

Air Canada



Turnround Plan

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Air Canada Turnround Plan Author: Howard Lewis September 2012



Air Canada

The Turnround Plan

Introduction

The Turnround of an aircraft on the Ramp is a complex and busy activity. Numerous people from various companies all working in close proximity in a congested and hazardous environment.

Their tasks, on occasions, are further hampered by such things as inclement weather conditions, noise and time constraints.

The Health and Safety Executive (HSE) have instructed the Air Transport Industry and all companies working Airside engaged in the Turnround of aircraft to improve awareness and health and safety standards.

Statistics suggest that currently, accident rates in the industry are well above the national average for all industries however, for ground handling and airport workers the rates even exceed those of the construction industry and the agricultural sector.

The requirement is to establish and implement a working Turnround Plan to better improve, maintain and manage health and safety standards.

Through joint consultation with all departments and service providers we jointly have a clearer understanding of each party's priorities and requirements. Everyone's objective is the same, to efficiently Turnround the aircraft. However, the safety of our staff, contractors, service providers, passengers, aircraft, facilities and equipment MUST NEVER BE COMPROMISED.

Note:

It is to be noted that the purpose of a turnround plan is not to either serve or replicate an airlines operating manuals but to detail in general terms, the basic safety principles to be applied by an airlines staff and contractors during an aircraft turnround operation with such detail being further documented and formalised through the joint risk assessment process under an organisations duty to control their contractors.

Definitive guidance and information will always be referenced within an airlines individual operating manuals.

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Glossary

ADP	Airside Driving Permit
AOSU	Airside Operations Safety Unit
APU	Auxiliary Power Unit
BAA	British Airports Authority
COSHH	Control Of Substances Hazardous To Health
ADP	Airside Driving Permit
FEGP	Fixed Electrical Ground Power
GMC	Ground Movement Control
FOD	Foreign Object Debris
GPU	Ground Power Unit
HAL	Heathrow Airport Limited
HSE	Health And Safety Executive
MEL	Minimum Equipment List
MDL	Main Deck Loader
OSI	Operational Safety Instruction
PPE	Personal Protective Equipment
SEG	Stand Entry Guidance
SIS	Staff Information System
TRIPLE A	Baggage V's Passenger Reconciliation Record
ULD	Unit Load Device
VIP	Very Important Person



Controlling Service Providers

Like all management functions, establishing control and maintaining it day to day is crucial to an effective health and safety management system.

The health and safety responsibilities in relation to the Turnround Plan has been assigned to Air Canada's operational line management who, have expertise made available to help them to achieve the requirements of the Heath and Safety at Work Act and the regulations made under the Act. The purpose of controlling service providers is to harness the collective enthusiasm, skills and effort of the entire workforce with managers taking the key responsibility and providing clear direction and guidance.

Air Canada ensures its service provider's comply with the relevant health and safety legislation by taking all reasonable steps to:

- (a) Check that their existing arrangements for health and safety are sufficient.
- (b) Ensure that tasks are safe and comply with Standard Operating Procedures.
- (c) Ensure joint working arrangements are agreed and documented.
- (d) Ensure that all employees are trained and are informed of their safety obligations.
- (e) Control the activities they carry out on the Company's behalf.
- (f) Monitor their performance and report non-compliance.

Checking Existing Arrangements

The Company will establish that each service providers existing health and safety management system is in place and considered adequate. This should firstly relate to the service providers safety policy, which should establish the health and safety performance to date. Other information is based upon for example:

Does the service provider:

- ➤ Have suitable risk assessments already in place?
- ➤ Have safe systems of work already in place?
- ➤ Have documentation, which is considered sufficient, current and valid?

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Checking Existing Arrangements (Cont.)

- ➤ Have employees competent to undertake the task required?
- ➤ Demonstrate they can follow the airlines standard operating procedures.

Complying with Standard Operating Procedures

Having identified the health and safety requirements that are necessary to meet the airlines standard operating procedures, it is essential that the planning stage includes setting clear performance criteria (defining what is to be done and by whom) and, stating who is responsible, the timescales involved and the desired outcome. This process is called "joint risk assessment".

Joint Working Arrangements

The key to satisfactory and effective control of the Company's service provider's activities is that of joint risk assessment, prior to engaging their services. This will enable the risk associated with each service provider, the risks they bring to site and the considered level of exposure to both the airlines employees and all the service providers employees that are likely to be working within the same environment in and around the aircraft to be evaluated.

Firstly, a comparison should be made of the two company's risk assessments in the areas where the two company's staff have been identified as working in conjunction with each other or performing their separate duties in the same area, examples of this would be the aircraft cabin or the Ramp Area (above and below the wing).

Undertaking this process will identify any conflict in operating procedures.

As a result of identifying the hazards and evaluating the risks a decision can be made on concluding a safe method of working where people interface. This is achieved by documenting a detailed task analysis. The analysis must describe exactly how a work operation is to be carried out in a manner, which is safe, and without risk to health and safety.

In addition, the document must also define who is responsible for what actions and when it should be done.



Joint Working Arrangements (Cont.)

As an example, an airlines Ramp crew working in conjunction with a cargo transportation service provider off loading pallets of cargo from an aircraft hold would detail items such as, who acts as a banksman, who operates the controls associated with the ramp equipment and when the pallet has been presented to the threshold of the truck, who activates the powered roller bed on the truck and when.

In the case of two companies staff performing separate functions within the same area the task analysis would clarify, if needed, who, under what circumstances, will have priority to the operation and, or, the sequence in which the two tasks could be conducted simultaneously.

Information and Training

Information arising out of these joint risk assessments must be conveyed to the people who are at risk from the undertaking of the company and the service provider, especially, control measures such as emergency procedures.

Airlines and service providers should consider sharing information through joint training initiatives particularly where there is a direct interface between both employee groups. The provision of such information and training should be monitored as part of an airlines effective health and safety management system.

Safety Obligations

Section 7 of the Health and Safety at Work Act 1974 places general obligations on every employee whilst at work:

To take reasonable care for the health and safety of themselves and other persons who may be affected by their acts or omissions at work.

The phrase "acts and omissions" means that every employee is responsible and accountable for the things they do (e.g. creating a hazard) and for the things they do not do (e.g. not removing or reporting a hazard that has been found)

- To cooperate with employers in assisting them to fulfill their statutory responsibilities and duties.
- Not to deliberately interfere with, alter or misuse anything provided in accordance with health and safety legislation, to further improve the health and safety at work.

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Safety Obligations (Cont.)

All employees at work are obligated to fully co-operate with their employers and other persons (e.g. HSE Inspectors) to enable the employer to carry out their legal duty or requirement.

Controlling the Activities

The aircraft turnround manifests the requirement for a competent person to be in place to control the activities around the aircraft. Air Canada's existing safety structure as detailed within Publication 70 "Ramp Operations" already identifies the Ramp Lead as the person who is in control and therefore the introduction of the Turnround Plan has not changed or increased their duties.

The Ramp Lead will be readily recognizable as they will be wearing an **ORANGE** tabard with RAMP LEAD printed on the back.

The Ramp Lead will be working to an agreed plan for the turnround of an aircraft as dictated by the detail contained within the joint risk assessments.

They are **not** required to directly supervise service providers employees as this responsibility lays with the service provider themselves and the duty placed upon an employee being paid to carry out tasks safely on their behalf however all staff who supervise other employees in any capacity regardless of their classification have a legal duty not to turn a "blind eye" and therefore condone any unsafe act.

Observations made by the Ramp Lead in the course of their normal duties play an important role in highlighting hazards, near misses and incidents which have the potential to compromise Air Canada's safe working practices.

They also have sufficient authority to hold off a service provider or stop a particular activity if such compromises are regarded as serious.

Non-Compliance

All cases of non-compliance, breaches or deviations to standard operating procedures are required to be reported to Air Canada management as this enables the Company in conjunction with the service provider's management to resolve any concerns and thereby fulfilling their legal responsibility.

Interaction with other Air Canada departments is treated the same as with any other service provider.

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Non-Compliance (Cont.)

The Ramp Lead is not expected to be present at all times during the turnround of an aircraft and therefore all employees are encouraged to report any considered safety concerns.

Safety Concern

The Air Canada safety reporting policy commits to an uninhibited reporting of considered hazards and occurrences that may have the potential to compromise the health, safety and property of Air Canada, its employees, customers and contractors.

As a means to communicate any safety concerns to the management group the officially recognised vehicle in place to achieve this is the Air Canada "Health and Safety Concern Form" and this is available for download through the Portal by all employees.

Monitoring and Performance

The service provider's procedures will be reviewed periodically irrespective of their last undertaking of work being satisfactory. Circumstances can change within the service providers operation e.g. infrastructure, new equipment or technology introduced, identified different methods of working, different materials or revised risk assessments that may necessitate different control measures and safe systems of work to control the risk.

Aircraft Turnround Summary

As a result of the Health and Safety Executive issuing guidance notes (HSG 209) Air Canada have documented the entire Aircraft Turnround process as required in conjunction with all our service providers. This has enabled and established an agreed process and practice between all parties.

All the individual assessments have been signed off by each of the service providers which commit all parties to working safely together in a common workplace environment within the parameters of the documentation.



General Hazard Awareness

The following will help to identify typical potential hazards associated with aircraft turnround.

The first rule is to ensure the all personnel are wearing the appropriate PPE (personal protective equipment). This will include as a minimum, high visibility garments (tabards etc), ear protection, and protective footwear.

Dependant upon the actual function that is being undertaken, additional PPE will be made available and must be utilized.

! Jet Engines and Propellers

Never approach a jet engine or propellers whilst the anti collision lights are illuminated, even if the engine is not running the fact that the anti collision lights are illuminated suggest it could be about to start.

The only people that are authorized to be near an engine or propellers when they are live are aircraft maintenance personnel.

❖ Jet Blast

Exposure to jet blast from passing aircraft should be considered. Whilst aircraft are instructed to manoeuvre around the airfield with minimum thrust the wake from the jet blast will potentially propel FOD (foreign object debris) over a wide area.

Noise

The Ramp area of an aerodrome is a noisy environment. Passing aircraft, vehicles and equipment operating and manoeuvring in a congested area, many of which; are fitted with audible sirens etc.

Ensure that the correct hearing protection is being worn however, do not be lulled into a false sense of security; you may not hear vehicles reversing towards you or someone shouting a warning, extra vigilance is required.



General Hazard Awareness (Cont.)

***** Falls from Height

Falls from aircraft holds, main deck cargo holds, belt loaders, FMC's, maintenance platforms, aircraft passenger doors, aircraft steps, aircraft jetties high-lift trucks etc all represent the potential of a "fall from height". Ensure that all equipment is positioned correctly and that all safety guides and rails are positioned and engaged.

See Struck by Falling / Moving Objects

Manoeuvring vehicles and equipment in the congested environment of the Ramp can represent a risk of being struck by falling or moving objects should the turnround not be orchestrated in a controlled manner. Hazardous areas include the vicinity of aircraft hold doors where dead load (baggage, cargo, mail etc) may fall from belt loaders, FMC's, ULD's or high lift trucks.

❖ Slip, Trip or Fall

Ensure good standards of housekeeping are maintained on the Ramp, spills of hydraulic oil, engine oil and fuel all represent possible slip and fall hazards. Ensure hoses from the fuelling operation and trailing cables from FEGP (fixed electrical ground power) units are all stowed correctly. Again, all equipment must be positioned correctly with all safety guides and rails positioned and engaged.

❖ Fire and Explosion

During aircraft refueling, ensure the fuel truck has an unobstructed escape route (as airport "best practice" suggests). Are there any vehicles or equipment parked under the aircraft wing fuel dump vents? Is the aircraft grounding cable attached? Damaged packages and spills from some classifications of dangerous goods can be potentially volatile.



General Hazard Awareness (Cont.)

***** Hazardous substances

Damaged and or leaking dangerous goods packages, exposure to body fluids and sanitary waste including discarded hypodermic needles (needlestick injuries) during the aircraft grooming.

Skin and eye exposure to hydraulic oil, fuel, FOD etc

***** Machinery

Attention is to be paid to machinery with moving parts such as belt loaders, FMC's, high lifts etc (e.g. conveyer belts, platforms and beds that raise and lower).

Also airstarts, ground power units and FEGP where there are cables and hoses that may represent a risk of trips and fall or, electrocution.

❖ Manual Handling

Pushing, pulling and lifting, all of these are required to offload and load cargo, baggage, mail, catering trolleys, vacuum cleaners etc.

These functions are often performed in restrictive spaces whether that is in an aircraft hold, between rows of seats within the passenger cabin or in the aircraft galleys.

Recognized manual handling procedures and techniques are required to be applied and in some circumstances, additional manpower made need to be made available and drafted in for assistance.

Whilst the preceding comprehensive list of hazard awareness items are general they are no by means to be seen as exhaustive and represents what is expected to be encountered during the aircraft turnround process.



Additional Factors to Be Considered

Meteorological Conditions

Hot

- ❖ Sun exposure / heat dehydration.
- ❖ Air conditioning within the aircraft cabin.
- **!** Electrical storms.
- **.** Fuel venting.
- Heat sensitive dangerous goods.
- ❖ Welfare of livestock, place in the shade and ensure a plentiful supply of water.

Cold

- ***** Exposure to cold / hypothermia.
- ❖ Heating for the aircraft cabin.
- * Hazards associated with rain, snow, ice and fog.
- * Frozen aircraft, equipment and vehicles.
- ❖ Suitable clothing for ramp workers. parkas, gloves etc.
- ❖ Welfare of livestock, locate in a warm area.

Wet

- Slippery surfaces on ramp and equipment.
- Soaked clothing and PPE problems.
- ❖ Increased vehicle braking distance required.
- ❖ Higher risk of electrical shock from equipment.
- * Reduced visibility.
- Check that the weather curtain on the jetty is extended so that rain water does not leak onto bridge.

Dry

- **.** Fire risk.
- **Dust, eye protection.**
- Glare.
- Pollen.



Additional Factors to be Considered (Cont.)

High Winds

- ❖ Danger of empty ULD's and FOD being blown around aerodrome.
- ❖ Aircraft storm chocking procedures to be applied.
- ❖ Implement aircraft protection procedures during high wind conditions.
- ❖ Implement jetty airbridge storm procedures.
- Wind velocity to be checked prior to an attempt being made to open aircraft hold and passenger doors.
- ❖ Increased risk when working at height, especially on MDL and high lift trucks, maintenance platforms etc.
- ❖ Wind velocity and wind direction to be checked with regards to vehicle stability e.g. high lift trucks.
- **!** Ensure curtains are secure on containers to prevent them flapping in the wind.
- ❖ Ground equipment to be pulled off the aircraft as the aircraft will rock as it is buffeted by high winds.

Note:

Actual wind velocity readings and direction can be obtained from the control tower or the BAA SIS (staff information system).

Refer to the Air Canada Ramp Operations Manual "Publication 70" and the Company aircraft protection procedures for guidance on the requirements to be applied to ensure the protection of aircraft during high wind conditions.

Refueling of an aircraft will be suspended when an electrical storm is within **5 MILES** of the airfield.

The communications headset will not be used during an electrical storm, revert to hand signals however, in reality, ground operations are likely to be temporarily suspended whilst these conditions are evident.



In Preparation of an Aircraft Arrival

- ❖ A walking inspection of the Stand is required to remove any obstructions and FOD. Any spillages or hazards are required to be cleaned up or removed and reported if further action is required.
- ❖ Check that the airbridge jetty is operational, fully retracted and parked in the box within the hatched area. Ensure that there are no obstructions within the hatched area that represents the airbridge manoeuvring area.
- ❖ All equipment, vehicles and personnel required for the arrival are to wait within the inter stand clearways except for anything or anyone associated with the immediate docking of the aircraft. (e.g. chocks, pins, ground power unit etc) These are required to be located away from the centre line in a safe area so as not to represent an obstruction or risk of being struck by the inbound aircraft.
- **!** Ensure correct use of PPE.
- Check that access routes and doorways are clear and free of any obstructions, slip, trip or fall hazards.
- ❖ Competent person in position to activate the "**Stop**" button if required.
- Confirm everyone on the Ramp is aware of the fuel hydrant emergency stop button.
- Only when all the checks have been completed, activate the SEG (stand entry guidance) system.
- ❖ In the event that the SEG is inoperative call for the BAA Marshallers. The aircraft will hold short until their arrival and will not attempt to proceed until indicated to do so by them.



Arrival Operation

- ❖ Monitor the safe arrival of the aircraft on to the Stand. Active the "Stop" button should any hazards occur or manifest themselves at the last moment.
- Under normal operations, ensure no attempt is made to approach the nose wheel area until the engines have been cut and the anti collision lights have been extinguished.
- ❖ Ensure a competent person connects the headset and establishes communication with the flight deck crew whilst being mindful of their immediate position in relation to the aircraft nose wheel.
- ❖ When confirmation received from the flight deck crew that the brakes are "set", the aircraft wheel chocks will be installed by a competent person.
- ❖ A competent person is to connect and activate the FEGP or ground power unit.
- ❖ A competent person is to install the pins.
- ❖ As the engines spool down and the anti collision lights are switched off the Ramp Lead will conduct a visual aircraft walk around check to confirm there is no apparent damage to the aircraft prior top the equipment engaging. The Ramp lead will signal when it is considered suitable, safe and appropriate for personnel and equipment to approach with caution and engage to the aircraft.
- ❖ The Ramp Lead will assess if it would be appropriate to hold certain service providers off the aircraft for an interim period, for example if there is an emergency high lift ambulance to position on a door where the catering truck would normally position on then the Ramp Lead will request that they hold off to give the ambulance priority. One other example would be to enhance the positioning of baggage dollies to the FMC, a request may be made that the high lift catering truck holds off for an interim period until the baggage containers have been off loaded from the aircraft hold.



Off Loading Operation

- ❖ Maintain a monitoring presence as the aircraft hold doors are opened and the airbridge passenger jetty engages to the aircraft.
- ❖ Belt loaders or engineering steps are the only equipment to be utilized should it not be possible to open the aircraft hold doors whilst standing on the Ramp.
- ❖ Ensure that the aircraft hold threshold stops are not dropped until the FMC has been manoeuvred into the operating position.
- ❖ Monitor the safe positioning of the FMC's into the hold doorways; ensure that the baggage tug do not attempt to position until the stabilizers are lowered.
- During a B747 Combi operation, ensure that the tail stanchion is installed prior to any load being off loaded from the forward container hold.
- Should any pushchairs or wheelchairs be required to be taken to the aircraft door, ensure that the stairs in the terminal building are used and not the steep service steps on the airbridge jetty.
- * Ramp workers are required to remain within the "line of sight" of the FMC operator. Should this not be possible then ensure a third party is utilized to achieve this.
- ❖ Ensure that a banksman is being deployed for any reversing equipment should this be considered appropriate.
- ❖ Coordinate the activity around the aircraft. Not all service providers will be required around the aircraft immediately. Some made need to wait with their vehicles at the edge of the stand in order to alleviate any potential congestion.
- ❖ Whenever practical, livestock should remain within the aircraft hold until the arrival of the Quarantine vehicle thereby, reducing any stress to the animal.



Loading Operation

- ❖ Prior to loading any holds, a visual check will be made to check for any damage. Special attention will be paid to dislodged, damaged or missing "blow out panels".
- ❖ On a B747-Combi aircraft, ensure that the tail stanchion is installed prior to any load being boarded on the main deck, aft container hold and bulk hold. Should a tail stanchion not be available then it is a mandatory requirement for the aircraft to be sequentially loaded. Contact the Load Agent for guidance.
- ❖ Ensure all personnel are wearing their appropriate PPE (e.g. high visibility tabard, safety footwear, ear protection etc).
- ❖ Constant vigilance is required regarding foreign object debris (FOD). This is to be removed and disposed of immediately in the FOD bins provided on each Stand by the airports authority.
- ❖ Ensure a banksman is deployed for all reversing equipment should this be considered appropriate.
- Checks to be made that all ULD's are serviceable and there are not any jagged edges that could cause injury. Any unserviceable ULD's are to be taken out of service for repair.
- ❖ In the event a container or pallet becomes jammed within the aircraft hold and extra manpower is required to push, ensure that a competent person is within the "line of sight" of the person operating the in-hold drive system to ensure no one becomes trapped and the correct process is applied to perform this task. Extra caution is required to be applied when working in the hold of an aircraft that does not have a solid floor (e.g. B747, B767).
- ❖ Ensure all dangerous goods shipments are checked for any visible damage or leaking packages and that they are all properly restrained.
- ❖ When loading baggage containers ensure no one walks between the "train" of dollies. Once the dollies are stationary by the FMC bed only allow a person to drop the locks on the dolly when a banksman is being deployed to ensure the "train" does not move. The container lock is only to be dropped when the FMC Bed is in the lowered position.



Loading Operation (Cont.)

- Under no circumstances is anyone to step under the bed of a raised FMC, MDL or high lift vehicle.
- ❖ Dead load on the belt loader is required to be reasonably spaced to enable the loaders at either end to cope with the flow of goods. This in turn ensures, in the event of a jam, the loads will not immediately pile up with the danger of goods falling off, prior to the belt being stopped.
- Any deadload that has wheels or castors are to be laid on their sides thereby ensuring they do not roll off the elevated belt loader boom.
- ❖ Any heavy or awkward pieces are to be lifted from the baggage cart on to the belt loader with two people performing a dual lift. Such items should then ideally be loaded on the bulk hold floor thereby avoiding the requirement to lift them within the bulk hold.
- Ensure that empty baggage carts, dollies, trucks etc are cleared to their designated parking area in a timely manner to ensure the Stand does not become unnecessarily congested.
- Ensure that all restraint components (e.g. locks, guides, nets etc) have been installed, engaged and raised to comply with the company's published standard operating procedures.
- ❖ The belt loader or engineering steps are the only equipment to be used when closing aircraft hold doors if this cannot be achieved whilst standing on the ground.
- ❖ Prior to the passenger door being closed and the jetty being removed, seek confirmation that the flight deck crew are in possession of all the relevant paperwork (e.g. NOTOC, passenger manifest etc) and that the Triple AAA passenger baggage reconciliation check has been completed.
- Prior to the jetty or aircraft steps being removed, ensure that there are no high lift trucks still positioned into the aircraft. This then ensures there is still a "means of escape" for passengers and crew should an emergency situation manifest itself.



Loading Operation (Cont.)

❖ Once all ground equipment, (with the exception of the pushback tug and bar) have been removed from the aircraft and all passenger and hold doors have been closed, the Ramp Lead will conduct a visual walk around to confirm there is no apparent damage to the aircraft prior to pushback.

Restraint

- ❖ Dead load on aircraft is required to be restrained against movement in-flight.

 Load is to be adequately restrained to prevent forward, aft, vertical and lateral

 (right or left) movement. The aircraft hold floor or ULD base serves to

 provide restraint against downward movement.
- ❖ In general terms, dead load on wide body aircraft is restrained collectively within structural ULD's, on netted pallets or within netted compartments in a bulk hold however, there are certain classifications of goods dependant upon their nature e.g. hazardous, live, piercing, penetrating, high density, cylindrical, spherical, items likely to topple or roll when subject to an aircraft manoeuvres and slender items that have an end or side dimension less than 6 inches / 15 centimeters that potentially could pass through a hold separator and / or crash net that are to be individually restrained whether loaded on or in a ULD or, loose loaded within a bulk hold.
- Electric mobility aids e.g. electrical wheelchairs, mobility scooters etc are to be adequately restrained and their circuits disconnected and or isolated thereby ensuring that such items cannot be inadvertently activated for example by load shift during turbulence.

 The first choice location to accommodate such items on a wide bodied aircraft are for them to be stowed within a ULD as apposed to being bulk loaded.
- ❖ Definitive guidance and instructions regarding restraint are to be referenced within the Air Canada operating manuals.



In Preparation for Pushback

- Check that the steering by-pass pin is installed.
- * Check that the wing men are in position prior to the pushback commencing.
- Normal practice is for the aircraft to be pushed back "dead" with engines only being started during the pushback.

 Aircraft with a tail mounted centre engine should only start these once the aircraft has been pulled forward an adequate distance from any blast screen. The exception to this is should an aircraft have an inoperative auxiliary power unit (APU) then permission can be sought to start one engine on Stand prior to pushback. When an airstart unit is being utilized, ensure that the unit and operative are suitably positioned away from the engines and that the hoses are not kinked or twisted.
- Ensure that only a competent person attempts to pushback an aircraft.
- ❖ Ensure the by-pass pins are removed and displayed to the flight deck crew if required prior to the aircraft taxing off.
- Only competent persons are to perform hand signals to the flight deck crew to indicate that it is considered safe and appropriate to "proceed with caution".

Pushback and Towing Operation

- ❖ Ensure that all personnel are wearing the appropriate PPE (e.g. high visibility tabard, safety footwear, ear protection etc).
- ❖ Due to the congested environment of the Ramp, no attempt should be made to position the aircraft pushback tractor until the majority of the Ramp and servicing equipment has vacated the Stand.
- Recognising that the aircraft pushback tractor needs to be "warmed up" and the air reservoir up to pressure for an immediate pushback once clearance is received from the control tower; do not let the engine idle unnecessarily as this will help to improve the air quality within the immediate area.
- * Check to be made that the aircraft steering by-pass pin is properly installed.



Pushback and Towing Operation (Cont.)

- ❖ Once the tow bar is connected to the aircraft nose wheel assembly, ensure that no attempt is made to connect the tug to the bar until the airbridge jetty or steps have been retracted.
- ❖ Ensure that a successful communications check with the flight deck has been undertaken by a competent person to establish communications with the flight deck prior to departure.
- Hand held day glow "wands" are to be utilized during pushbacks and illuminated versions during the hours of darkness, dusk, dawn and periods of low visibility.
- ❖ Ensure that two "wing men" are utilized and that standard operating procedures are being applied.
- ❖ Conduct a final visual walk around check prior to pushback once all the ground equipment has been withdrawn from the aircraft.
- ❖ On a jetty served Stand, the Ramp Lead is required to stand on the ramp beneath the jetty within the "line of sight" of the tractor driver, as the aircraft pushes back they are required to monitor the clearance between the jetty and the aircraft to ensure the aircraft does not come into contact or clip the jetty.

Towing

- ❖ When towing an aircraft all radio communication with Ground Movement Control (GMC) will be performed by either the lead car driver or tow bar less tractor driver subject to the individual holding a "C" class airfield driving permit.
- ❖ From instructions received from ground movements, the lead car driver will indicate to the pushback driver when to pushback, how far to push the aircraft, and in which direction the aircraft is required to be facing once the pushback is complete.



Towing (Cont.)

- ❖ When towing instructions have been received from ground movements, acting upon the "Stop" and "Follow Me" signs the pushback tractor driver towing the aircraft will then follow the lead car at an appropriate distance ensuring that sufficient space is maintained between the tractor and the lead car to enable the tractor and aircraft to be bought to a controlled smooth stop as and when required.
- ❖ The route that the tow will take is determined by ground movement control (GMC) in the control tower. Should it be just a short tow within a cul de sac then it is likely GMC will give clearance to "pushback and re-position" on the "request to pushback" transmission however, should the tow be of some distance then towing instructions will generally be issued in stages.
- ❖ The route may well involve towing on various taxiways, possibly being directed through links between the inner and outer taxiways and stopping at various holding points to give way to other aircraft taxiing or being towed around the airfield.
- ❖ On reaching the intended Stand, the lead car will hold the aircraft short if the ramp lead and ramp crew are not in attendance.

 The ramp lead and crew are required to ensure that the Stand is clear of any considered obstructions and hazards e.g. airbridge jetties not retracted into their fully parked position, personnel, ground equipment and vehicles not associated with the immediate docking of the aircraft are clear and positioned within the clearway or in an appropriate position and, the area being clear of any foreign object debris (FOD) prior to indicating to the lead car driver that it is considered safe and appropriate for the aircraft to be positioned onto the Stand.
- ❖ When towing onto a stand the ramp lead will make a visual check with the lead car who will sit on the back boundary line of the stand to ensure the aircraft is within the parameters of the stand.



Post Departure

- ❖ After pushback, the ramp lead is required to perform a post departure check of the Stand. The key to this check is good housekeeping and returning the Stand to a standard in which you would expect to find it.
- ❖ A walking inspection of the Stand will be undertaken to remove any foreign object debris (FOD), this is to be responsibly disposed of in the FOD bins supplied on each Stand by the airports authority.
- ❖ Ensure that the FEGP is switched off, the cables stowed properly within the cable receptacle box and that the unit has been repositioned to a suitable standby position away from the centre line.
- ❖ A check will be made to ensure tat the airbridge jetty is fully retracted and that the wheels are properly located within the box in the hatched area. Any faults that have arisen associated with the Stand are to be reported to the airports authority as this may require the Stand to be taken out of commission.
- ❖ All vehicles and equipment are to be removed from the Stand and inter stand clearways and parked in the appropriate allocated parking areas.
- ❖ Any spillages are to be reported to Airside Operations Safety Unit (AOSU) for clear up.
- ❖ Confirm that the stand entry guidance system (SEG) has been switched off.

Aircraft on Remote Stand

- ❖ Generally aircraft that are on the ground in excess of four and a half hours are required to be towed off to a remote parking stand in order for the airports authority to better utilize the jetty served stands within the central area.
- ❖ Given this scenario, once the aircraft has been towed to the remote stand the Ramp Lead will no longer remain at the aircraft. Whenever there is a member of Air Canada staff at the aircraft they will assume the role of highlighting and reporting any potential considered hazards. During any time that there is no member of Air Canada staff at the aircraft then the security guard will assume this role.



Security Operation

- ❖ The primary function of the security guard on board is to ensure the safety and security of the aircraft is not compromised during the turnround process and that any person attempting to gain access to the aircraft has a legitimate reason for doing so.
- ❖ The security guard will interface with other service providers in the aircraft cabin whilst performing their duties; these will include catering, grooming, and aircraft maintenance personnel amongst others.
- ❖ Once all passengers have disembarked the security guard will perform a comprehensive "sweep" of the aircraft checking for any suspicious or unauthorized items. This is to include the flight deck, passenger cabin, all cupboards, galleys, storage areas, washrooms etc.
- ❖ Once the security guard has performed their "sweep" they will position themselves by the aircraft door to ensure no unauthorized persons gain access on to the aircraft.
- ❖ A security guard will remain with the aircraft at all times during the turnround process. On an occasion where the security guard has to be "drafted off" then they will advise the Air Canada Duty Coordinator prior to the guard leaving the aircraft. The aircraft will then be closed down, all doors closed and the steps or jetty will be removed thereby ensuring the safety and security of the aircraft will not be compromised.
- ❖ PPE equipment required (e.g. high visibility tabard)

Note: Please refer to section "Aircraft on Remote Stand" for assumed duties.



Aircraft Maintenance

- ❖ Generally aircraft maintenance personnel are not working in an area that directly conflicts with the Ramp Operation albeit in close proximity however, on occasions they are aware of minimum equipment list (MEL), deferred or outstanding items that could well represent a potential hazard to others.
- ❖ Aircraft Maintenance will advise the Duty Coordinator in a timely manner when such an item could represent a potential hazard e.g. in-hold drive systems inoperative, overheated brakes, counter balance weights on hold doors inoperative etc.
- ❖ One of the biggest hazards to likely affect aircraft maintenance personnel is if the aircraft should move whilst they are working on or around it. To this end it is imperative that published wheel chocking procedures are applied.
- ❖ Aircraft Maintenance generally work with minimal equipment and vehicles however, when there is a technical problem they often require specialist equipment and tools and then it is more likely that they will interface with others at apron level or within the aircraft cabin.
- ❖ On an occasion where aircraft maintenance personnel are working in the forward electronics bay, an open bay hatch would represent a risk of fall therefore, bay hatches are not to be propped open.
- ❖ Aircraft Maintenance will ensure that any oils, grease, hydraulic fluids etc that are spilt will be reported for clean up.
- ❖ Personnel will ensure that personal protective equipment (PPE) is being utilized that is consistent to the duties being undertaken e.g. safety footwear, high visibility tabard, hearing protection, eye protection, safety harness etc.
- ❖ On an occasion that an engine run is required on the Ramp, aircraft maintenance will ensure that everyone is aware and that the Ramp has been instructed to remove any FOD, equipment, vehicles, personnel, movable objects etc. Permission will be sought for an "idle power only" engine run from the Airside Operations Safety Unit (AOSU). Any high power engine runs will require the aircraft to be towed to a remote part of the airfield.



Aircraft Fuelling Operation

- ❖ Due to the nature of the fuelling operation the main potential hazard is fire and explosion. Whilst aircraft fuelling companies are highly regulated and follow stringent operating procedures, there are certain observations that the Ramp Lead can make.
- ❖ Ensure that everyone working at Ramp level is aware of the location of the fuel hydrant emergency stop button.
- Preference should always be given to positioning the fuel truck and conduct the fuelling operation from the port side of the aircraft thereby reducing the potential congestion on the traditionally congested starboard side of the aircraft.
- **!** Ensure no one is smoking.
- ❖ Ensure the operator is wearing the appropriate personal protective equipment e.g. safety footwear, high visibility tabard, gloves etc
- ❖ In addition, when the actual re-fuelling is being undertaken the operator should be out of the fuelling truck cab, wearing safety glasses and a bump hat whilst on the fuelling platform and not utilizing a mobile phone within the hydrant exclusion zone.
- Under an operational safety instruction (OSI) issued by the airports authority, best practice requires that an unobstructed escape route is maintained for the fuel truck.
- **Ensure** that the grounding cable is attached.
- ❖ Ensure that no vehicles or equipment are situated within the fuel dump vent exclusion zones.
- ❖ In the event of a fuel spillage, stop fuelling, call the fire brigade (tel: 222), assess the requirement to vacate the area, report to the airside operations safety unit (AOSU) for clean up and call aircraft maintenance.
- ❖ Dependant upon fire and the actual size of the fuel spillage, this would dictate the requirement to vacate the immediate vicinity and aircraft, if in any doubt vacate then seek guidance from the fire service.

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Aircraft Fuelling Operation (Cont.)

- Ensure the safety rails are being deployed on the fuel truck platform.
- ❖ During the loading and re-fuelling process the aircraft will "settle" with the additional weight. Special attention is required to be focused upon aircraft steps and airbridge jetties, especially with aircraft types where the passenger doors are located on the outside of the fuselage when open e.g. B747, B777, A330 etc.

Aircraft Catering Operation

- ❖ The aircraft caterers work primarily with high-lift trucks. Ensure that the truck is positioned correctly and that the safety rails have been engaged.
- ❖ Ensure that the correct personal protective equipment (PPE) is being utilized e.g. safety footwear, high visibility tabard etc.
- ❖ Consistent with the aircraft groomers, the area in which the caterers work is a space restricted environment. During the off / on loading of catering, the galleys and passenger cabin can become very congested. A degree of good housekeeping is required to be maintained to reduce the potential of hazards manifesting themselves.
- ❖ Manual handling techniques are required to be applied due to the nature of the operation with the lifting, pushing and pulling of galley units, trolleys and carts.
- On occasions, catering supplies and units are carried up to the galleys from ramp level especially with any last minute top up; these are required to be taken up via the terminal building stairs and not via the steep airbridge jetty stairs.
- ❖ Ensure a banksman is deployed to help manoeuvre the high-lift truck on and off the aircraft. This is especially pertinent to doors L4 and R4 on the B747 operation with regards to the flap canoes.
- ❖ A degree of good housekeeping is required on the high-lift trucks. Any rubbish that is removed from the aircraft is required to be bagged or boxed to ensure it does not fall or get blown out of the truck to become foreign object debris on the airfield.

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Aircraft Catering Operation (Cont.)

❖ The Ramp Lead on occasions may request that a service provider "hold off" the aircraft for an interim period. Please make reference to the "Arrival Operation" section.

Aircraft Grooming Operation

- ❖ Aircraft Grooming will not commence until all the passengers have disembarked the aircraft due to the potential slip, trip and fall hazards their equipment may represent e.g. vacuum cleaners, mops, brooms, trailing cables etc.
- ❖ A high-lift truck is used for their operation; ensure that the truck is properly positioned and that the safety rails have been engaged.
- The groomer's equipment is normally transported up to the aircraft cabin via the truck however, on occasions it is carried up to the passenger cabin; ensure these items are carried up via the terminal building stairs and not via the steep airbridge jetty stairs.
- ❖ Good housekeeping is required to be maintained within the restricted environment of the passenger cabin with special attention being focused upon trailing cables that potentially represent a risk of trip and fall to other personnel working within the aircraft cabin.
- ❖ Ensure that the correct personal protective equipment is being utilized e.g. safety footwear, high visibility tabard, gloves etc.
- ❖ Aircraft groomers are to be aware of an increased risk of needle stick injuries from discarded hypodermic needles especially when clearing the aircraft seat pockets.
- Caution is to be applied when working and bending down between rows of seats due to the possibility of back strain.
- ❖ A sharps box is supplied on the groomer's high-lift trucks to enable the safe disposal of such items as hypodermic needles.



Aircraft Grooming Operation (Cont.)

- ❖ A degree of good housekeeping is required on the high-lift trucks. Any rubbish that is removed from the aircraft is required to be bagged or boxed to ensure it does not fall or get blown out of the truck to become foreign object debris on the airfield.
- ❖ Ensure a banksman is deployed to help manoeuvre the high-lift truck on and off the aircraft. This is especially pertinent to doors L4 and R4 on the B747 operation with regards to the flap canoes.

Passenger Coaching Operation

- ❖ Passenger coaches will be deployed whenever an aircraft arrives directly or departs from a remote stand.
- ❖ Generally the coaches would not arrive at the Stand prior to the aircraft arrival; this is an ideal situation within the congested environment of an aircraft Stand. In the event that the coaches do arrive prior to the aircraft then the driver will park the coach in a suitable position away from the Stand.
- ❖ Once the aircraft has docked and the aircraft steps have been positioned then the coach can proceed towards the aircraft with caution.
- ❖ There will be a member of Air Canada's Passenger Service staff at the aircraft positioned at the bottom of the aircraft steps, they will assist passengers to disembark or board the coaches and ensure their safe passage between the coach and the aircraft passenger cabin door.
- ❖ The member of the Air Canada's Passenger Service staff will ensure that passengers do not wander off with special attention being paid to children who are likely to be curious as to the activities around an aircraft.
- ❖ The Air Canada Passenger Service Agent will ensure that passengers do not backlog on the aircraft steps causing a potential hazard, in the event that this looks likely then the agent will hold the passengers on the bus and not let them congregate on the Ramp. Once the route is clear then the passengers will be invited to continue boarding the aircraft.
- Personal protective equipment required to be utilized by passenger service staff are high visibility tabard and ear plugs.

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Passenger Coaching Operation (Cont.)

- The coach driver is unlikely to come off the bus however, if he does, then a high visibility tabard is required to be utilized.
- ❖ Due to the congested environment of some remote stands, should the bus need to reverse then the diver must seek the assistance of a banksman.
- ❖ The driver will attempt to position their bus a suitable distance from the aircraft steps however, under no circumstances will a coach attempt to drive under a wing of an aircraft. In this congested environment this may result in the passengers having to walk a few extra meters.

Wheelchair Attendant

- ❖ A wheelchair attendant is primarily involved with the special needs of wheelchair passengers. Manual handling plays a prominent part within their duties and dependant upon the degree of mobility of the individual passenger as to what degree is required. This can range from assisting a passenger to walk from the aircraft door to their seat or having to lift and carry them.
- ❖ On an arriving aircraft the wheelchair passengers are normally taken off when all able body passengers have disembarked. The aircraft groomers and caterers are required not to start their duties until all the passengers have disembarked. On occasions when there is a delay waiting for specialist equipment such as wheelchairs or a high-lift ambulance then they may have to commence their duties. Given this scenario, the groomers and caterers are required to keep the area between the passenger's seat and the aircraft door clear of any obstructions or equipment.
- On departing aircraft, special needs passengers should be boarded prior to general boarding. This is more practical as there would be less congestion within the aircraft cabin at this time.
- Manoeuvring a passenger in and out of a wheelchair by the aircraft door on an airbridge jetty head requires the area to be clear of any potential trip hazards such as grooming or catering equipment.
- ❖ Personal protective equipment required would be safety footwear and should they be required to venture out onto the ramp, then a high visibility tabard in addition.

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Wheelchair Attendant (Cont.)

- Two attendants are required when attending to the needs of a "carry on" passenger, in the event of a large or heavy passenger then additional assistance will be sought.
- ❖ Manual handling techniques are to be applied when assisting passengers, lifting, pushing and manoeuvring wheelchairs.
- ❖ In the event the aircraft is on a remote outside stand then a high-lift ambulance should be utilized to transport the passenger to and from ramp level in wet, snow, icy or high wind conditions. Outside these conditions if it is considered that a passenger's mobility to too restricted or the passenger is too big or heavy to negotiate the gradient of the aircraft steps then again the services of a high-lift truck will be sought.
- ❖ In addition to the normal seating restrictions for wheelchair passengers e.g. not to be seated within emergency exit rows, not to be seated on the upper deck of a B747 if unable to walk up the stairs. Consideration should be given to assigning a seat where the armrests are not static. This enables the attendant to slide the passenger into their seat, not having to lift them so high and as they are lowered into their seat the chance of catching the passengers hip on a static armrest.

Crew and Crew Bus Operation

- ❖ The crew bus picks up and delivers pilots and flight attendants to and from the aircraft side. On arriving aircraft, generally the aircraft is on the Ramp prior to the crew bus arrival; this is an ideal situation as the crew would not normally disembark until the passengers are off.
- ❖ In the event the crew bus arrives on the Ramp prior to the aircraft, the crew bus driver will park the coach in a suitable area away from the Stand so as not to further congest the stand area.
- ❖ On departing aircraft where the aircraft has to be towed on from a remote stand; occasionally the crew bus may arrive prior to the aircraft. Again in this scenario the crew bus will park in a suitable area away from the Ramp and not approach the aircraft until the aircraft has docked and the airbridge jetty or steps have been positioned.

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Crew and Crew Bus Operation (Cont.)

- ❖ On Air Canada flights the crew take their baggage up into the passenger cabin so normally there is no requirement for the crew bus to drive round to the hold area. The exception to this would be on an occasion where there is a large piece of crew baggage that needs to be accommodated within the aircraft hold.
- ❖ Personal protective equipment e.g. high visibility tabard is required to be worn by the crew bus driver however; pilots and flight attendants are not required to wear a high visibility tabard to walk the short distance between the crew bus and the aircraft.
 - Pilots when conducting a pre-departure walk around check are required to utilize a high visibility tabard.
- ❖ On a jetty served Stand the crew are required to utilise the terminal building stairs to the aircraft as apposed to the steep airbridge jetty stairs. The likelihood is they will be carrying baggage and possibly wearing inappropriate footwear therefore; the crew bus will pick up and drop off by the terminal building stairs.

Crew

- ❖ Pilots are required to wear a high visibility tabard whilst undertaking an aircraft walk around check.
- ❖ Pilots are to be kept clear from areas beneath belt loaders, FMC's, MDL's, high-lift trucks etc where there is a risk of being struck by falling objects.
- ❖ In the event that the grooming operation has not been completed when the crew are ready to board, then they should wait in the gate lounge until at least the forward passenger cabin has been completed and is clear of equipment.
- ❖ On board the aircraft, the crew are responsible for passenger safety. Any cabin doors open, have been opened essentially for good reason therefore, the crew will ensure all precautions are in place to prevent a fall from height.



Water and Waste Operation

Waste

- ❖ In an attempt to reduce ramp congestion on an arriving aircraft it is required that the waste is not serviced for at least 20 minutes after arrival. If the aircraft is to be towed off to a remote stand then this would represent the ideal opportunity for the waste to be serviced as there will be minimal personnel and equipment around the aircraft.
- ❖ The waste operative is to utilize personal protective equipment consistent to their task e.g. water proof suit, safety footwear, face mask, rubber gloves, high visibility tabard etc.
- Ensure that a banksman is utilised should this be considered appropriate.
- ❖ Any spillage of effluent on to the Ramp represents a significant health hazard therefore it is a mandatory requirement that this is reported in order for it to be cleaned up.
- ❖ During winter operations any spillage may well freeze and cause an additional ice hazard.
- Operatives are to be aware of the COSHH (Control of Substances Hazardous to Health) assessment for any chemical additives being used.

Water

- ❖ In an attempt to reduce ramp congestion on an arriving aircraft it is required that the water is not serviced for at least 20 minutes after arrival. If the aircraft is to be towed off to a remote stand then this would represent the ideal opportunity for the water to be serviced as there will be minimal personnel and equipment around the aircraft.
- ❖ The water operative is to utilize personal protective equipment consistent to their task e.g. water proof suit, safety footwear, rubber gloves, high visibility tabard etc.
- Ensure that a banksman is utilised should this be considered appropriate.



Water and Waste Operation (Cont.)

Water (Cont.)

❖ During winter operations aircraft maintenance may well require the water system to be drained on aircraft "laying over" all night. The water is not to be drained onto the Ramp as it may well freeze and cause an additional ice hazard.

Marshalling

- ❖ The marshalling of aircraft at Heathrow Airport is only to be performed by an approved airports authority HAL aircraft marshaller.
- ❖ A marshalling service is automatically provided for Stands that are not equipped with a stand entrance guidance system (SEG) or where the SEG system is known to be unserviceable. Marshalling assistance is always available upon request.
- Personal protective equipment is to be utilized consistent with the task e.g. safety footwear, hearing protection, high visibility tabard etc.
- ❖ The aircraft marshallers have overall authority whilst an aircraft is being manoeuvred onto a Stand.

De-icing Operation

- ❖ The aircraft de-icing process is carried out during the winter months and is critical to flight safety. External areas of the aircraft e.g. wings, flaps, rudder, ailerons etc are sprayed with a de-icing agent to remove snow, slush, ice and frost. This application will inhibit any subsequent accumulation for a limited period after spraying.
- ❖ Generally, once an aircraft has been "de-iced" the aircraft then has to take off within 20 minutes, however this time window is dictated by the actual weather conditions at the time. Failure to achieve this will require the aircraft to be deiced again.



De-icing Operation (Cont.)

- ❖ The de-icing process will not take place until the aircraft is ready to pushback. All the hold and passenger doors need to be closed as do any service flaps, panels and doors. The Ramp Lead is required to ensure this is in place and all ground equipment with the exception of the pushback tractor and fixed electrical ground power (FEGP) have been cleared from the immediate aircraft vicinity.
- ❖ The Ramp Lead will check with the flight deck crew that they are ready for de-icing to commence. Amongst other checks, the air conditioning packs will be shut down so the residue from the de-icing spray is not ingested into the aircraft, should residue enter the air conditioning packs then this is likely to produce smoke into the aircraft cabin.
- ❖ The de-icing operatives are to wear personal protective equipment (PPE) consistent with their undertaking e.g. safety footwear, winter weather gear, hearing protection, face mask, safety harness, high visibility tabard etc.
- ❖ The de-icing truck will manoeuvre around the aircraft at the request of the operative raised in the boom conducting the spraying. Ensure that the safety rails are engaged on the boom and that a safety harness is being worn.
- The residue mist from the de-icing fluid will drift across the Ramp with any prevailing wind therefore; personnel are required to be kept upwind from the spraying or within a vehicle.
- ❖ The de-icing operatives can reduce congestion on the Ramp by standing by with their vehicle at the edge of the Stand within the interstand clearway until the ramp equipment has been cleared and the Ramp Lead has indicated that it is considered safe and appropriate for them to engage their vehicle with caution to the aircraft.

Cargo Transportation

❖ Due to the activity around an aircraft during the unloading and loading process it is required that the trucks remain on the edge of the Stand until the Ramp Lead indicates that they are ready for the trucks to position themselves to the ramp equipment. Generally there are baggage ULD's to off load prior to the cargo and mail so this will help alleviate the potential congestion within the restricted environment aircraft side.

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Cargo Transportation (Cont.)

- ❖ When appropriate, a banksman will be utilized when positioning trucks on to the ramp equipment.
- ❖ During the positioning process a brake test is required to be applied.
- ❖ It is not a requirement for the rubber buffer on the rear of the truck to come in contact with the MDL or FMC units however; it is required to be within 30 centimeters.
- ❖ The truck driver is responsible to ensure all ULD's and loads are suitably secured on the truck with all the restraint components engaged prior to an attempt being made to manoeuvre the vehicle.
- ❖ All efforts are to be made to ensure that the on load ULD's are presented to the aircraft on the trucks in "load order". This then reduces the volume of truck movements to both the forward and aft holds and thereby further mitigates the risk.

Emergency Services

Fire

- ❖ The fire service will attend all emergency situations. During a fire related emergency situation, the fire service have priority to the operation and any instructions given by them will be executed to the letter.
- ❖ No one is to approach an aircraft until the fire service give the "all clear".

Police

As with the fire service, the police are only likely to be in attendance at an aircraft with good reason therefore, all cooperation will be shown and their instructions followed.



Emergency Services (Cont.)

Ambulance

❖ In an emergency situation, priority to be given to the ambulance service. Where a high-lift ambulance is in attendance this will be positioned on the aircraft as a matter of urgency however, in a non emergency situation the high-lift will be positioned at a convenient time (see "high-lift ambulance" operation).

UK Border Agency

❖ The UK Border Agency have wide reaching powers in their quest to protect society. They may be in attendance at an aircraft conducting surveillance or may even totally seal off or impound an aircraft forbidding anyone or anything to be off or on loaded.

Consistent with the fire and police authorities, all cooperation will be shown and any instructions followed.

Port Health

❖ Whilst Port Health are not an emergency service, they may, on occasions be present at an aircraft.

In an extreme situation they may require an aircraft to be temporarily isolated if for example they suspect a passenger(s) may be onboard with a contagious disease.

Consistent with the other authorities, all cooperation will be shown with any instructions followed.

High Lift Ambulance

- ❖ A high-lift ambulance is used to transport passengers to and from the aircraft cabin and ramp level who are unable to access the aircraft via the airbridge jetty or aircraft steps or, where this is not practical.
- ❖ Areas where the high lift ambulance operator will interface with others are within the aircraft cabin and at ramp level. Many of the tasks undertaken within the aircraft cabin have been outlined in the "Wheelchair Attendant" section.

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High Lift Ambulance (Cont.)

- ❖ Interface at ramp level on an arriving aircraft may include the high-lift ambulance holding off their vehicle in an appropriate position so as not to further congest the ramp operation. No attempt will be made, except in an emergency situation to carry off a passenger until all other passengers have disembarked.
- ❖ As soon as practical, the Ramp Lead will advise the high-lift ambulance operative when it is considered safe and appropriate to position the ambulance.
- ❖ On a departing aircraft it is preferred practice to board any special needs passengers via the high-lift ambulance prior to general passenger boarding. Should this not be possible then they will be boarded at a convenient time.
- ❖ In an emergency situation, the Ramp Lead will give priority to positioning an ambulance.
- ❖ High-lift ambulance operators will wear personal protective equipment consistent with their task e.g. safety footwear, high visibility tabard etc.
- ❖ The high-lift ambulance operatives will ensure that all stabilizers and safety rails are engaged as appropriate.

VIP's, Diplomats and Couriers

- On occasions, special loads are required to be witnessed being either loaded or off loaded from an aircraft.
- The minimum personal protective equipment required for such adhoc visitors to the ramp would be a high visibility tabard.
- ❖ Experience suggests that often these types of people can be very over zealous and whilst in an unfamiliar and potentially dangerous environment such as the Ramp, could end up being a danger to themselves and others.
- ❖ All efforts should be made avoid the situation if possible, on occasions a verbal confirmation that something is on board will often suffice.

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VIP's, Diplomats and Couriers (Cont.)

- ❖ In an event where they do come down onto the ramp aircraft side then they will be accompanied by the ramp lead at all times.
- ❖ Their visit to the ramp will be kept to an absolute minimum.
- ❖ Under no circumstances will they be allowed either to climb on to any ramp equipment or be allowed access into the aircraft holds.

Miscellaneous Service Providers

- ❖ On occasions it is inevitable that an adhoc visitors or service providers will be in attendance at the aircraft e.g. security van with valuable cargo, transport company with an unusual load, the press with camera crews etc.
- ❖ Given these situations, it would be likely that the ramp lead would be aware that they are due and will be vigilant as to their arrival.
- ❖ It is likely they would be unfamiliar with an aircraft turnround environment therefore; it is important that the ramp lead identifies themselves and offers guidance as required.
- On introduction, should it become apparent that this is their first encounter in this type of environment then; the ramp lead is required to explain that it can be a dangerous and congested environment if not properly managed and that the ramp lead's instructions and requests are to be applied and respected.
- ❖ Should they require to be on the ramp and are not in possession of any personal protective equipment than the ramp lead will endeavour to provide a high visibility tabard as a minimum for their use.

Airside Driving

- All airside drivers are required to be in possession of a current valid Airside Driving Permit (ADP).
- ❖ Airside driving permits are issued by Heathrow Airport Limited (HAL) or organizations approved by HAL to deliver airside driver training.

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Airside Driving (Cont.)

- Candidates under training will be required to pass an airside driving test and theory test.
- ❖ Airside drivers are subject to a "fitness to drive" medical, the standards of which have been established in conjunction with the Department for Transport (DFT) and occupational health practitioners. The medical standards encompass within the check are eyesight, colour perception, hearing and general health.
- An airside driving permit is valid for five years (three years for a "C" class manoeuvring area permit) after which time refresher training and a theory test will be undertaken to enable the revalidation of an individual's airside driving permit.
- There are three types of Airside Driving Permits (A, B and C) all valid for different areas.
 - **A** Valid for airside service roads only.
 - **B** Valid for airside service roads, aprons, controlled and un-controlled crossings.
 - C Valid for the areas as detailed above in addition to the aircraft manoeuvring areas (e.g. aircraft taxiways, runways etc).
- ❖ An airside penalty point system is applied by the airports authority that is based broadly upon the Road Traffic Act where traffic, driving and vehicle violations will attract penalty points against an individual's airside driving permit.

.General Airside Driving Rules

- ❖ Aircraft always have the right of way.
- ❖ Speed limits on airside roads are 20 mph unless otherwise indicated.

5 mph on the apron.

30 mph in the cargo and ART tunnel

40 mph on the aircraft manoeuvring area.

Never drive in front of, or behind, an aircraft where the anti collision lights are illuminated.

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Airside Driving (Cont.)

General Airside Driving Rules (Cont.)

- ❖ No smoking is permitted within vehicles airside.
- ❖ Vehicles are required to drive with dipped headlights and obstruction lights illuminated at all times.
- ❖ Vehicles should not be left running whilst un-attended.
- Drivers are to keep to the designated routes and not take short cuts off the road system.
- ❖ It is the driver's responsibility to ensure all loads are properly restrained.
- ❖ Always park within a designated area, space airside is at a premium and this helps to reduce potential congestion.
- ❖ In times of low visibility as advised by the Airside Operations Safety Unit (AOSU), "free ranging" by "C" class permit holders is not permitted. AOSU will advise when low visibility procedures are no longer in force.
- ❖ All accidents are to be reported immediately to the Police and AOSU.
- ❖ During winter conditions, greater braking distances will need to be applied when driving all vehicles and equipment, and extra vigilance is required as boundary lights, lines and markings may become ambiguous should they become obscured by snow. A supplementary brake test should be performed when positioning a vehicle or engaging equipment to an aircraft.
- ❖ Published speed limits on the airside roads systems and ramp areas are maximum limits and not prescriptive objectives therefore; driving speeds are to be further regulated so as to be conducive to the actual conditions.