

# IATA Airport Handling Manual

---

## ➤ AHM 611

### AIRSIDE PERSONNEL: RESPONSIBILITIES, TRAINING AND QUALIFICATIONS

#### 1. INTRODUCTION

The dynamics of the airside environment have the potential for producing conflict between personnel, equipment operations and aircraft and/or facilities.

To ensure safety, quality and proficiency; definitive performance and responsibility criteria is required for all personnel engaged in airside activities. Organisations shall establish minimum training requirements for all personnel whose duties require airside access.

#### 2. SCOPE

The scope of this AHM is to provide a guideline of factors that shall be considered in establishing the responsibilities, proficiency and qualifications of personnel operating airside as well as to define the requirements for airside training programs.

The content of this AHM should be read in conjunction with other appropriate AHMs.

#### 3. RESPONSIBILITIES

##### Basic level

- follow safe working practices;
- incident reporting.

##### Equipment operator/specialist tasks

- vehicle/equipment checks;
- follow standard operating procedures;
- incident reporting.

##### Supervisory level

- allocation and direction of resources;
- coordination of aircraft handling functions;
- performance monitoring;
- incident reporting.

##### Management level

- provision of resources;
- health and safety management;
- budgetary control;
- incident reporting.

#### 4. TRAINING

##### 4.1 Objective

The objective of training is to ensure that learners are provided with the requisite skills, knowledge and attitude to complete the task being trained in a safe and efficient manner.

## 4.2 Definitions

Training	Instruction in a new task or skill or whenever changes to equipment or processes occur.
Recurrent	Company, Industry or legislative mandated topics that have to be repeated within specific time frames.
Re-training	Repeat of 'Training' to verify understanding. Initiated following procedural failure, accident/incident, near miss or prolonged absence from the working environment.
Refresher	Revision of training modules relevant to a persons function.
Assessment	A structured system to ensure the ongoing competence of the individual in relation to key items of their job function.

## 4.3 Processes

Theoretical and practical skills training shall be conducted by personnel who have demonstrated the skills to deliver the training effectively, and who have competence (knowledge, skill and experience) in the subjects to be instructed.

Assessments shall be conducted by persons who have appropriate knowledge, skills and experience in the functions being assessed.

Training shall be a combination of theoretical (suitable and sufficient information and instruction relating to the topic being trained) and practical skills training to verify the learners understanding of, and ability to complete, the task being trained.

Changes to processes or equipment shall be communicated to relevant personnel and appropriate additional information and training shall be delivered.

## 4.4 Records

All training, assessments and competencies shall be documented in a timely and consistent manner.

The record shall identify the date when the particular subject matter has been delivered to the learner. The trainer will sign or initial that they have delivered the training.

The learner will, as acknowledgement and understanding of the training, sign or initial the appropriate subject matter on the training record form.

Training content and records shall be made available for review by an authorised air carrier representative and/or regulatory authority.

Where electronic or computer based training record systems are maintained, the content shall include, as a minimum, the learner's name, test mark achieved, date of training and course reference.

## 5. QUALIFICATIONS

Knowledge verification will be required through, where applicable, a written test of the topic trained which shall have a minimum pass mark of 80% and there shall be a review process for addressing all question failures even if the pass mark has been achieved. Practical competency verification shall be achieved through trainer evaluation.

Upon successful completion of the above, personnel can be considered as qualified to fulfill their assigned duties.

To maintain ongoing competence, each individual's performance shall be assessed at intervals that will be not less than once every three years.

This may be achieved by

- Refresher training or
- Observation(s) of the persons performance or
- Written test(s)

## 6. TRAINING PROGRAM ELEMENTS

### 6.1 Safety Training

#### 6.1.1 General

The following matrix indicates the subjects that shall be included in safety training according to job function.

Function/ subject	1	2	3	4	5
6.1.2.1	All	All	All	All	All
6.1.2.2	All	All	All	All	All
6.1.2.3	a-f, h-n	All	All	All	All
6.1.2.4	All	All	All	All	All
6.1.2.5	All	All	All	All	All
6.1.2.6	All	All	All	All	All
6.1.2.7	All	All	All	All	All
6.1.2.8	All	All	All	All	All
6.1.2.9	a-c, e-g	a-c, e-g	a-c, e-g	All	All
6.1.2.10	X	X	X	All	All

Legend:

Function 1: Any person whose duties require airside access.

Function 2: Any person whose duties require them to operate basic GSE, such as tractors, belt loaders etc.

Function 3: As per function 2, plus the operation of specialised equipment, including but not limited to; aircraft movement units, container/pallet loaders, deicers, catering vehicles and also exercises control on aircraft movement operations and performs lead responsibility over other personnel.

Function 4: First level of operational management, including supervisory personnel having responsibility for directing staff and equipment resources, controlling the operational activity.

Function 5: Station management having responsibility for resource issues, health and safety, incident management and budgetary control.

*Note: The above functional definitions should not be regarded as exclusive and may be varied as determined by local requirements and considerations.*

#### 6.1.2 Program content

##### 6.1.2.1 Safety philosophy

- (a) Company safety policy and program
- (b) Employer/employee safety functions and responsibilities

**6.1.2.2 Safety regulations**

- (a) International Aviation regulations
- (b) National regulations
- (c) Airport airside regulations
- (d) Safe Working Practices/Safe Operating Practices

**6.1.2.3 Hazards**

Examples but not all inclusive:

- (a) Vehicle movements
- (b) Pedestrian movements
- (c) Aircraft movements
- (d) Jet engines
- (e) Propeller driven aircraft and helicopters
- (f) Aircraft antennae and other protrusions
- (g) GSE
- (h) Aircraft fuelling and fuel spills
- (i) Adverse and seasonal weather conditions
- (j) Night operations
- (k) Working at height
- (l) Slips, trips and falls
- (m) Noise
- (n) Manual Handling
- (o) Runway incursions

**6.1.2.4 Human factors**

- (a) Motivation and attitude
- (b) Human behaviour
- (c) Communication skills
- (d) Stress
- (e) Ergonomics
- (f) The effects of drugs and alcohol
- (g) Fatigue
- (h) Time pressures
- (i) Peer/management pressure
- (j) Situational Awareness
- (k) Team work

**6.1.2.5 Airside markings and signage**
**6.1.2.6 Emergency situations**

- (a) Reporting
- (b) Injuries
- (c) Security threats
- (d) Spillages
- (e) Location and response to alarms and emergency stops
- (f) Fuel shut-offs
- (g) Ground to Flight deck emergency handsignals
- (h) Fire
- (i) Severe weather
- (j) Emergency procedures for on stand evacuation

**6.1.2.7 FOD prevention program**

Refer to AHM635

**6.1.2.8 Personal protection**

- (a) Personal protective equipment e.g.
  - HI-visibility clothing
  - Protective clothing for: Ears, Feet/Toes, Knees, Hands, Eyes

- (b) Occupational health program

- (c) Musculoskeletal injury prevention programs

- (d) Weather exposure

**6.1.2.9 Accidents, Incidents and Near Misses**

- (a) Personnel injuries
- (b) Damage to aircraft, ground equipment and facilities
- (c) Reporting
- (d) Investigation
- (e) Prevention

- (f) The cost of accidents/incidents

- (g) Risk assessment review

**6.1.2.10 Airside safety supervision**

- (a) Creating an open reporting culture

- (b) Performance monitoring

- (c) Co-ordination of airside activities

- (d) Workload Management

- (e) Decision Making

- (f) Planning

**6.2 Driver Training**
**6.2.1 Program content**
**6.2.1.1 The role and responsibilities of vehicle operators**

- (a) fitness to drive (medical/health standards) per national or airport requirements;
- (b) use of personal protective equipment such as high visibility clothing and hearing protection;
- (c) general driving standards;
- (d) speed limits, prohibited areas and no parking regulations;
- (e) vehicle reversing;
- (f) staff and passengers walking across aprons;
- (g) vehicle towing restrictions;
- (h) vehicle movement in proximity to maneuvering aircraft and navigational equipment/signage;
- (i) smoking restrictions;
- (j) FOD - types, effects and required action;
- (k) assurance of vehicle suitability for the task and used correctly;
- (l) consequences of contravening rules and regulations related to operation of vehicles airside.

**6.2.1.2 Vehicle/equipment standards**

- (a) condition and maintenance standards agreed at aerodrome and/or national level;
- (b) requirements to display obstruction lights and company insignia;
- (c) requirements and content of daily vehicle inspections;
- (d) agreed standards of aerodrome and company vehicle fault reporting and rectification;
- (e) local requirements for the issue and display of Airside Vehicle Permits (AVPs)

**6.2.1.3 Hazards of airside driving**

- (a) the danger zones around aircraft,
- (b) engine suction/ingestion and blast, propellers and helicopters,
- (c) aircraft refuelling,
- (d) fuel spillage.
- (e) congestion on the ramp.

**6.2.1.4 Reduced visibility procedures**

- (a) driving at night;
- (b) driving in adverse weather conditions, particularly low visibility.

**6.2.1.5 Accident and incident reporting procedures**

- (a) action to be taken in the event of a vehicle accident,
- (b) action to be taken in the event of a vehicle striking an aircraft,
- (c) action to be taken in the event of fire,
- (d) action to be taken in the event of aircraft accident/incident,
- (e) action to be taken in the event of personal injury.

**6.2.2 Aprons, stands and airside roads**

These elements are supplementary to that outlined in 6.2.1 above.

**6.2.2.1 Familiarization with the apron layout: operational stands, vehicle corridors, airside roads, aircraft taxi lanes, etc.**

- (a) the general geography of the local aerodrome;
- (b) aviation terminology used;
- (c) interpretation of airside markings and signage;
- (d) markings and lights for both vehicles and aircraft;
- (e) signs, markings and lights used to guard runways;
- (f) any controlled/uncontrolled taxiway crossing procedures.

**6.2.2.2 Airport rules, regulations and/or procedures pertaining to airside vehicle operations**

- (a) rules of air traffic services as they relate to vehicles, particularly rights of way;
- (b) specific aerodrome regulations, requirements and local instructions;
- (c) local methods used to disseminate general information and instruction to drivers;
- (d) local methods used to disseminate information regarding works in progress.

**6.2.2.3 Procedures for crossing aircraft movement areas**
**6.2.2.4 Pedestrian crosswalk rules**
**6.2.3 Maneuvering area**

Vehicle operators requiring operational access to maneuvering areas shall receive additional training to that outlined in 6.2.1 and 6.2.2 above. This training shall include:

**6.2.3.1 Identification of obstacle free areas, e.g. navigation aids, limited access areas**
**6.2.3.2 Aerodrome Regulations and Requirements**
**6.2.3.3 Air Traffic Control**

- (a) function of aerodrome control and its area of responsibility;
- (b) function of ground movement control and its area of responsibility;
- (c) normal and emergency procedures used by ATC relating to aircraft;
- (d) ATC frequencies used and normal handover/transfer points for vehicles;
- (e) ATC call signs, vehicle call signs, phonetic alphabet, standard phraseology;
- (f) demarcation of responsibilities between ATC and Apron Control if applicable.

**6.2.3.4 Aerodrome Layout**

- (a) standard ICAO signs, markings and lights used on the maneuvering area;
- (b) signs, markings and lights used to protect the runway;
- (c) description of equipment essential to air navigation such as ILS;
- (d) description of protected zones related to ILS antenna;
- (e) description of ILS protected areas and their relation to runway holding points;
- (f) description of runway instrument/visual strip, cleared and graded area;
- (g) description of lights used on the maneuvering area with particular emphasis on those related to low visibility operations.

**6.2.3.5 Maneuvering Area Driving**

- (a) driving at night;
- (b) operations in low visibility and other adverse weather conditions;
- (c) rights of way for aircraft, towed aircraft and PFFS vehicles in emergency;
- (d) actions to be taken in event of vehicle accident/incident;
- (e) actions to be taken in event of aircraft accident/incident;
- (f) actions to be taken if FOD or other debris is found on runways and taxiways;
- (g) procedures to be used by vehicle operators if lost or unsure of position;
- (h) procedures for vehicle and/or radio becoming unserviceable whilst on maneuvering areas;
- (i) alternative communication procedures in event of equipment breakdown;
- (j) combined radio/vehicle failure procedures;
- (k) prevention of runway incursion.

**6.2.3.6 Radio communication requirements and procedures**

- (a) radio procedures to be used, if applicable;
- (b) light signals used by ATC, if applicable;
- (c) how to contact the local aerodrome safety unit.



### 6.2.3.7 Aircraft Familiarisation

- (a) knowledge of aircraft types and ability to identify all types normally operating at the aerodrome;
- (b) knowledge of Airline call signs;
- (c) knowledge of aircraft terminology relating to engines, fuselage, control surfaces, undercarriage, lights, vents etc.

### 6.2.4 Driver evaluation

In order to determine the competency (both knowledge and skill) of the airside driver applicants, the training program must include two forms of evaluation:

- (a) a theory test that challenges the applicants' recall of important information, procedures, policies, rules and driving restrictions; and,
- (b) a practical test that challenges the applicants' ability to apply the airside vehicle operation requirements (application of knowledge) and, ability to operate vehicles and equipment (employer specific) (performance) in the performance of their duties airside.

#### 6.2.4.1 Evaluation Elements

Shall include, but not be limited to:

Aprons, stands and airside roads

- (a) airside service roads, taxiway crossings and any restrictions during low visibility;
- (b) aprons and stands;
- (c) surface paint markings for vehicles and aircraft;
- (d) surface paint markings that delineate the boundary between aprons and taxiways;
- (e) signs, markings and lights used on the taxiway and help indicate runways ahead;
- (f) parking areas and restrictions;
- (g) speed limits and regulations;
- (h) hazards during aircraft turnarounds and aircraft movements.

Maneuvering area:

- (a) all runways (including access and exit routes), holding areas, taxiways and aprons;
- (b) all signs, surface markings and lights associated with runways, holding positions, CAT 1/2/3 operations;
- (c) all signs, surface markings and lights associated with taxiways;
- (d) specific markings that demarcate the boundary between aprons and maneuvering area;
- (e) navigation aids such as ILS, protected area, antenna, RVR equipment and other meteorological equipment;
- (f) hazards of operating around aircraft landing, taking off or taxiing;
- (g) any locally used naming convention for particular areas or routes.

As determined by local requirements all Airside Drivers shall be required to take a refresher/recurrent evaluation at pre-determined intervals.

## 6.3 Aircraft Handling Training

### 6.3.1 Introduction

The functions of aircraft handling include, but are not limited to:

- (a) assembly of load in bulk or in ULDs;
- (b) loading/off-loading of aircraft;
- (c) completion of Loading Instruction Report (LIR);
- (d) aircraft movement;
- (e) provision and operation of ground support equipment;
- (f) provision and operation of passenger, crew vehicles and ambu-lift;
- (g) toilet/water servicing;
- (h) cabin servicing;
- (i) catering;
- (j) fuelling;
- (k) aircraft deicing/anti-icing;
- (l) efficient management of resources, such as personnel, loading and servicing equipment, etc.;
- (m) co-ordination between departments and functions involved in the handling of an aircraft.

### 6.3.2 General

Personnel shall, as appropriate to their job function, receive training on the applicable subjects in the following list:

- (a) airside safety;
- (b) security regulations;
- (c) irregularly/incident/accident reporting procedures;
- (d) manual handling of load;
- (e) safety during aircraft fuelling;
- (f) principles of aircraft loading;
- (g) handling of loads requiring special attention;
- (h) loading incompatibilities;
- (i) handling of aircraft Unit Load Devices (ULDs);
- (j) operation of aircraft loading systems/securing of ULDs;
- (k) identification/consequences of malfunctions of in-plane loading systems;
- (l) consequences of load damage and spillage;
- (m) positioning and operation of loading and servicing equipment;
- (n) notification to Captain of load being carried;
- (o) passenger embarkation/disembarkation procedures;
- (p) standards of aircraft cleaning, lavatory and fresh water servicing;
- (q) aircraft movement operations.

### 6.3.3 Program content

Training content shall be based (where applicable) on the safe operating practices in:

- IATA AHM 590 (Load Control)
- IATA AHM 630 (Aircraft Handling)
- IATA AHM 631 (Aircraft movement operations)
- IATA AHM 634 (Passenger Boarding Bridge Operations)

