1 General

Under the Health & Safety Executive's guidance document HSG209 "Aircraft Turnround", aviation industry partners are recommended to apply common minimum standards to turnround procedures at all UK airports.

Safety must be the primary consideration of everyone working airside. It requires constant vigilance, attention to procedures and alertness to potential hazards. Airside Safety is of paramount importance and all of us have a vital part to play in ensuring that the aerodrome is as safe as we can possibly make it.

The 'Apron Area' represents a shared workplace and demands the co-operation of all employers who 'share' the area under UK Health & Safety Legislation.

There are 3 key things that need to be done by employers to protect employees' health and safety working within the airside environment:

- Co-operate and co-ordinate with other employers.
- Control your contractors
- Assess and control the risks to other people from your activities and inform them of any risks still left.

If there is co-operation and co-ordination between all employers sharing a workplace then everyone's legal obligations can be met. Good co-operation and co-ordination are vital where employers share a complex and dynamic workplace.

Any individual(s) not adhering to these procedures detailed within this instruction maybe liable to an infringement under the Airfield Infringement Scheme. See EGCC-I-AOPS-013.

2 Compliance with Legislation

MA requires all organisations and personnel operating in Airside Areas to comply with the relevant legislation below:

- Air Navigation Order.
- 1954 Manchester Airport Byelaws.
- Health and Safety at Work Act 1974.
- Management of Health and Safety at Work Regulations 1999
- Health and Safety Consultation with Employees Regulations 1996
- Safety Representatives and Safety Committees Regulations 1977
- The Noise at Work Regulations 2005
- CAP 642 Airside Safety Management
- IATA Ground Operations Manual (IGOM) Edition 13
- HSG 209 Aircraft Turnround

3 Passenger Handling

Passengers are generally unaware of the dangers around them and are therefore particularly vulnerable to risk on the apron. They must always be closely supervised and contracts between the Airline and Handling Agent will need to take this requirement into account.

It is the responsibility of the Airline and/or the Handling agent to:

- Take full care of passenger safety during the embarkation and disembarkation of passengers.
- Always supervise passengers when they are between the Terminal interior and the Aircraft interior.
- Guide and control the movement of passengers when walking on the apron so that aircraft engines, aircraft refuelling procedures or other airside activities do not endanger them. Passenger routes must not pass below aircraft wings, beneath fuel vents or close to engines propellers or rotors of any aircraft on the apron. Passenger Integrated Guidance Systems (PIGS) are required when passengers are boarding or disembarking using aircraft steps. However, PIGS must not replace the requirement for ground handling passenger supervision. PIGS are to be deployed by the person responsible for the control of passengers and the centre of the PIGS should be positioned approximately one metre away from the aircraft wingtip and the chains / barriers extended to both the front and rear steps.
- Ensure that they do not mix with passengers from other arriving or departing flights.

4 Airside Clothing

4.1 All airside users must wear a high visibility waistcoat, jacket or equivalent when airside and outside of any building. This includes walking to and from workplaces airside.
Airside access will be denied at security if the airside users do not have a hi-visibility coat/jacket or equivalent.
When worn, the waistcoat or jacket must be properly fastened to provide maximum prominence to the front and rear of the garment. All employers should ensure that their staff are provided with hi-visibility clothing which must be manufactured to the recognised British Standard BS EN 471. All airside users have a responsibility to report any concerns relating to hi-visibility clothing to their employer.

Further guidance on high visibility personal protective equipment is available from the Health and Safety Executive (HSE). Please refer to their document L25 1992, titled “Personal protective equipment (PPE): high visibility clothing for airport workers” available from the HSE website at www.hse.gov.uk

Employers should monitor that their staff have hi-visibility clothing and that it meets the requirements, is clean, fits the individual and free from defects. Failure to wear high visibility clothing properly will result in an infringement penalty notice as per section 10.7 of ASI 13 – Safety Infringements.

4.2 Those operating or working around ground service equipment must not wear clothes which have loose elements such as scarves, cords or chains as these present a risk of entanglement and entrapment.

Hoods on coats must be worn up as protection against poor weather or be stowed in an integral compartment. Hoods are not permitted to hang or be worn down unless they are easily detachable. Hoodies are not an acceptable item of clothing for airside staff.

Shoe and bootlaces must be properly tied and secured, and not trailing. Footwear must have no loose or dangling elements.

Any headwear worn for observation of religion must have any loose ends tucked away, including turbans and headscarves.

For those that have long hair whereby there's a risk that the hair may become entrapped or entangled they must ensure the hair is suitably secured to mitigate the risk.

5 Aircraft Doors

Aircraft cabin and hold doors can be hazardous when open as a fall from height from either could result in serious injury.
No aircraft door(s), either for the hold or cabin, are to be left open without the appropriate service equipment positioned correctly.

If opening a door from inside an aircraft, personnel must have received confirmation that the appropriate equipment is in position before opening the door. Furthermore, personnel inside an aircraft must allow sufficient time for those outside the aircraft to retreat a safe distance from the door before it is opened.

All organisations are responsible for ensuring that suitable and effective measures are taken to prevent individuals from falling from aircraft doors. Aircraft doors left open without an appropriately positioned platform on the outside are not deemed secure by the application of a tenser barrier alone. Aircraft doors must be closed or secured in a way which prevents falls from height when a platform is not positioned on the outside of the aircraft and when the open door is potentially accessible by others onboard.

The floor of the aircraft in the immediate vicinity of the cabin or hold door must be kept clear of hazards that could cause an individual to slip, trip or fall.

6 Use of Handrails

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.

Working at height means a person is undertaking a task at a height where he/she could be injured by falling, even if it is at or below ground level.

Working at Height Regulations requires all employers to do all that is reasonably practicable to prevent anyone falling a distance that could result in injury. The employer must assess the risks involved with any activity at height and where the risk cannot be avoided, introduce control measures commensurate with the risk.

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

7 Positioning of Equipment

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.

Equipment must not be left unattended on a stand area or Inter-stand Clearway.

Prior to aircraft arrival, ground service equipment must not be prepositioned in the tug / marshaller box. This includes aircraft tugs, ground power units, towbars, aircraft chocks, cones or PIGS. This area is to be kept clear to safeguard the aircraft in the event it may fail to stop on its intended position.

In addition to this, the tug / marshaller box is required to marshal an aircraft onto stand in the event of AVDGS system failure or activation of the emergency stop.

Only when the aircraft has safely parked on stand, engines are shut down and all chocks have been applied can an aircraft tug and other ground service equipment be positioned in the tug / marshaller box in preparation for pushback.

A passenger's route around the wing is not to be obstructed and as such, the numbers and positions of all vehicles in the vicinity of the aircraft must be considered, along with the location of the rear of stand road system.

Ensure that when an aircraft arrives on stand, all emergency exits are kept clear of handling equipment until external means of evacuation have been put into place.

When positioning vehicles and equipment, consideration to Jet-Blast/Prop-Wash from adjacent stands or taxiways should be made.

8 Ground Power Attachment & Chocking of Aircraft

Chocks must not be pre-positioned or placed within the immediate vicinity of arriving aircraft as these present a trip hazard.

All airside personnel who are associated with the application of chocks and ground power of aircraft arriving onto stand must not approach the aircraft until the engines have been shut down and the anti-collision lights turned off.

After aircraft engines have shut down and the anti-collision lights are off, operatives should only approach the aircraft from the front to ensure their personal safety when chocking aircraft.

Chocks must be placed before any other turnround activity may take place.

Exceptions:
It is acknowledged that where an aircraft has an unserviceable APU, it may be exceptionally necessary to keep an engine running whilst ground power is connected. This is a non-standard situation requiring procedures to be used following an assessment of the additional risks.

Aircraft departing from airbridge served stands must remain chocked until the airbridge has been fully removed from the aircraft and is in its parked position

9 Airfield Safety Cones

Manchester Airport will provide safety cones on each aircraft parking stand. The safety cones should be used for aircraft turnaround purposes only. The safety cones will be green in colour and 750mm in height. The green safety cones will be clearly branded as MAG. The safety cones should not be moved from the stand that they are allocated to.

Usage of the MAG, Manchester Airport safety cones during turnaround activities will be a mandatory requirement for all ground handling agents. All ground handling agents must adhere to this requirement. Any other safety cone, branded or other, will not be permitted on the airfield unless approved explicitly by the Airfield Operations Manager.

Airfield safety cones are for aircraft turnarounds only and should not be used for any other activity on the airfield.

10 Chocking of Service Vehicles

All vehicles that are involved in the servicing of an aircraft and that are parked within 2 meters of an aircraft should be chocked. The only equipment exempt from this are pushback tugs connected to an aircraft, any vehicle fitted with an inter-locking device and any vehicles that use manual or hydraulic stabilisers.

Manchester Airport is endeavouring to minimise the risks of aircraft and/or personnel being damaged/injured by unsecured ground service equipment.

Any operator who does not wish to chock their service vehicles during aircraft servicing must provide the Head of Airfield Operations with a suitable and sufficient risk assessment to substantiate their reasons.

11 Vehicle Manoeuvring And/or Parking Under Aircraft Wings

Manoeuvring and/parking aircraft under an aircraft wing presents a safety hazard; for example, should an aircraft vent any fuel. It also impinges on the safe separation distance between vehicles and aircraft and raises the potential for an incident/accident.

Only vehicles that have an operational requirement to park under an aircraft wing may do so. Examples of such vehicles might include those of aircraft refuellers or aircraft maintenance companies.

All other vehicles must manoeuvre at a safe distance from aircraft wings.

12 Use of Banksman When Reversing

The dangers of reversing on apron areas are heightened because of a relative lack of manoeuvring space.

All service vehicle operators and their operatives are to adopt a procedure of using a banksman to provide external guidance when reversing a vehicle on the apron.

All dual or multi-crewed vehicles operating on the apron area must use at least one of the crewmembers as a banksman.

Airfield Operations is aware that not all vehicles operating on the apron are dual or multi-crewed.

Therefore, all organisations that operate vehicles with a single crewman are required to provide the Head of Airfield Operations with a thorough risk assessment for the reversing of their vehicles.

13 Inter-Stand Clearways (ISC)

Inter-Stand Clearways (ISCs) are a common feature on aprons at international airports in the UK and overseas. They are intended to indicate, by way of ground markings, the lateral extent of an aircraft stand and a clear route by which vehicles involved with aircraft turnround activity or Emergency Response may transit between the front and rear of a parked aircraft. The Speed limit of 5mph applies to all Inter Stand Clearways.

Clearways are especially important for provision of an unobstructed route for access of emergency vehicles and egress of fuelling vehicles.

The ISC is delineated by a 'saw tooth' white line each side, like the markings indicating the approach to a pedestrian crossing on a public road. The width of the ISC is circa 6 metres and its positioning allows a minimum of 1-metre buffer from the wingtip of the largest span aircraft type using the stand. The ISC will extend from the head of head or equipment area to the rear of stand roadway or taxiway strip lines, whichever is applicable.

The Inter-Stand Clearway must always be kept clear of parked, unattended equipment. ISCs are not intended to be used to pre-position vehicles and equipment awaiting aircraft arrival. Misuse of ISCs will be treated as an unsafe working practice and will result in an infringement penalty notice as per section 10.7 of EGCC-I-AOPS-013 – Safety Infringements.

A number of clearways have been installed with zones that have been marked in red.

The red zone area of the Inter-stand clearway delineates an area that must be kept clear of any obstacles when aircraft are manoeuvring on or off an adjacent stand. The red zone provides suitable clearance from an aircraft wingtip when parking on an adjacent stand.

Vehicles / Equipment transiting or left unattended in the red zone whilst an aircraft is manoeuvring on or off an adjacent stand could cause a wingtip collision. Drivers may pass thorough the red zone area of an Inter-stand clearway as normal when aircraft are not manoeuvring on or off adjacent stands

The driving or parking of vehicles / equipment in the red zone whilst an aircraft is manoeuvring on or off an adjacent stand will be treated as an unsafe working practice and will result in an infringement penalty notice as per section 10.7 of EGCC-I-AOPS-013 – Safety Infringements.

14 Marshalling of Aircraft

Airfield Operations are the only individuals authorised to marshal an aircraft.

If a member of flight crew asks or signals for guidance from a person not employed by Airfield Operations, it must be disregarded.

Marshalling is provided where no other form of guidance is available or where Safedock AVDGS is unserviceable or not calibrated for the aircraft type.

There may, at times, be a short delay before an individual from Airfield Operations arrives. However, under no circumstance should ground handling personnel attempt to marshal an aircraft onto stand.

15 Advanced Visual Docking Guidance Systems (AVDGS)

SAFEDOCK AVDGS is currently employed to guide aircraft to the correct parking position on all contact stands and some remote stands.

SAFEDOCK AVDGS will be operated solely by Ground handling agent staff and must only be operated by personnel who have received formal training and are deemed competent to carry out this task.

Ground handling agent staff will activate this system, having checked that the stand is safe for aircraft to park.

A swipe-card at the reader device is located at the head of stand. By swiping a card, handling agent staff are confirming to Airfield Control that the stand has been checked and judged to be safe for an aircraft to use

16 Wingtip Clearance of Aircraft Under Tow

All tug drivers are reminded that it is their responsibility to ensure adequate wingtip clearance is maintained whilst towing or pushing an aircraft.

Any permission given by Air Traffic Control to tow an aircraft must not be taken as an assurance that wingtip clearances are guaranteed on either taxiway or apron areas.

All tug drivers must therefore remain vigilant at all times when towing or pushing an aircraft.

17 Emergencies on the Airfield

The telephone number in case of emergency is 0161 489 2222.

In the event of an emergency there should be no assumption by any party in the vicinity of an aircraft that the emergency services have already been alerted.

During an incident ‘on stand’ a precautionary evacuation using the normal means of disembarkation may be more desirable to the aircraft commander than an evacuation using emergency slides.

Operators and handling agents are responsible for ensuring the availability of equipment that will facilitate a normal disembarkation.

All airside personnel are to remain clear of incidents and accidents, whether involving aircraft, vehicles, or equipment unless their attendance is specifically requested or required by the Incident Management Team. The incident/accident Commander will determine when normal operations can be resumed.

Dependent on the type of inbound aircraft emergency, aircraft will be designated either a contact or remote stand.

18 Head of Stand Safety Boards

Head of Stand Safety Boards are installed at all Terminal Pier aircraft parking stands. The Safety boards are highly visible and will provide the emergency Fuel hydrant cut-off switches and Aircraft Emergency 'STOP' buttons.

The Fuel Emergency Stop Switch is to be used in case of an accident or incidents that require the aircraft fuel hydrant system to be shut down.

The Aircraft Emergency Stop button is to be used when there is an urgent requirement to indicate to an aircraft parking on stand that it should immediately stop. This should only be used in a situation where a hazard is observed that could lead to an accident involving the aircraft whilst in motion.

19 Safety Requirements Applicable to The Handling and Of Dangerous Goods and Electronic Mobility Aids

The handling and transportation of all dangerous goods must comply all relevant legislation including:

- ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air.
- IATA Dangerous Goods Regulations.
- European Agreement for the International Carriage of Dangerous Goods by Road {ADR}.

Manchester Airport do not expect airside drivers to obtain a licence under ADR. However, all dangerous goods must be handled by suitably trained and competent individuals. All goods must be transported with their inventory and in suitable containers which are appropriately labelled.

The transport, attempted transport or handling of dangerous goods which results or has the potential to result in the safety of the operation being endangered or lead to an unsafe condition is a reportable event within MOR EU 376 requirements.

Any occurrence involving the spillage or unintended release of such items must be reported as an emergency without delay via telephone number 0161 489 2222.

As the airport operator Manchester Airport contracts, a third-party operator to provide assistance to ensure that any electric mobility aid belonging to a PRM is safe for carriage.

19.1 Summary of Electric Mobility Aids (EMA) Responsibilities

19.1.1 MAG

MAG as Airport Operator has a responsibility to (i) make an EMA safe for carriage by air where adequate inhibiting instructions have been provided by the Aircraft Operator; and (ii) undertake ground handling of the EMA (NB. the CAA has clarified that 'ground handling' means transporting the EMA "from where it is left by the passenger to the aircraft". (Mobility aids surrendered at check-in should be considered cargo and will not fall under this remit.)

These obligations are on the basis that MAG is provided at least 48 hours' advance notice by the Airline and/or Ground Handler.

19.1.2 ABM

Manchester Airport has contracted with ABM to fulfil its obligations relating to the safe carriage of EMAs in accordance with CAA Safety Notice 2012/003 but remains accountable for ABM's compliance with this process Manchester Airport shall conduct periodic audits of EMA tags to ensure obligations are being undertaken and fulfilled correctly.

ABM will transport the EMA to/from the aircraft side and follow the inhibiting instructions provided by the Aircraft Operator as noted on the device's EMA tag. ABM will sign the EMA tag to confirm that the inhibiting instructions have been followed and circuits are protected from short circuit.

19.1.3 Airlines

The Aircraft Operator has the responsibility to: (i) collect advance notification and information from the passenger about an EMA including the inhibiting instructions and pass it to the airport (or ABM) in accordance with the notice timeframe; and (ii) verify that the EMA has been made safe by completing a test of the device immediately prior to loading, after the ABM actions are complete. The Aircraft Operator may reject any EMA if it does not consider safe for carriage.

These legal responsibilities reside with the airline, but they may contract with a ground handler to undertake them on their behalf should they so choose.

19.1.4 Airport Operators Licence holders

Ground Handling Agents are responsible for loading of the EMA from the ground to the aircraft door (outbound) and unloading from the aircraft door to the ground (inbound).

A reminder of data provision responsibilities is detailed within existing Airport Operators Licence:

19.2 Provision Of Information Input into Company's Operational Data Base.

4.1.6. information, including the type of assistance required by persons with reduced mobility (PRM), such as WCHR/ WCHS/ WCHC/BLND/DEAF/Electric mobility devices, to include mass of each device/Passenger own chairs/meet and assist.

20 Vehicles and Equipment That Raise and Lower During Aircraft Turnround

All operators of vehicles and equipment that raise and lowers must ensure that a suitable and sufficient risk assessment is carried out for this aspect of their operation and ensure that appropriate control measures are in place to reduce the risk significantly to personnel and equipment.

The following control measures to reduce the risk must be considered when preparing the risk assessment.

- the suitability of the vehicle and whether the need to have the vehicle body raise/lower with the tail lift extended can be engineered out
- the provision of suitable warning systems that activate during raising/ lowering
- supervision and or arrangements at ground level to avoid equipment and personnel being in the area immediately below an extended tail lift whilst the vehicle body is being lowered.
- the use of CCTV and/or mirrors

The identified control measures in the risk assessment must be applied consistently to all the vehicles and equipment under the control of the operator.

21 Aircraft Safety Cone Storage Trolleys

Manchester Airport will provide aircraft safety cone storage trolleys. The cone trolleys will facilitate seven cones at a time.

Aircraft safety cones and their storage trolleys must not be transported on vehicles for use at other locations.

Ground staff may use cone trolleys to assist in the deployment of safety cones on arrival and during collection on departure.

Storage trolleys and safety cones must be returned to their allocated position at the head of stand after every aircraft turnround.

Any missing cones or damaged trolleys are to be reported to Airfield Operations via telephone number 0161 4893331.

22 Aircraft Loading Errors

A loading error can severely affect aircraft performance, stability and control. Loading errors may also lead to loss of control during an attempted take off or during subsequent flight. It is therefore essential that all service providers have appropriate mitigation and training in place to prevent such occurrences.

Aircraft loading errors can arise in one of three ways:

- The aircraft is not loaded in the way stated on the accepted load and trim sheet. This is applicable to any load sheet type.
- The aircraft load and trim sheet uses correct input data but the output data is wrong. This is applicable to manual load sheets.
- The flight crew apply the (correct) load and trim data incorrectly when using it to calculate aircraft take- off performance data, including reference speeds and scheduled thrust settings.
- The hold load is not properly secured or contains prohibited or incorrectly packed items.

All service providers should report loading errors under the Mandatory Occurrence Scheme as per MOR EU 376 requirements

All loading error events should also be reported to MA Airfield Operations.

23 Use of Dual Taxiway/Stands

There are two areas on the airfield which have dual purpose use as a taxiway or a stand.

- Stands 80 and 231 [Taxiway November-Charlie].

When stands 80 and 231 are vacant Taxiway November-Charlie becomes an open live taxiway to aircraft movements. These areas are indicated on the airfield road system map.

Drivers are required to maintain their situational awareness when approaching these areas and give way to all aircraft movements. Service providers must also ensure that all ground service equipment is removed promptly upon completion of an aircraft turnaround to enable the reopening of the taxiway when required.