/white side, as this is the limit of the Level 2 area.

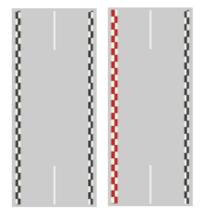


Figure 2 - Taxilane Crossing

In these instances, airside drivers are either not to proceed, or must immediately relocate behind the closest <u>Aircraft Parking Clearance</u> <u>Line</u> (solid red line bordered by solid yellow lines) if it is safe to do so. Take care not to obstruct arrival/pushback and ensure sufficient separation between all vehicles and the aircraft.

If on a taxilane crossing and when driving past parked aircraft, stay to the taxilane side of this line. If aircraft are using the taxilane, stay on the parking bay side of the line while remaining clear of parked aircraft. Wait for the taxiling aircraft to pass before proceeding back onto the taxilane crossing and never shortcut between parked aircraft.

## 7.3. Live Taxiway Crossings

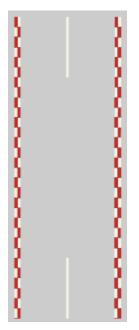


Figure 3 - Live Taxiway Crossing

Live Taxiway Crossings are the only point at which an ADA Level 2 holder can cross a taxiway. Live taxiway crossings are marked with staggered red lines each side. Live taxiway crossings are not available during Low Visibility Operations and if you require access for operational reasons, an escort will need to be provided. Once you have commenced crossing a Live Taxiway Crossing, you must not stop on the taxiway.

The contact for this service is <u>Airside Safety Officer - Car 3</u>.



## 8. Safety Rules

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. Speed Limits

A 5km/h speed limit applies:

• Within all baggage makeup rooms

A 10km/h speed limit applies:

- Around or under buildings (Airside Road, Concourse Road, Freight Service Road)
- Apron area within 15 metres of an aircraft

A 15km/h speed limit applies to:

• Apron area <u>not</u> within 15 metres of an aircraft and <u>not</u> under or around buildings

A speed limit of 15km/h for tugs and 25km/h for all other vehicles applies to:

- Roadway from Gate 27 to south of Bay H2 (Airside Access Road)
- Roadway from maintenance bases and the rest of the airfield (Maintenance Road)
- Roadway from Gate 27 to G.S.E maintenance precinct (Airside Access Road)

#### 8.1.1. 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. Seat belts

All drivers and their passengers must wear a seat belt at all times when driving on the airside. It is the driver's responsibility to ensure passengers are wearing seat belts.

#### 8.3. Amber Beacon

Airside vehicles operating on the airside must be fitted with a dedicated rotating or flashing vehicle hazard light (amber beacon) which is:

- Yellow or amber in colour,
- Able to flash at a rate of 60-90 flashes per minute,
- At a peak intensity of between 40 cd and 400 cd; and
- Placed on top of the vehicle and visible from all directions.

**Note**: If fitting a beacon on top of a vehicle is not possible, additional (equivalent) rotating or flashing lights must be fitted at suitable locations to ensure visibility in all directions.

Amber beacons are to be operating at all times whilst driving airside in both day and night conditions. The beacon must be clearly visible in normal daylight in all directions from a distance of not less than 200m.



## 8.4. Vehicle Signage

Vehicles are to display a sign of a minimum A4 size (297mm x 210mm) to clearly identify the company the vehicle belongs to. The signage must be displayed on both sides and located on the outside of the vehicle.

## 8.5. Drugs and Alcohol

All drivers on the airside must abide by CASA permitted levels for drugs and alcohol as reflected in the <u>Drug and Alcohol Management Plan</u>. Drivers will be required to undergo drug and alcohol testing if they are involved in a vehicle accident or incident, or they commit a breach of the Airside Drivers Rules that carries a significant penalty. Drivers may also be required to undergo random testing at any time.

#### 8.6. Children and Animals

Children (under 15 years old) and animals are not permitted airside without approval from Melbourne Airport Security.

## 8.7. Bicycles and E-Scooters

Bicycles, scooters, skateboards and other non-motorised modes of transport are permitted to be taken onto the airside but cannot be ridden or otherwise used. This includes the baggage rooms, terminals, aprons and airside roads.

E-scooters and any other electronically powered modes of transport are strictly prohibited from being taken onto the airside in any capacity.

## 8.8. No Seat No Ride

The 'No Seat No Ride' policy applies at Melbourne Airport. The driver has the responsibility to ensure that they do not allow any person to ride in or on their vehicle or equipment if there is no seat or authorised operating position provided.

## 8.9. Smoking

No smoking is permitted inside or outside a vehicle on the airside. The use of E-cigarettes and vapes is also prohibited. The airside is at extreme risk from any form of fire at all times.



#### 8.10. Mobile Phones and Radio Transceivers

Airside drivers must always stop their vehicle in a safe location when operating a mobile phone or radio transceiver, unless otherwise permitted below.

If a **mobile phone** (not a smartwatch) or **radio transceiver** is secured in a commercially designed holder fixed to the vehicle, an airside driver may use it to make or receive an essential communications call or radio transmission, provided:

- It can be operated without touching any part of the **mobile phone** (i.e. using Bluetooth) or in the case of a **radio transceiver** a commercially designed hand unit is available,
- It does not distract them from the safe operation of the vehicle, and
- The drivers' situational awareness is not adversely affected.

**Note:** The term 'essential' is considered to mean the performance of an operational, safety or security duty which cannot be delayed without an adverse consequence. All other functions including, texting, emailing, task management, photography, engagement with social media, commercial/shopping activities or other use of non-essential applications are prohibited whilst the vehicle is in motion.

## 8.11. Airside Safety Officers

The Airside Safety Officers have the ultimate responsibility for safety on the airside. It is important that you listen and follow all instructions or advice that they give you.

#### 8.12. Pedestrians

Always stop and give way to pedestrians. Slow down before you reach the pedestrian crossings on Airside Road. Never drive between aircraft and the terminal walkways, even if the aircraft is not in the process of boarding or disembarking. Stay alert to the presence of staff or passengers when driving on the aprons airside. Never walk across an apron or the taxiways.

### 8.13. High Visibility Clothing

It is mandatory that whenever you are airside, high visibility clothing must be worn at all times. The only acceptable colour for all high visibility garments is Dayglow Yellow. You must be seen to be safe. For more information on staying safe airside refer to the <u>Pedestrian Safety Policy</u>.

#### 8.14. Noise

The airside is a noisy environment due to aircraft, vehicles and equipment operating. Your hearing can be easily damaged – ensure that you minimise the risk of hearing loss by wearing hearing protection.



## 8.15. Low Visibility

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. Other indications may include the 'Low Visibility in Force' banner shown on the Flight Information Display System (FIDS).

In these instances, only drive on the roadways closest to the terminal and near or under concourses (if your vehicle height with load or towing of equipment permits).

Vehicles are not permitted to use Live Taxiway Crossings unless under escort from an ASO. When Low Visibility Procedures are in force, they apply to the whole airport even if low visibility conditions do not affect the whole airport.

## 8.16. Headlights

If driving on the airside at night or in bad weather your headlights must be used and on low beam.

## 8.17. High Winds and Thunderstorms

High winds are winds above 41 knots (greater than 75 km/h) and a number of precautions are taken at the airport when this occurs. It is the responsibility of the driver to ensure all servicing equipment and containers are secured by applying parking brakes or locking them onto dollies/profiles.

An 'Operations Shutdown' may be broadcast by a warning siren, when a thunderstorm is within 5 nautical miles of the airport and is continuing to approach. Timing of the shutdown is up to the employer; however, staff generally move off the apron at this time. Avoid the possibility of a lightning strike by moving clear of the apron when thunderstorms approach.

#### 8.18. Secure Load

Drivers are responsible for any load they carry – it must be secured. Any material lost must be collected immediately (as long as it safe to do so). Park safely then collect and reload the item.

## 8.19. Towing of Freight Dollies

Limits apply to the number of freight dollies that may be towed at a time; six small units (container dollies/trailers) or four large units (low profiles/baggage barrows). Baggage rooms have a strict limit of four container units or two barrows.

### 8.20. Foreign Object Debris

Rubbish from debris is blown around in the course of operations. This material is called FOD (Foreign Object Debris) and can cause significant damage/injury to aircraft, equipment and people.

Even a small amount of FOD may potentially be ingested into the engine of an aircraft or run over and cause substantial damage. FOD has been known to blow across the apron injuring personnel and causing damage to equipment. When you see FOD, park safely, pick it up (if it safe to handle) and put it in a red FOD bin.



## 8.21. Dangerous Goods

A hazardous materials (HAZMAT) incident can occur when a chemical is spilled during the movement of HAZMAT. Generally, this would be the result of a breakdown in freight handling procedures or packaging. Most of these incidents occur in and around the passenger or freight terminals.

HAZMAT incident poses a severe risk to your health as well as to the environment. Avoid the increased risk by remaining well clear of any HAZMAT incident.

## 8.22. Fatigue

Fatigue effects our judgement, decision making skills and all aspects of human performance, including your reaction time and situational awareness. Recognise the symptoms of fatigue and take the appropriate action such as having a break or not driving on the airside that day. If you are feeling sleepy or are having trouble concentrating - then you are showing signs of fatigue, and placing yourself and others in danger. Getting plenty of good restful sleep is the only effective solution to fatigue. It is the responsibility of the individual airfield user to ensure they are alert, aware and can remain vigilant before entering the airfield.

## 8.23. Emergency Exit

In case of an emergency all drivers must be aware of where the most appropriate apron exit is located (i.e. manned access gates etc.). They must also have an awareness of which authority to notify in the event of an emergency – the IOC on 9297 1601

## 8.24. Apron Slopes

The following apron areas associated with aircraft turnaround activities have increased apron slopes which require drivers/operators to exercise additional caution:

- D15, D17, D19
- F11, F13 F15
- G42, G43, G44, G45, G46, G48, G50, G51, G52, G54, G56
- H1, H2

There are additional areas outside of apron areas that have increased slopes and therefore drivers are to ensure their vehicles are securely positioned at all times (refer Section  $\underline{0}$ ). Penalties apply.



## 9. Safety Around Aircraft

## 9.1. Engine Jet Blast and Ingestion



Jet Blast is the exhaust emission from a jet engine. It will be hot, contain noxious gasses, travel at high speeds and can blow loose material around. Always stay at least 75 metres away from the rear of an operating engine to avoid jet blast.

Important: Remember to consider that when aircraft use 'minimum breakaway thrust' on the taxiway to commence the aircraft roll from standstill – a greater discretionary distance is to be applied.

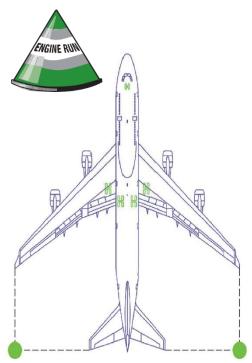
Engine Ingestion is the term used to describe the way in which an aircraft can suck objects into the engine intake area. Always stay at least 7.5 metres from the front and to the side of engines to avoid the possibility of being ingested.

#### 9.1.1. Propellers

Aircraft propellers are just as dangerous as jet engines. When spinning, they can be almost impossible to see. Wash from propellers is also a hazard and should be treated like jet blast. Follow the same safety precautions as you would with other types of engines. Never approach an aircraft with the engines running.







Green engine run cones indicate when an engine ground run is underway. This includes dry motoring. The cones are green with a reflective stripe.

Cones will be placed in line with the tailplane and wing tips of the aircraft, OR, where ground runs are being conducted on restricted bays, the cones will be placed along the taxiway/taxilane crossing to prevent vehicles passing behind aircraft conducting engine runs. Ensure you remain clear of these marked areas.

Refer to the <u>Ground Running of Aircraft Operational Safety</u> Policy for further information.

#### 9.3. Aircraft Pushbacks

An aircraft about to move will have the **anti-collision beacons**, commonly fitted to the upper and lower fuselage, activated.



Other indications are:

- The aerobridge or stairs will be retracted or retracting
- There are no vehicles servicing the aircraft
- A pushback tug or power push unit (PPU) will be attached and the beacon on
- The presence of engineers at the nose wheel of the aircraft
- The wheel chocks removed

If you are unsure if an aircraft is about to pushback, **STOP** and wait, or take another route. Never proceed behind an aircraft that appears ready for pushback even if the engineer or tug driver waves you through.

## 9.4. Give Way to Aircraft

Aircraft have priority and you must always give way to them, whether the aircraft is under its own power, being towed or is being pushed back. Remember aircraft have right of way at all times.



#### 9.5. Aircraft Arrivals

Indications that an aircraft is about to arrive onto a bay will commonly include:

- Vehicles staging in or near a vacant bay
- The presence of a marshaller/engineer
- An illuminated Visual Docking Guidance System

Important: drivers should avoid driving along, or being stationary on, the road adjacent to a parking position when an aircraft is powering onto a bay.

## 9.6. Helicopters

Helicopters arrive and depart vertically – usually out of a clear line of sight. The rotor wash of a helicopter poses much the same dangers as are associated with jet blast and propeller wash. Avoid the danger by being alert and situationally aware. Always look up and behind you before you enter the apron in a taxilane or use a live taxiway crossing.

#### 9.7. Clearance to Aircraft

Always remain at least 3 metres from aircraft that you are not servicing and extend this distance to 15 metres while an aircraft is refuelling unless driving on an Apron Service Road.

## 9.8. Underneath an Aircraft

Never drive under the wing, nose, tail or fuselage of an aircraft unless you are required to for servicing the aircraft, as you could be injured, or your vehicle may damage sensitive aircraft instruments and components, such as the landing gear, wing flaps and sensors.

The landing gear and many other components located in the wheel wells of an aircraft are dangerous to personnel. The most obvious danger is from hot or burning brakes. Overheated brakes or tyres have the potential to explode and this could be fatal.

The underwing area contains many of the aircraft flight controls, for example, the flaps, the engines and the engine cowlings (or covers). With the flaps extended, the clearance under the wing of an aircraft could be dramatically reduced. Fuel vents are also located under the wings, so do not position your vehicle under the wing in the event a refuelling incident occurs.

The hazards of the fuselage are associated with the low clearances between the ground and the underside of the aircraft. The specific things to watch out for are antennae, masts, inlets, exhausts, drain holes and sewerage outlets.

It is highly important that if you do accidentally make contact with an aircraft, you must report it to an airline engineer or your supervisor immediately.



## 9.9. Refuelling Operations

Always remain at least 15 metres from a refuelling aircraft unless you are required to for servicing. When working around an aircraft with a refuelling vehicle attached, an area of at least 3 metres in any direction from the centre-point of fuel couplings, fuel vents, hydrant fuel pits, fuel hoses and fuelling vehicles must be kept clear to avoid contact. This area is known as the Fuelling Safety Zone. Vehicles and equipment must be positioned so that they do not obstruct the refuelling vehicles escape route.

Emergency Fuel Shut Down buttons are located on the cabin of all refuelling vehicles, tankers and on most aircraft bays and remote parking stands. Any fuel spilled on personnel should be washed away using an eye wash or deluge shower on the apron. Clothes should only be removed under a shower to prevent a static spark igniting the fuel.

## 9.10. Bonding and Earthing of Aircraft

Aircraft must be bonded during refuelling. Earthing may also be required during the loading of oxygen. Both tasks are carried out by using wire bonding leads to equalise and/or dissipate the static charge. Although risks associated with the processes are low, if the bond between the aircraft and the vehicle is broken then there is a danger of the static creating a spark which could, in turn, cause a fire. If the bond is removed notify the refueller immediately.

#### 10. Vehicles

#### **10.1.** Vehicle Traffic

The apron is an extremely busy and a potentially dangerous place. All the activity is highly concentrated, and the traffic movements are often random. Each airside team member has a particular role to play in which on-time performance is crucial.

The area surrounding an aircraft can be very busy with movements of all kinds. Vehicles such as catering trucks, refuelling vehicles, toilet trucks, tugs, maintenance vehicles and security vehicles will all be moving in and out of the area. Keep your eyes and ears open when you are in the vicinity of an aircraft.

Whenever possible, airside drivers must use the Aprons Service Roads to ensure safe traffic flow. Shortcuts must not be taken through aircraft bays while they are active as penalties apply.



## 10.2. Parked Equipment and Vehicles

Equipment and vehicles can present a hazard if incorrectly parked. The risks associated with equipment include:

- The sudden movement of equipment in any direction
- Equipment can move on its own if the parking brake is not properly applied
- Vehicles may skid if travelling through an unobserved spill on the apron

Be situationally aware at all times on the airside. Before you drive or walk behind any equipment, make sure that the vehicle engine is not running and that it is not about to move. Always apply the parking brake to any vehicle or equipment (including rolling stock) when leaving it unattended, and do not leave keys in the vehicle or accessible to unauthorised person(s). Airside vehicles and equipment should not be parked on red hatching or over stormwater drains.

Important: no airside driver is permitted to operate another company's piece of equipment without authority given by the ownership company.

#### 10.2.1. Unattended Vehicles

Vehicles left unattended in an unsecured state on any area of the apron and/or the airside are not to be left running (engine) or with the keys left in the ignition, or with keys accessible to any unauthorised person(s).

Vehicles that are left running or are left with keys in the ignition unattended are more likely to be used by a non- authorised person on the airside.

Keys left in the ignition will be confiscated by Melbourne Airport. It will be the responsibility of the vehicle operator to coordinate a time and date to collect the keys from the Senior Airfield Safety Officer.

#### 10.3. Vehicles Under Escort

As Melbourne Airport is a security categorised airport, many vehicle movements on the airside are done under escort. Examples include retail deliveries and irregular visitors to the airside.

Escorted drivers may be distracted. It is important to never pass between the escort vehicle and the vehicle being escorted.



#### **10.4.** Situational Awareness

Situational awareness is a term often used in aviation. The formal definition of situational awareness is 'a person's perception of the environment at a particular time and place'. More simply, it can be translated into 'being alert to all that is happening around you'.

Our situational awareness can be affected by a number of things being stress, fatigue, work overload and work underload. The following techniques can help you maintain situational awareness:

- The use of mental pictures
- Clear and open communication
- Checking for ambiguous information
- Planning ahead
- Monitoring and evaluating your performance
- Keeping your eye on the bigger picture
- Following standard operating procedures
- Removing possible distractions

## 10.5. Fuel / Oil Spills

Spills arise from a wide variety of sources. The most common being from ground servicing equipment or aircraft. Spills are a hazard to the safe operation of the airport, to our environment and to you as an individual working on the apron area. Spills left on the apron make the area slippery and are a danger to vehicles as well as a slip hazard to pedestrians.

Fuel, oil or other chemicals entering the airside drainage system have the potential to impact the environment. If you notice a spill, you have to report and commence clean-up (utilising a spill kit) immediately.



## 11. Airside Markers, Markings and Signage

## **11.1.** Road Markings

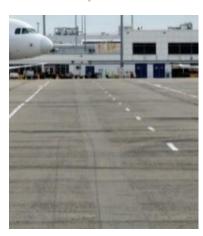
## 11.1.1. Apron Limit Line



A double solid white line with a black contrasting colour indicating the limit of the ADA Level 2 area, and separating the apron from the Manoeuvring Area (Taxiways and Runways).

Never cross this line unless when under escort by a Melbourne Airport vehicle with the appropriate authority.

### 11.1.2. Apron Service Roads



Are provided on the majority of aprons to ensure that any vehicle movements are clear of aircraft parking bays.

The roads are marked similarly to landside roads – white with a broken centreline and must be followed where possible.



#### 11.1.3. Live Taxiway Crossings

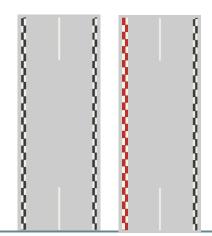


Are marked with staggered red lines each side. This is the only point at which an ADA Level 2 holder can cross a taxiway.

On approaching the live taxiway crossing, come to a complete stop, give way to any aircraft or vehicles using the taxiway and ensure the taxiway is clear before you cross.

Remain within the red staggered lines while crossing the taxiway and do not use a crossing without escort when in low visibility, or when an Apron Limit Line is across the point of entry.

### 11.1.4. Taxilane Crossings



Marked with black/white staggered lines forming a zipper pattern. Drivers utilising designated taxilane crossings will interfere with aircraft operations when the taxilane is in use.

Note: Taxilane crossings that sit beside a Taxiway have red/white staggered lines on one side. Do not cross the red/white side otherwise you will enter an ADA level 3 area.

### 11.1.5. Stop for Taxiing Aircraft



The 'Stop for Taxiing Aircraft' marking is used for taxiway and taxilane crossings between aircraft and vehicles. It means aircraft can cross in front of vehicles, such as on a taxiway or taxilane, entering a parking position under power or when pushing back.

*'Stop for Taxiing Aircraft'* markings located on apron service roads communicate to drivers:



- If an aircraft (or authorised vehicle on a taxiway) is approaching, you must stop at this marking.
- If <u>no</u> aircraft (or authorised vehicle on a taxiway) is approaching, you may continue without stopping.

**Note**: 'Stop for Taxiing Aircraft' markings may also include a left or right direction arrow (as applicable).



## 11.1.6. Height Clearances on Airside



You must know the height of your vehicle and the height clearances in any area you are driving.

## 11.1.7. Parking Areas



Vehicle Parking is permitted only within white marked parking bays or in the Equipment Storage Areas.

#### 11.1.8. Traffic Warning Systems



Push Back Warning Lights have been installed near bays Hotel 1, Delta 2 and at the end of Echo concourse (for pushbacks on bays Delta 8 and 12). The red beacon lights will flash indicating an imminent pushback, vehicles must stop before the Hold Safe marking.

These lights are activated by a button at the head of stand by the handling agent in charge of the arrival/pushback. Drivers are reminded to always maintain 'situational awareness' to avoid engine jet blast or propeller wash and other aircraft clearances.

Traffic Warning Systems on Bay H1 warn drivers of the arrival and pushback of an aircraft larger than a B737 or A321.

#### 11.1.9.

## 11.1.9. E-GSE Markings



This line marking depicts parking areas to be used by Electric Ground Service Equipment (E-GSE) for charging purposes.

11.1.10. Miscellenaneous

Marking – Lease Area

Marking



This marking depicts where a leased area boundary commences.

**11.1.11.** Road Signs



Common road signs are used airside and represent exactly what they do on public roads. Take note of all airside signage particularly stop and give way signs.



## 11.2. Apron Markings: Ground Servicing of Aircraft

## 11.2.1. Aircraft Parking Clearance Line



A solid red line bordered by yellow lines, confirming clearance to both parked and taxiing aircraft. When driving past parked aircraft stay to the taxilane side of this line. If aircraft are using the taxilane, stay on the bay side of the line, while remaining at least 3 metres clear of parked aircraft.

Wait for the taxiing aircraft to pass. Never shortcut between parked aircraft.

#### 11.2.2. Hazard Areas



Hazard Areas are marked by diagonal red hatching, usually bordered in white. The marking is used in many areas on the Aprons to signify an area to be kept clear of vehicles and equipment at all times.

These are mostly associated with emergency exit points or the aerobridges.

### 11.2.3. Fuel Hydrants



Refuelling Hydrants are marked by a white box. You should avoid driving over the hydrants to prevent both damage to the hydrant lid and damage to your vehicle. Never park on a fuel hydrant.



#### 11.2.4. Equipment Storage Areas



Equipment Storage Areas are defined by a solid red line and are set aside for the parking of airline equipment and vehicles in the medium term (up to 24 hours).

## 11.2.5. Equipment Staging Areas



Equipment Staging Areas are defined by a broken red line and are set aside for the staging of equipment and vehicles, prior to an aircraft arrival, while it is on the bay & for a short time after its departure (up to 15-20 minutes).

#### 11.2.6. Tug Manoeuvring Area



Are indicated by yellow hatching. These areas must be kept clear at all times, so the pushback tug has room to manoeuvre when towing aircraft on or off some stand-off positions on the Delta Remote. Level 2 drivers cannot access this area as it is outside the Apron Limit Line.

#### 11.2.7. Unserviceable Areas



Unserviceable areas are marked with white cones with a red band. At night these markings are supplemented with red lights. Do not enter these areas. These are predominantly used to depict a closure or unserviceability of a movement or manoeuvring area including other areas used for aircraft operations, such as a Parking Bay.



#### 11.2.8. Engine Ground Run Cones



A cone of the same size and shape as the more common unserviceability cone. Indicates an engine ground run is underway.

They are green with a reflective stripe and will be placed in line with the tail and wing tips of the aircraft signifying a ground run. Ensure you remain clear of the operating aircraft engines.

# 11.3. Aircraft and Pushback Markings

#### 11.3.1. Aircraft Lead-in Line



Is marked with a solid yellow line for primary parking positions. The marking is followed when aircraft taxi into a parking bay.

Secondary parking positions are marked with a yellow dashed lead-in line or a solid line in some cases (solid lines associated with secondary parking positions will be phased out in 2024).

### 11.3.2. Low Strength Pavement Markings



Are made up of double yellow lines on the edge of the taxiway. Extended shoulders are marked with yellow chevrons.

Never drive over low strength pavement.



### 11.3.3. Parking Position Designation Marking



The Parking Position Designation Marking is a yellow alphanumeric marking that indicates the unique bay number (i.e. D4).

## 11.3.4. Aircraft Nosewheel Stop Line



Defines a position the aircraft nose wheel is guided to in order to ensure correct parking. It is marked by a solid yellow bar extending along or off to the side of the aircraft lead-in line.

## 11.3.5. Aircraft Nosewheel Stop Line - Marshalling



Defines the position where the marshaller is to stop the aircraft nose wheel to ensure the aircraft is parked correctly. It is marked by a solid yellow bar 6 metres long on the port side of the aircraft.

#### 11.3.6. Aircraft lead-out line



Marked with a broken yellow line.

Used for secondary parking positions, it is the marking that an aircraft will follow when taxiing out from a parking position.



#### 11.3.7. Push Back Line



Aircraft are pushed back along a broken white line. The line provides an indication of the path for the tug to follow.

### 11.3.8. Push Back Limit Line



Aircraft are pushed back along the Push Back Line no further than this Limit Line, indicated by two white bars across the Push Back Line.

#### 11.3.9. Tow Bar Disconnect Points



Marked with a white bar – an aircraft is pushed back or pulled forward to this marking. The tug disconnects and the aircraft then departs under its own power.



## **Penalties**

A Penalty Points System applies for airside drivers that breach the rules for drivers operating Airside. Melbourne Airport publishes the <u>Airside Driver Penalty Infringement Notice (PIN) Booklet</u> 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.

## **12.** 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
- Abide by the speed limits and signage
- Be situationally aware at all times
- Know the airside markings and their meaning
- Drive safely to the conditions

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

## 13. Further Information

For further information with regards to this **Handbook**, please contact: <a href="mailto:learningandcapability@melair.com.au">learningandcapability@melair.com.au</a>.

