Driving in airside areas presents many specific challenges requiring different knowledge and skills to those required for public roads. Furthermore, poor discipline and lack of competence by airside drivers has one of the greatest potentials for hazard to aircraft operations. All personnel operating airside must understand the distinction between the Apron and the Manoeuvring Area. It must be noted that the double white lines divide the Apron (on which vehicles may move without the permission of ATC) from the Manoeuvring Area (on which all movements are subject to ATC permission).

**General Driving Rules**

- Inspect your vehicle before driving it.
- Drive only where your permit allows.
- Give way to aircraft including aircraft under tow at all times.
- When crossing a live taxiway, always allow a 200 metre distance before crossing at the back of a taxiing aircraft.
- Be aware of aircraft pushing back/coming on to stand.
- On apron roads, always give way to vehicles coming off the manoeuvring area.
- Display the vehicle flashing obstruction light(s).
- Use dipped headlights at night and in reduced visibility.
- Observe the relevant Movement Area speed limits at all times.
- Observe and comply with low headroom signs.
- Carry only the permitted number of passengers in the vehicle.
- All passengers must be seated.
- Ensure that all loads are safe and secure. Doors and shutters must be closed when operating airside. Personnel must remain entirely inside the vehicle.
- Observe reversing procedures. Use a banksman.
- Do not leave vehicles unattended with engines running (unless there is a justifiable need for the engine to be running).
- Observe all parking restrictions. Do not park on Inter-Stand Clearways or hatched areas.
- Apply the handbrake when the vehicle is parked.
- Do not drive across aircraft stands unless involved in the turnaround on that stand.
- Do not park underneath an aircraft wing unless you have an operational requirement to do so (fuelers, engineers).
- Never approach an aircraft until it has stopped, the wheels have been chocked, the anti-collision light is out and the engines are run down.
- Report all vehicle unserviceability without delay.
Equipment Parking

When not being used, all ground equipment should be parked up neatly in a parking bay/area. Equipment should NOT be:

• Parked on green pedestrian walkways: These walkways must be kept clear at all times for pedestrian use.
• Parked on hatched areas: Areas are hatched for a reason. The hatched marking is most prevalent around airbridges, as this marking outlines an airbridge manoeuvring zone. Therefore, it is imperative that these areas are kept clear of vehicles and equipment.
• Parked on Inter-Stand Clearways: ISC’s are intended to indicate, by way of ground markings, the lateral extent of an aircraft stand and a clear route by which vehicles may transit between the front and rear of a parked aircraft.
• Clearways are especially important for provision of an unobstructed route for access of emergency vehicles and egress of fuelling vehicles. Therefore, ISC’s must not be blocked by parked/unattended vehicles or equipment.
• Parked out of marked bays: When parking vehicles or equipment, always make sure that they are put completely inside properly marked bays. Equipment should be parked in such ways as to maximise the use of parking bays. Companies also have their own allocated parking areas in which to park.
• Left with engines running whilst not being used: Vehicle exhaust emissions cause pollution to the environment, and therefore should not be left running whilst not being used.
• Left on stand after a turnaround: Equipment should not be left on stand after a turnaround as this can cause problems to any other aircraft (expected or not) coming on to stand.
• Pre-positioned and left unattended: Equipment must not be pre-positioned on apron stands prior to the imminent arrival of an aircraft such that it could cause an obstruction and/or damage to an aircraft. If vehicles are being pre-positioned, you must stay with them.
• Dumped off trailers (cans, pallets etc.): Cans and pallets can cause any number of problems when they are dumped off trailers.
• Infringing within 3 metres of the perimeter fence: There must always be a gap between the fence and parked equipment. This is a security requirement to lessen the likelihood of people being able to get over the fence.
• When questioned, the most problems for pilots coming in to Manchester were caused by ground equipment positioned incorrectly on stands.
There are many things that you need to know about the fuelling process. Due to working on the ramp with and around fuellers, you are required to know the following…
• Access and egress should not be blocked to fuellers. When hydrant-fuelling vehicles are obstructed, the equipment it is obstructed by must be manned and able to be moved quickly in the event of an emergency.
• Refuel pits are clearly visible on every stand and access is required to these at all times so please keep clear. On some stands (such as stand 18) barriers have been positioned to protect vulnerable pits. These barriers are there for a purpose and should under no circumstances be removed. If these barriers are not present or have been moved then no refuelling can take place until they are returned to their correct position.
• To prevent the likelihood of fire or explosion during re-fuelling, aircraft are electrically bonded to the fuelling apparatus before fuelling begins, and are not disconnected until fuelling is complete. It is critical that the bonding cable is not stepped on or driven over. If this happens, please inform the fueller immediately. If any cables become dislodged, again, please inform the fueller, and do not replace any leads or cables yourself. If the bonding lead becomes dislodged, all fuelling must stop to allow any built in static to dissipate naturally before the bonding lead can be replaced. The bonding lead is usually yellow in colour and made of fine copper wire. This makes it quite difficult to see. However, the refuel vehicle is easily spotted. If a refuel vehicle is positioned near to an aircraft you should assume that the two are connected by a bonding lead.
• Portable electronic devices, such as mobile telephones, MP3 players, radios and any other electronic or electrically operated equipment, are prohibited within the fuelling zone (3 metres radially from the aircraft filling and venting points and from any part of the fuelling vehicle or equipment including hoses). A major problem currently being encountered is the use of mobile phones in these areas. They not only provide a source of ignition within a refuel zone, they also distract users increasing the likelihood of injury or accidents in a dangerous and busy area during an aircraft turnaround.
• Where possible 3-metre driving clearance should be observed around all refuelling equipment. However, where this is impracticable, extra care and the use of a banksman should be employed to guide vehicles in and out.
• Everyone must be aware of the Fuel Emergency Cut-off procedure and positions of Cut-off points at Head of Stands. Emergency number for a fuelling incident is x2222.
Personal Safety Hazards

Hazards in an airport environment are abundant. What can you do to protect yourself from these hazards?

**Wear Hi-Viz Clothing**

All personnel must wear a high visibility waistcoat, jacket or equivalent when airside and outside of any building, so that they stand out as much as possible from their surroundings.

When worn, the waistcoat or jacket must be properly fastened to provide maximum prominence to the front and rear of the garment. Any employee found on the apron not wearing hi-viz clothing will incur a fine which will be payable by their employer. Exceptions will apply to VIP events or PR promotions etc, which will be permitted under controlled conditions. Please note, the requirement to wear hi-viz on the apron at Manchester Airport is mandatory.

**Wear Ear Defenders**

There are many sources of noise on an aerodrome. Excessive noise exposure can result in both short-term and permanent hearing loss. People can help themselves by wearing ear defenders during times of loud noise.

**Wear Protective footwear**

People can also reduce the risk of injury by wearing protective footwear. Working in an environment with so many vehicles and heavy equipment around, this is important just in case your foot gets trapped under some equipment / a vehicle.

**Be careful when working at height**

It is a legal requirement as part of the Working at Height Regulations that all personnel must use equipment supplied (including safety devices) following training and instruction.

Where the employer provides safeguards for preventing falls from height, for example handrails, there is a legal duty on the employee to use those safeguards.

**Manual Handling**

In respect of manual handling, all training should be sought through each individual company.
Causes of slips, trips and falls
Potential hazards are shown below…

**Flooring**
The floor in a workplace must be suitable for the type of work activity that will be taking place on it.

**Contamination**
Most floors only become slippery once they become contaminated. Prevent contamination and you reduce or even eliminate the slip risk. Contamination can be classed as anything that ends up on the floor e.g. rainwater, oil, grease, cardboard, product wrapping, dust etc. the list is endless. It can be a by-product of a work process or be due to adverse weather conditions.

**Obstacles**
50% of all trip accidents are caused by bad housekeeping. Improving housekeeping would eliminate a large number of accidents. Good housekeeping doesn't cost money, it just takes a little personal effort.

**Cleaning**
Cleaning affects every workplace, nowhere is exempt. It is not just a subject for cleaning managers and staff, everyone in the workplace has a job to do e.g. keeping your workspace clear and dealing with your own spillages. Cleaning itself, however, can cause a trip/ slip hazard. People should take extra care where cleaning is in progress.

**Human Factors**
Footwear worn can make a difference. Another hazard is when people become distracted whilst walking e.g using a mobile phone, rushing about, carrying large objects etc.

**Environment**
In this context, 'environment' means things such as lighting (natural or otherwise), loud or unfamiliar noises, the weather, humidity, condensation etc. Ice can be a particular problem during cold spells of weather and extra care should always be taken during these times.
Birds represent a serious, but often misunderstood, threat to aircraft. Most bird strikes do not result in any aircraft damage, but some bird strikes have led to serious accidents involving aircraft of every size. As well as costing millions of pounds each year, the lives of the crew and passengers are also at risk. Since 1988, over 200 people have been killed worldwide as a result of aircraft encounters with birds and other wildlife choking jet engines. This would have been more had it not been for the heroics of the pilot who recently landed in the Hudson River, New York, after his aircraft struck a large flock of Canada Geese. In 2001, a UK study estimated that birds cost aviation worldwide approx £900 million per year by damaging and delaying planes.

In 2017, there were 45 bird strike 'events' at Manchester, this is not taking into account near misses, of which there were several. The total number of birds observed on airfield at Manchester in 2017 was estimated at just short of 110,000. The highest number of birds tend to be seen around the months July-October.

Birds can be attracted to the airfield for a number of reasons…Wide open spaces, litter left lying around, FOD… Foreign Object Debris (FOD) is any object, material or liquid that could cause damage to an aircraft. It represents one of the most serious - but avoidable - hazards to aircraft on the ground. If not properly controlled, this debris can end up on the movement area where it can present a significant risk to aircraft and airside workers.

Hence, the importance of preventing the occurrence of FOD and removing any that does find its way onto the movement area should never be underestimated. The Concorde crash near Paris in 2000 was cause by FOD on the runway, a single piece of metal 3cm (1.2in) wide and 43cm (17in) long.

Everybody who works airside at MA is responsible for:
- Ensuring that their personal activities do not generate FOD.
- Removing any FOD they observe, regardless of whether or not it relates to their activities.
- Removing FOD from vehicles and equipment as a preventative measure.
- Inspecting vehicles frequently during use to check for loose parts, open doors etc.
- Not choosing to ignore FOD.
- Reporting persistent FOD problems to their Line Manager or MA Airfield Duty Manager.

Moreover, it is essential that any member of staff working at MA do not feed any form of wildlife, this including birds and foxes.
## Speed Limits

<table>
<thead>
<tr>
<th>Location</th>
<th>Speed Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entering Buildings</td>
<td>5 MPH</td>
</tr>
<tr>
<td>Apron Stands</td>
<td>5 MPH</td>
</tr>
<tr>
<td>Interstand clearway</td>
<td>5 MPH</td>
</tr>
<tr>
<td>Interstand Roadway T2</td>
<td>5 MPH</td>
</tr>
<tr>
<td>T3 Coaching Lane</td>
<td>5 MPH</td>
</tr>
<tr>
<td>T1 Southern Front Apron Road leading to Baggage Hall Entrance</td>
<td>5 MPH</td>
</tr>
<tr>
<td>T1 Stand 12 Link Bridge Head Of Stand Road</td>
<td>10 MPH</td>
</tr>
<tr>
<td>Between Stands 100-101</td>
<td>10 MPH</td>
</tr>
<tr>
<td>North Road (IDLEX to North Gate)</td>
<td>5 MPH</td>
</tr>
<tr>
<td>Western Maintenance Area</td>
<td>10 MPH</td>
</tr>
<tr>
<td>Apron Roads</td>
<td>20 MPH</td>
</tr>
<tr>
<td>Perimeter Road</td>
<td>20 MPH</td>
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<tr>
<td>Other Roads</td>
<td>20 MPH</td>
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</tbody>
</table>
Vehicle Standards

All vehicles and trailed equipment operating airside at Manchester Airport must be maintained and inspected in accordance with CAA CAP 642 Airside Safety Management and DVSA Regulations.

A robust maintenance and safety inspection regime must be in place to ensure that vehicles/equipment do not endanger drivers, aircraft, persons or property and are fit for their intended purpose.

Responsibility for the safe condition of vehicles/equipment, the inspection regime safety inspection records and rectification of defects lies with the operator.

The operator is responsible for ensuring that employees who operate airside vehicles/equipment are appropriately trained to pre check the vehicle/equipment prior to use and to report defective vehicle/equipment. Minimum requirements ref to, ANNEX 3 VEHICLE DAILY WALKROUND INSPECTION CHECK LIST available on Manchester Airports website: https://www.manchesterairport.co.uk/ops Operators must inform employees of their responsibilities regarding vehicle/equipment and the legal responsibility to ensure vehicle/equipment is safe prior to use.

Any vehicle found to be defective will be red tagged and will be removed and placed out of service until rectified. Anyone found to be driving a vehicle that has been taken out of service will be subject to the AOR process and maybe subject to a disciplinary.