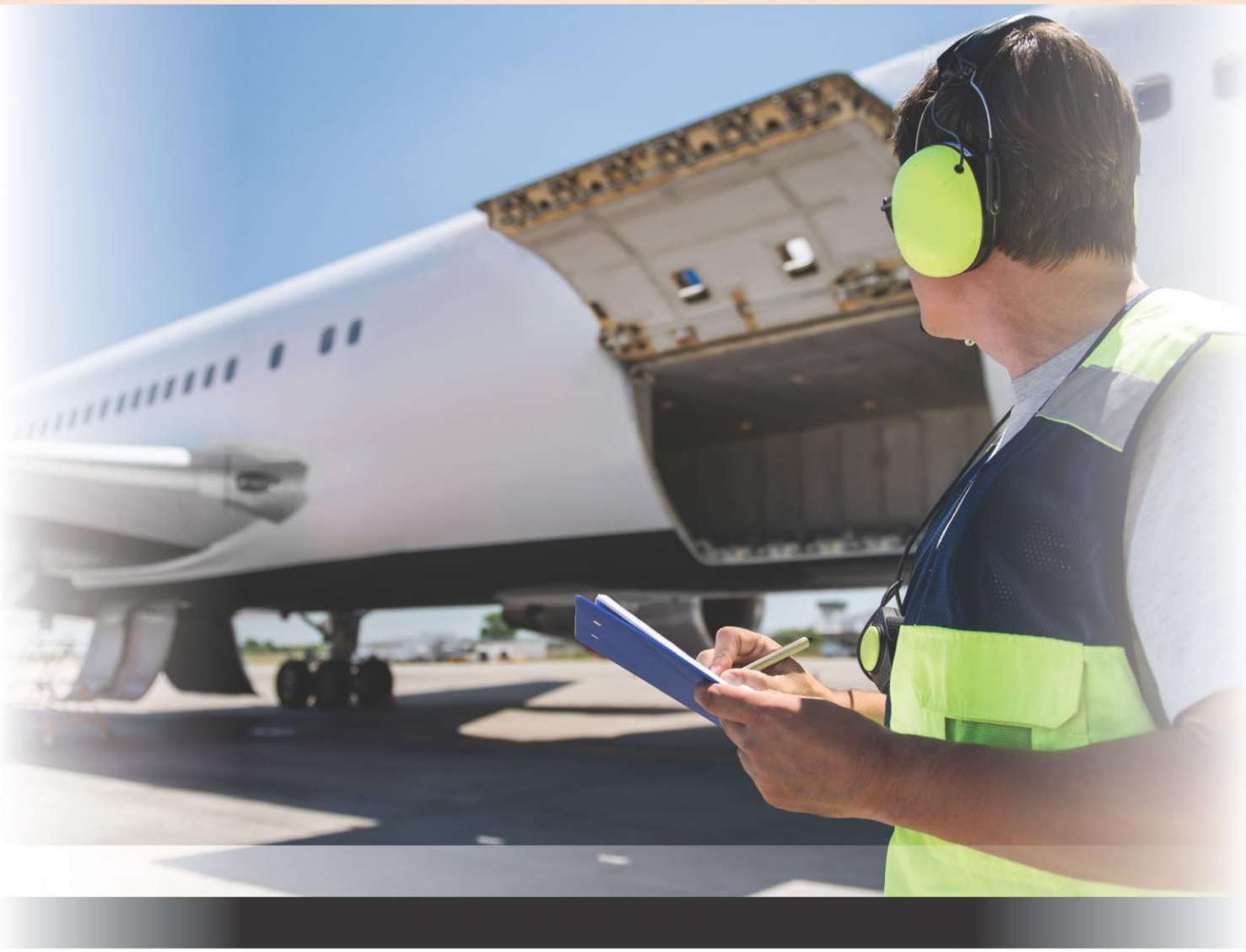
Highfield Level 2 End-point Assessment for ST0037 Aviation Ground Operative

Pathway: Aircraft Handling

End-Point Assessment Kit



Highfield Level 2 End-Point Assessment for ST0037 Aviation Ground Operative - Aircraft Handling

EPA Kit

Contents

Please click on the headings below to navigate to the associated section of the EPA Kit.

How to use this EPA Kit

Welcome to the Highfield End-Point Assessment Kit for the Aviation Ground Operative – Aircraft Handling apprenticeship standard.

Highfield is an independent end-point assessment organisation that has been approved to offer and carry out the independent end-point assessments for the Level 2 Aviation Ground Operative – Aircraft Handling apprenticeship standard. Highfield internally quality assures all end-point assessments in accordance with its IQA process. Additionally, all end-point assessments are externally quality assured by the relevant EQA organisation.

The EPA Kit is designed to outline all you need to know about the end-point assessments for this standard and will also provide an overview of the on-programme delivery requirements. In addition, advice and guidance for trainers on how to prepare apprentices for the end-point assessment is included. The approaches suggested are not the only way in which an apprentice may be prepared for their assessments, but trainers may find them helpful as a starting point.

Key facts	
Apprenticeship standard:	Aviation Ground Operative – Aircraft Handling
Level:	2
On-programme duration:	Minimum of 12 months
Grading:	Pass/merit/distinction
End-point assessment duration:	Maximum of 2 months
End-point assessment methods:	On-demand tests (core and pathway) Practical observation Professional discussion

In this guide, you will find:

- an overview of the standard and any on-programme requirements
- a section focused on delivery, where the standard and assessment criteria are presented in a suggested format that is suitable for delivery
- guidance on how to prepare the apprentice for gateway
- detailed information on which part of the standard is assessed by which assessment method
- suggestions on how to prepare the apprentice for each part of the end-point assessment
- a section focused on the end-point assessment method where the assessment criteria are presented in a format suitable for carrying out 'mock' assessments

Introduction

Aviation Ground Operative - Aircraft Handling overview

The Aviation Ground Operative standard covers 5 pathways: Aircraft Handling, Aircraft Movement, Fire Fighter, Flight Operations and Passenger Services. This EPA Kit is designed to support the Aircraft Handling pathway.

An aviation ground operative could work in a number of environments, such as a commercial airport, military base/aerodrome, heliport or other airfield. With 5 key specialist functions all working in conjunction with each other, aviation ground operators form the teams above and below wing to ensure the efficient and effective arrival, turnaround and departure of aircraft. At the heart of the role is safety, security and compliance with aviation regulations that focus on each operator's day-to-day duties. Effective communication and teamwork ensure that aircraft handling, air traffic control (ATC) and those moving, loading, unloading and servicing a range of aircraft achieve the objectives of their organisation in this diverse field.

The role of an aircraft handling ground operative is to ensure that the full array of aircraft services are completed correctly, including marshalling, chocks, ground power, correct operation of lower hold doors, loading and unloading passenger baggage and cargo in accordance with aircraft manufacturer and current carrier/organisational regulations. An aircraft handler must be an effective, diligent and proactive team member, displaying a high degree of care to aircraft, equipment and customer goods, being responsible for their own actions and being a good ambassador for their organisation.

On-programme requirements

The period of learning, development and continuous assessment is managed by the employer, in most cases with the service of an education or training provider. Although this method is flexible and the process is not prescribed, the following best practice recommendation is made:

Throughout the programme, and at least every 3 months, the apprentice should meet with the continuous assessor and record their progress against the standard. At these reviews, evidence should be recorded and, once the apprentice is competent, sections of the standard signed off by the employer.

The training programme leading to end-point assessment should cover the breadth and depth of the standard using suggested on-programme assessment methods that integrate the knowledge, skills and behaviour components, and which ensure that the apprentice is sufficiently prepared to undertake the end-point assessment. Training, development and ongoing review activities should include:

- achievement of level 1 English and maths. If the apprentice began their apprenticeship training before their 19th birthday, they will still be subject to the mandatory requirement to study towards and achieve English and maths. The requirements for English and maths are optional for apprentices aged 19+ at the start of their apprenticeship training.

The process of maintaining a continuous assessment record is important so employers are confident in determining when the apprentice has achieved full competence in their job roles and is ready for end-point assessment. The continuous assessment record is not a portfolio of evidence, but a practical record of what the apprentice can do following periods of training, development and assessment. A minimum of 4 meetings and completed records are recommended to show ongoing competence across the entire standard, over a minimum of a 12-month period prior to starting the end-point assessment.

Additional, relevant on-programme qualification

There are no mandatory qualifications for this standard, however, employers may wish to include relevant qualifications to help structure the on-programme delivery.

Use of Artificial Intelligence (AI) in the EPA

Where AI has been used as part of the apprentice's day-to-day work and forms part of a project report, presentation, or artefact, it should be referenced as such within the work. AI must not be used to produce the report or portfolio.

Where AI has been used as part of a portfolio that underpins an interview or professional discussion or any other assessment method, it should be fully referenced within the portfolio.

Readiness for end-point assessment

For a learner to be ready for the end-point assessments:

- the apprentice must have achieved level 1 English and maths. The requirements for English and maths are mandatory for all apprentices aged between 16-18 at the start of their apprenticeship training. The requirements for English and maths are optional for apprentices aged 19+ at the start of their apprenticeship training.
- the employer must be confident that the apprentice has developed all the knowledge, skills and behaviours defined in the apprenticeship standard. To ensure this, the learner must attend a formal meeting with their employer to complete the Gateway Readiness Report
- the apprentice and the employer should engage with Highfield to agree a plan and schedule for each assessment activity to ensure all components can be completed within a 2-month end-assessment window. Further information about the gateway process is covered later in this kit

If you have any queries regarding the gateway requirements, please contact your EPA Customer Engagement Manager at Highfield Assessment.

Order of end-point assessments

There are 3 end-point assessment methods: 2 on-demand tests, a practical observation and a professional discussion. The assessments can be taken in any order.

Click here to return to contents

The Highfield approach

This section describes the approach Highfield has adopted in the development of this end-point assessment in terms of its interpretation of the requirements of the end-point assessment plan and other relevant documents.

Documents used in developing this end-point assessment

Standard (2016)

https://www.instituteforapprenticeships.org/apprenticeship-standards/st0037-v1-0

End-point assessment plan (July 2016)

https://www.instituteforapprenticeships.org/media/7237/aviation_ground_operative-em.pdf

Common approach

People 1st

Specific considerations

Two on-demand tests - Highfield has used 30 scenario-based questions, with 60% being the pass mark for each of the on-demand tests, to align with the People 1st common approach.

In accordance with the aviation ground operative assessment plan, Highfield has detailed which criteria **must** be covered within the professional discussion at the end of this guide. Additionally, the criteria that are not covered by the selected observation scenario must also be assessed during the professional discussion.

During the practical observation, wherever possible, situations and evidence should be naturally occurring. However, to ensure that all criteria can be covered, some simulation will be allowed to ensure total coverage of the standards. This can be arranged before the assessment takes place to give the best opportunity for all criteria to be met.

As the subject areas that the following criteria and behaviour statements are intended to assess are not clearly listed in the assessment plan, they have been aggregated into the subject areas Highfield have deemed most appropriate. Criteria for the on-demand tests and professional discussion have been written based on the knowledge, skills and behaviour statements outlined in the assessment plan. All of the evidence criteria used within this end-point assessment have been taken directly from the Aviation Ground Operative standard assessment plan or written based on supporting documentation.

The assessment plan states that: 'The on demand tests and observation can be completed in any order but must be passed prior to the professional discussion as the last assessment activity', however, this has since been revised within the People 1st common approach document, issued in November 2019, allowing the assessment methods to now be taken in any order.

Click here to return to contents

Gateway

How to prepare for gateway

After apprentices have completed their on-programme learning, they should be ready to pass through 'gateway' to their end-point assessment.

Gateway is a meeting that should be arranged between the apprentice, their employer and training provider to determine that the apprentice is ready to undertake their end-point assessment. The apprentice should prepare for this meeting by bringing along work-based evidence, including:

- customer feedback
- recordings
- manager statements
- witness statements

As well as evidence from others, such as:

- mid and end-of-year performance reviews
- feedback to show how they have met the apprenticeship standards while on-programme

In advance of gateway, apprentices will need to have completed the following. The requirements for English and maths listed below are mandatory for all apprentices aged between 16-18 at the start of their apprenticeship training. The requirements for English and maths listed below are optional for apprentices aged 19+ at the start of their apprenticeship training.

- Achieved level 1 English
- Achieved level 1 maths

Therefore, apprentices should be advised by employers and providers to gather this evidence and undertake these qualifications during their on-programme training. It is recommended that employers and providers complete regular checks and reviews of this evidence to ensure the apprentice is progressing and achieving the standards before the formal gateway meeting is arranged.

The gateway meeting

The gateway meeting should last around an hour and must be completed on or after the apprenticeship on-programme end date. It should be attended by the apprentice and the relevant people who have worked with the apprentice on-programme, such as the line manager/employer or mentor, the on-programme trainer/training provider and/or a senior manager (as appropriate to the business).

During the meeting, the apprentice, employer and training provider will discuss the apprentice's progress to date and confirm if the apprentice has met the full criteria of the apprenticeship standard during their on-programme training. The **Gateway Readiness Report** should be used to log the outcomes of the meeting and agreed by all 3 parties. This report is available to download from the Highfield Assessment website.

The report should then be submitted to Highfield to initiate the end-point assessment process. If you require any support completing the Gateway Readiness Report, please contact your EPA Customer Engagement Manager at Highfield Assessment.

Please note: a copy of the standard should be available to all attendees during the gateway meeting.

Reasonable adjustments and special considerations
Highfield Assessment has measures in place for apprentices who require additional support. Please refer to the Highfield Assessment Reasonable Adjustments Policy for further information/guidance.

ID requirements
Highfield Assessment will need to ensure that the person undertaking an assessment is indeed the person they are claiming to be. All employers are therefore required to ensure that each apprentice has their identification with them on the day of the assessment so the end-point assessor can check.

Highfield Assessment will accept the following as proof of an apprentice's identity:

- a valid passport (any nationality)
- a signed UK photocard driving license
- a valid warrant card issued by HM forces or the police
- another photographic ID card such as an employee ID card or travel card

Click here to return to contents

The Aviation Ground Operative – Aircraft Handling apprenticeship standard

The following pages contain the Level 2 Aviation Ground Operative apprenticeship standard and the assessment criteria for the **Aircraft Handling** pathway, in a suggested format that is suitable for delivery.

<table>
<tr><th colspan="3">Safety</th></tr>
<tr><th>Knowledge</th><th>Skills</th><th>Behaviour</th></tr>
<tr><td>Health and safety regulations and legislation relevant to the role; an aviation environment and organisational procedures and how they impact on self, others and in relation to aviation operational duties</td><td>Work in line with organisational and legal requirements relating to health and safety, and be aware of, report and prevent hazards in an aviation environment</td><td>Work responsibly to keep people safe and operations flowing smoothly, complying with working practices

Treat work areas and equipment with respect at all times</td></tr>
<tr><td colspan="3">On-demand test</td></tr>
<tr><td colspan="3">Indicative assessment criteria</td></tr>
<tr><td colspan="3">SA1 Understand how to act within standard operating procedures at all times
SA2 Identify legislation and organisational procedures covering health and safety
SA3 Identify the location and the hazards associated with the ramp/dispersal area
SA4 Understand the health, safety and hazards associated with aircraft movement
SA5 Identify surface markings, operating and emergency areas for aircraft, vehicles and pedestrians on the ramp area
SA6 Identify personal protective equipment (PPE) and describe when to wear it
SA7 Describe dangers from foreign object debris (FOD) and the importance of keeping areas clean and tidy at all times
SA8 Describe dangers from birds and other wild animals and the importance of ensuring that the area does not attract them
SA9 Describe how to use equipment and vehicles on the ramp area
SA10 Outline the benefits of safe working practices
SA11 Identify the consequences of not operating safely in an airport environment
SA12 Identify the main causes of incidents/accidents in an airport
SA13 Identify hazardous materials and outline the procedures for using them</td></tr>
</table>

SA14 Describe **procedures for reporting incidents/accidents airside** **SA15** Describe the effects of **severe weather** airside and the precautions to take		
Observation		
Pass criteria	**Merit criteria**	***Distinction criteria***
SA16 Correctly report hazards if identified **SA17** Act within standard operating procedures at all times	**SA18** Take action to deal with hazards in line with **organisational procedures**	*There are no distinction criteria for this component*

Amplification and guidance

Regulations and legislation

- Regulators:
  - Civil Aviation Authority (CAA)
  - International Civil Aviation Organisation (ICAO)
  - European Aviation Safety Agency (EASA)
  - Department for Transport (DfT)
  - Military Aviation Authority (MAA)
  - these organisations all publish guidance and information relevant to job roles contained within this specification
- Legislation:
  - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)
  - Health and Safety at Work etc. Act
  - Air Navigation Order (ANO)
  - CAP 168 Aerodrome Licensing
  - Control of Substances Hazardous to Health (COSHH)
  - MAA regulations:
    - MAA02 Master Glossary
    - MAS regulations 1000 to 5000
  - local bylaws

- relevant CAPs such as:
  - CAP642 Airside Safety Management
  - CAP 772 Wildlife Hazard Management

Organisational procedures

- May include:
  - standard operating procedures (SOPs), industry, organisational and regulator specific instructions and guidance and are based on:
    - safe methods of working
    - safe systems of working
    - risk assessment:
      - fire drill

Location and hazards associated with the ramp/dispersal area

- Risks in the ramp/dispersal area including:
  - vehicles
  - human injury
  - ground support equipment areas
- Risks from aircraft such as:
  - aircraft movement hazards:
    - jet blast
    - engine ingestion
    - rotary blades or propellers
    - propeller wash
    - wingtip clearance/collision
    - taxiing aircraft

- vehicle movement hazards:
  - ground support equipment traffic
  - air bridges
- foreign object debris (FOD)
- weather-related hazards
- human factors:
  - fatigue
  - miscommunication
  - distraction
- fire hazards:
  - fueling operations
  - electrical equipment
- noise hazards
- use of cones/passenger integrated guidance systems (PIGS)

Hazards associated with aircraft movement

- Awareness and use of designated areas such as:
  - movement/dispersal areas
  - safety zones for personnel
  - awareness of moving aircraft/aircraft not cleared to approach
  - following procedures when operating in the manoeuvre/movement areas
- Runway incursions:
  - runway crossings
  - incorrect runway use:
    - mistakes in identifying runways/taxiways
    - attempting to take-off or land on the incorrect runway

- Emergency situations:
    - aircraft brake failure
    - aircraft engine failure
    - evacuation hazards

Surface markings

- Compliance with CAP 637 Visual Aids
- Awareness and use of:
    - pedestrian walkways
    - road markings/road signs
    - speed limits
    - identified gate areas
    - equipment/vehicle parking bays
    - remote aircraft parking
    - safety zones
    - centrelines
    - parking markers/indicators for specific aircraft

Personal protective equipment (PPE):

- Equipment worn as stipulated in SOPs when airside
- Gloves
- High-visibility clothing
- Ear protection
- Safety footwear

Dangers from foreign object debris (FOD)

- Damage to movement areas and aircraft

- Injuries to staff and passengers
- Increased operating costs to airlines
- Ensure FOD plods take place as a precaution

Dangers from birds and other wild animals

- Engine failure due to bird strike
- Collision
- Damage to aircraft
- Following procedures for airfield wildlife management and bird control

Equipment and vehicles on the ramp area

- Purpose, use and safety features of ground equipment and vehicles such as:
    - aircraft tugs and tractors
    - baggage carts/dollies
    - loading equipment
    - ground power units
    - air start units
    - refueling vehicles
    - de-icing vehicles
    - passenger boarding steps and air stairs
    - catering trucks
    - lavatory service trucks
    - water service trucks
    - aircraft rescue and firefighting vehicles
    - ramp buses

Benefits of a safe working environment

- Personal safety and well-being
- Operational efficiency
- Cost savings
- Enhanced reputation

Consequences of not operating safely

- Injury or fatality
- Damage to aircraft and equipment
- Operational disruptions
- Financial losses/claims
- Reputational damage

Main causes of incidents/accidents in an airport

- Human error:
    - inattention
    - distraction
    - fatigue
    - lack of training
- Poor communication
- Equipment failure:
    - mechanical breakdown
    - incorrect use
- Environmental factors
- Procedural failures

Hazardous materials

- Aviation fuel
- De-icing fluids
- Hydraulic fluids
- Compressed gases

Procedures for reporting incidents/accidents airside

- Follow airfield safety and emergency procedures
- Alert supervisors
- Activate emergency services (if necessary)
- Follow internal reporting procedures
- Notify any relevant authorities

Severe weather

- Extreme bouts of:
    - wind
    - snow
    - ice
    - heat

Security		
Knowledge	**Skills**	**Behaviour**
The systems, procedures and requirements to ensure security of self and others in own area of responsibility	Contribute to security of self and others in own area of responsibility, e.g. in airside/landside areas	Work responsibly to keep people safe and operations flowing smoothly, complying with working practices
On-demand test		
Indicative assessment criteria		
SE1 Identify signs of **suspicious behaviour** **SE2** Outline the **limits of your authority** **SE3** Identify **specified, banned, illegal and dangerous items** **SE4** Explain **threat or risk** awareness **SE5** Identify **relevant aviation security documents** **SE6** Identify **relevant aviation security authorities** **SE7** Outline **your responsibility** in relation to security **SE8** Outline your organisation's **procedures for restricting access**		
Professional discussion		
Indicative assessment criteria		
SE9 Describe how to secure items, areas and data in line with your responsibilities **SE10** Describe your organisation's personal identification requirements **SE11** Identify reporting procedures for suspicious incidents or behaviour **SE12** Identify reporting procedures for **discrepancies in the security of actual or potential access points** **SE13** Describe how to ensure action is taken in response to an actual or suspected security threat **SE14** Describe the appropriate remedial actions to take when irregularities in security are identified		

Amplification and guidance

Suspicious behaviour
• Body language:
  ○ appearing nervous or agitated
  ○ excessive fidgeting
  ○ clock-watching
  ○ head-turning
  ○ shuffling feet
  ○ leg shaking
  ○ excessive sweating inconsistent with environment
• Unusual movement or loitering
• Unusual interest in security measures or restricted areas
• Attempting to conceal identity
• Unrelated phone calls or conversations
 	
Limits of your authority
• Access control:
  ○ restricted areas
  ○ personal identification
• Decision-making authority:
  ○ operational decisions within scope of your responsibilities
  ○ incident management
• Compliance with regulations:
  ○ adherence to standard operating procedures
  ○ adherence to the relevant regulatory authority

Specified, banned, illegal and dangerous items

- Specified items:
  - liquids, aerosols and gels in restricted quantities
  - medication
- Banned items:
  - specifically prohibited from being present in certain areas:
    - weapons:
      - firearms (unless carried by security personnel)
      - knives
    - unauthorised electronics
    - unapproved chemicals
- Illegal items:
  - possession, handling or transportation is against the law
    - contraband
    - drugs
    - counterfeit currency
    - smuggled goods
    - explosives
    - unlicensed hazardous materials
- Dangerous items:
  - can pose a safety risk if improperly handled and require specialist handling, storage or disposal procedures:
    - flammable materials
    - solvents
    - aerosols
    - fuels

- compressed gases

Threat or risk

- Improvised explosive devices (IED)
- Knives
- Guns
- Improvised weapons such as:
  - scissors
  - cutlery
- Hijack of aircraft (ground or in air)
- Bags in airport left unattended
- Awareness of current National Security Threat level

Relevant aviation security documents

- Passenger documents:
  - passports
  - tickets
  - boarding cards
  - ID cards
  - pertinent travel documents
- Staff documents or identification:
  - staff ID
  - visitor's ID
  - completion of general security awareness training (GSAT)
  - completion of authentication, authorisation and accounting (AAA) certificate

Relevant aviation security authorities

- Civil Aviation Authority (CAA)
- Military Aviation Authority (MAA)
- Department for Transport (DfT)

Your responsibility

- Adhere to company security procedures:
- Identify unattended baggage/items
- Awareness of and reporting restricted items
- Report and awareness of security breaches by staff and passengers
- Attending training sessions and refresher training
- Awareness of current National Security Threat level
- Ensure no tailgating at access points
- Carry appropriate ID
- Be vigilant to activity

Procedures for restricting access

- Identification and verification
- Access control systems
- Screening and security checks
- Use of technology
- Ensure accurate headcount

Discrepancies in the security of actual or potential access points

- Gate change
- Unacceptable passenger

- Missing passenger
- Missing passenger document
- Hand baggage not acceptable

Compliance & legislation		
Knowledge	**Skills**	**Behaviour**
Aviation and regulatory legislation, procedures and regulations relating to an aviation environment, within own area of responsibility	Comply with all relevant legislation, procedures and regulations in an aviation environment within own area of responsibility	Work responsibly to keep people safe and operations flowing smoothly, complying with working practices
On-demand test		
Indicative assessment criteria		
CL1 Explain the **requirements for compliance** in the aviation environment **CL2** Outline **procedures that must be followed** to ensure compliance **CL3** Explain the **impact of not following procedures and ensuring compliance** **CL4** Explain the **impact of the aviation operation on the environment** **CL5** Identify **environmental controls** in the aviation operation		
Practical observation		
Pass criteria	**Merit criteria**	***Distinction criteria***
CL6 Check area of responsibility complies with procedures and legislative requirements	**CL7** Take action to correct non-compliance	***CL8*** *Proactively ensure compliance with procedures and legislation, e.g. challenge suspicious persons*
Amplification and guidance		
Requirements for compliance • Compliance with Civil Aviation Authority (CAA) and/or Military Aviation Authority (MAA) requirements • Compliance with local bylaws • Safety of yourself, colleagues, crew, visitors and passengers • Rules to deal with unattended baggage or restricted items • Awareness of security breaches by staff and passengers		

- Ensuring General Data Protection Regulations (GDPR) are adhered to
- Correct disposal of confidential waste
- Computer screens are locked when leaving work areas
- Wearing/carrying ID as required

Procedures that must be followed

- Safety:
    - personal safety:
        - wear appropriate personal protective equipment
        - follow safety protocols
    - equipment handling
    - hazard identification
- Security procedures:
    - access control:
        - verify identification
        - monitor access points
    - suspicious behaviour
- Operational procedures
- Emergency procedures
- Reporting procedures:
    - incident reporting

Impact of not following procedures and ensuring compliance

- Safety risks:
    - increased accident risk
    - creation of hazardous conditions
- Security breaches:

- unauthorised access
- vulnerability to attacks

- Operational inefficiencies:
  - disruption of services
  - damage to equipment and cargo

Impact of the aviation operation on the environment

- Air quality:
  - greenhouse gas emissions
  - air pollutants
- Water quality:
  - run-off from activities such as de-icing
  - disposal of waste water
- Noise pollution:
  - take-off and landings
  - ground operations
- Land use and habitat disruption:
  - airport construction and expansion
  - grass cutting to discourage nesting and foraging
- Energy consumption:
  - fossil fuels
  - energy efficiency

Environmental controls

- Noise on and around airports
- Carbon emissions
- International spread of disease due to travel
- Is water used on board safe to drink from
- Filling points in the airport terminals

- Water transporters
- Importation and exportation of live animals
- Food safety both at the terminal and on board the aircraft

Communication		
Knowledge	**Skills**	**Behaviour**
How to communicate effectively and transfer relevant information to people and how to select the most appropriate method of communication	Communicate effectively transmitting and receiving information and recording it as required	Treat others with respect at all times
On-demand test		
Indicative assessment criteria		
CO1 Describe available **lines and methods of communication** **CO2** Identify relevant **communications equipment** and explain organisational procedures relating to its use **CO3** Explain organisational procedures regarding **malfunctioning equipment** **CO4** Identify relevant aviation **guidelines, procedures and standard phrases** **CO5** Identify commonly used **aviation codes** relevant to your job role and **sources of information for less commonly used codes** **CO6** Know **the phonetic alphabet** **CO7** Explain the difference between **confidential and commercially sensitive information**, and describe your organisation's systems for processing and storing this information **CO8** Explain organisational procedures for passing on messages and **alternative communication routes** in the event of an equipment failure **CO9** Manage **requests for information from: seniors, colleagues or external sources**		
Practical observation		
Pass criteria	**Merit criteria**	***Distinction criteria***
CO10 Communicate with the right people at the right time using the correct method **CO11** Ensure communication is received and understood **CO12** Ensure all communications are timely and accurate	**CO13** Adapt language and tone to match audience and situation	***CO14** Ensure all communications are effective and understood, anticipating additional appropriate information requirements and liaising with key people to facilitate ongoing information flow*

Amplification and guidance

Lines and methods of communication
• Verbal
• Non-verbal
• Written
• Electronic
• Hand signals
• Use of interpreters/software
 	
Communications equipment
• Handheld radio
• Mobile phone
• Fixed-line telephone
• Public address (PA) system
• Air-to-ground radio
• Lights:
  ○ anti-collision lights to indicate safe/unsafe to approach
• Alarms:
  ○ alarmed access doors
• Noticeboards
• Flight information display systems
 	
Malfunctioning equipment
• Identify the problem
• Notify supervisors/helpdesks
• Complete incident reports if necessary

- Implement safety protocols if necessary

Guidelines, procedures and standard phrases

- Aviation industry, organisational and regulator specific instructions and guidance such as:
    - Radiotelephony manual (CAP 413)
    - Military Aviation Authority (MAA) Regulations
    - Air Traffic Management (ATM)
    - adding gate/passenger comments to passenger name records (PNRs)

Aviation codes

- International Civil Aviation Organisation (ICAO) airport, airline and aircraft codes
- International Air Transport Association (IATA) airport, airline, baggage, delay and cargo codes
- Aircraft registration codes
- Weather and flight plan codes

Sources of information for less commonly used codes

- Aviation authorities and regulatory bodies
- Manuals
- Industry databases and tools
- Training and educational platforms

The phonetic alphabet

- NATO phonetic alphabet, for example:
    - A - Alpha
    - B - Bravo
    - C - Charlie

- Used for clarity in communication

Confidential and commercially sensitive information

- Technical data:
  - aircraft design specifications
  - maintenance records
- Operational data:
  - flight plans and/or schedules
  - pilot and crew rosters and timetables
- Safety reports and investigations
- Customer information:
  - agreements with airlines, leasing companies or cargo operators
  - personal data linked to passengers and personnel
- Financial or business information
- Regulatory compliance data

Alternative communication routes

- Public address system
- Landline/mobile phone
- Handheld radio
- Hand signals
- Signs
- Email
- Flight information display system (FIDS)
- Noticeboards
- Social media platforms
- Local TV, radio, media stations

Requests for information from: seniors, colleagues or external sources

- Pass on appropriate information to relevant people
- Consider confidential and commercially sensitive information
- Ensure information is up-to-date and accurate

Inter-personal skills		
Knowledge	**Skills**	**Behaviour**
Own role within the team and how it contributes to achieving objectives. Know how to identify and respond to **individuals' needs** and abilities in different situations and communicate with others and colleagues from a diverse range of backgrounds and cultures.	Work effectively as part of a team and with others, identifying and responding to the needs of individuals, including colleagues, other organisations or customers	Be a positive role model to others in attitude to work and how it is undertaken Treat the team, customers and other **stakeholders** with courtesy respect Be punctual and reliable Demonstrate personal drive to achieve the vision and objectives of the organisation
Professional discussion		
Indicative assessment criteria		
IP1 Explain the benefits of developing productive working relationships with colleagues **IP2** Explain how to address conflicts with colleagues **IP3** Describe how to deal with diversity issues **IP4** Outline how to receive and make use of feedback on your performance from colleagues **IP5** Identify the responsibilities of team members in own area **IP6** Outline the processes within the organisation for making decisions **IP7** Outline line management relationships within the organisation **IP8** Identify the organisation's aims, values and culture **IP9** Explain the standards of appearance, behaviour and performance expected in the organisation **IP10** Identify your organisation's guidelines for how to recognise what your customer wants, and respond appropriately **IP11** Respond to requests for information adhering to your organisation's standard timeliness		
Practical observation		
Pass criteria	**Merit criteria**	***Distinction criteria***

IP12 Work as part of a team to ensure adequate performance in the role **IP13** Work accurately with supervision	**IP14** Take initiative as part of a team to improve performance in the role within limits of operation **IP15** Work accurately with minimal supervision	*There are no distinction criteria for this component*

Amplification and guidance

Individuals' needs

- Treat stakeholders courteously and helpfully at all times
- Keep stakeholder informed and reassured
- Respond promptly to a stakeholder seeking help
- Check with stakeholder that you have fully understood their expectations

Stakeholders

- People
- Organisations
- Social groups
- Internal or external to the business that have a vital interest in the business or its activities

Aviation systems		
Knowledge	**Skills**	**Behaviour**
Identify key **aviation systems** used in own role and how to operate and adhere to them in line with the organisation's procedures	Use **aviation systems** relevant to own role effectively to achieve the required outcome	Use equipment and technology responsibly and effectively Work responsibly to keep operation flowing smoothly, complying with working practices
Practical observation		
Pass criteria	**Merit criteria**	***Distinction criteria***
AS1 Use prescribed systems correctly **AS2** Report faults or errors as they occur **AS3** Meet performance expectation for timescales to complete tasks	**AS4** Take action to maintain systems to prevent faults or errors **AS5** Work efficiently to meet and exceed timescales to complete tasks	***AS6*** *Organise and prioritise work to make the most efficient use of time and complete core and relevant additional tasks within timescales*
Amplification and guidance		

Aviation systems
• Handheld devices:
  ○ tablets
  ○ networked laptop
  ○ desktop computer systems that contribute to the overall management of ground operations		

Disruption incidents & emergencies		
Knowledge	**Skills**	**Behaviour**
Emergency procedures in own area of responsibility, common incidents and disruption that may occur in an aviation environment and the appropriate action to take in the event of an incident	Take appropriate action in the event of an incident, disruption or emergency, liaising with relevant people and recording actions and outcomes as required	Remain focused when a problem arises so that effective and timely decisions can be made Handle all tasks in a calm and organised manner
On-demand test		
Indicative assessment criteria		
DI1 Get help to **identify an incident/emergency** and be able to describe its main features **DI2** Know **how the incident/emergency affects you and other people** **DI3** Know how people would like to be **informed about the progress and solution of the incident/emergency** **DI4** Identify **problem-solving methods** that can be adopted to address the incident/emergency **DI5** Identify **factors** that may affect the way you deal with the incident/emergency **DI6** Identify which **people** could help you resolve the incident/emergency **DI7** Outline **rules and regulations** that you have to consider when solving the incident/emergency **DI8** Know **how to overcome difficulties** when solving incidents/emergencies **DI9** Follow a plan that takes into account any issues that may arise **DI10** Explain how you will **know when an incident/emergency has been resolved** **DI11** Know how to access **additional support** available post-incident		
Professional discussion		
Indicative assessment criteria		
DI12 Interpret incidents/emergencies that have been identified **DI13** Ask suitable questions to check you understand the incident/emergency **DI14** Identify the available solution(s) for resolving the incident/emergency **DI15** Discuss and understand proposed solution(s) to the incident/emergency with others to identify the most suitable solution		

DI16 Keep others fully informed about what is happening to resolve the incident/emergency
DI17 Check with others to ensure the incident/emergency has been resolved satisfactorily
DI18 Give clear reasons to others when the incident/emergency has not been resolved satisfactorily
DI19 Be engaged with the job role, remaining calm and assured throughout the working period
DI20 Be able to concentrate on the task in hand and not be distracted by problems
DI21 Prioritise all tasks to ensure effective time management and a calm approach to work

Amplification and guidance

Identify an incident/emergency

- Recognising when problems arise and passing on relevant information:
    - gathering information from others
    - asking questions to ensure understanding
    - discussing the situation with others involved to ensure all details are covered and none have been missed

How the incident/emergency affects you and other people

- Passengers:
    - physical and mental health
    - psychological impact
    - delays and disruptions
- Flight crew
    - responsibility for safety
    - career impact
    - crew operating hours
    - impact on physical and mental health
- Ground personnel
    - impact on staffing levels
    - impact on physical and mental health
- Aviation industry

- reputational damage
- financial losses
- operational disruptions

Informed about the progress and solution of the incident/emergency

- Calm and direct communication
- Visual and auditory alerts
- Notification via official channels
- Frequent updates
- Clear terminal announcements
- Formal incident reports
- Press office
- Social media updates

Problem-solving methods

- Following standard operating procedures and checklists
- Risk assessment and mitigation
- Simulation and drills

Factors

- Training and experience
- Stress and emotional response
- Fatigue and physical condition
- Personality traits and coping mechanisms
- Support systems

- Situational awareness
- Communication skills
- Leadership and decision-making abilities
- The type of incident/emergency

People

- Flight crew
- Cabin crew
- Air traffic control
- Emergency response teams/services
- Maintenance/technical support teams
- Passengers
- Airport operations/ground crew
- Airport terminal management
- Central/base station ops

Rules and regulations

- International regulations:
    - IATA
    - ICAO
- National regulations:
    - European Union Aviation Safety Agency (EASA)
    - United Kingdom Civil Aviation Authority (UKCAA)
- Air-specific regulations:
    - air operating manuals

- Emergency response plans/procedures
- Passenger safety regulations

How to overcome difficulties

- Clear communication:
    - using standardised communication
    - maintaining calm and clarity
    - giving regular updates
- Effective decision-making:
    - following emergency checklists
    - utilising simulations or training exercises

Know when an incident/emergency has been resolved

- When advised by supervisor/duty manager
- Confirmation from authorities
- Resumption of normal operations
- Verification through checklists and procedures
- Incident report filed and confirmed

Additional support

- Medical assistance
- Psychological support
- Customer service support
- Compensation
- Post-incident review and safety improvements

Dangerous goods		
Knowledge	**Skills**	**Behaviour**
Relevant dangerous goods and how to deal with them effectively in own area of responsibility	Follow procedures for identification and safe handling of dangerous goods in own area of responsibility	Work responsibly to keep people safe, complying with working practices
On-demand test		
Indicative assessment criteria		
DG1 Acknowledge and understand the general **principles of storage, carriage and handling of dangerous goods** **DG2** Identify **classifications of dangerous goods** **DG3** Explain **dangerous goods handling requirements** **DG4** Explain the **emergency procedures** in the event of a dangerous goods incident		
Professional discussion		
Indicative assessment criteria		
DG5 Ensure dangerous goods are handled effectively in accordance with organisational procedures and responsibilities **DG6** Identify potential dangerous goods hazards **DG7** Operate safely when exposed to dangerous goods		
Amplification and guidance		

Principles of storage, carriage and handling of dangerous goods
• Ensuring proper packaging:
  ○ using ICAO/IATA-approved packaging
  ○ ensuring secure sealing
  ○ following quantity restrictions
• Segregation of incompatible goods, for example:
  ○ oxidisers and flammable liquids
  ○ using designated storage areas		

- following compartmentalisation rules
- Manual handling safety
- Using specialised equipment
- Maintaining safe loading practices
- Avoiding damages or spillages
- Monitoring and inspection
- Documentation and record-keeping

Classifications of dangerous goods

- Understanding hazard classes as stipulated by dangerous goods regulations:
  - class 1 – explosives
  - class 2 – gases:
    - flammable
    - non-flammable
    - toxic
  - class 3 – flammable liquids
  - class 4 – flammable solids, substances liable to spontaneous combustion and substances that emit flammable gases when in contact with water
  - class 5 – oxidising substances and organic peroxides
  - class 6 – toxic and infectious substances
  - class 7 – radioactive materials
  - class 8 – corrosive substances
  - class 9 – miscellaneous dangerous goods:
    - lithium batteries
    - dry ice
    - environmentally hazardous substances

- Understanding packing groups:
    - packing group 1 (PG I) – high danger
    - packing group 2 (PG II) – medium danger
    - packing group 3 (PG III) – low danger
    - packing groups help to determine the specific packaging requirements for transport
- Proper shipping names (PSN) and United Nations (UN) numbers:
    - each dangerous good is assigned a proper shipping name (PSN) and a United Nations (UN) number, used to identify the material during transport
    - each PSN and UN must appear on the packaging, labels and shipping documents to ensure the correct handling procedures are followed

Dangerous goods handling requirements

- Training and certification
- Proper packaging:
    - packing groups
    - PSN/UN numbers
- Labelling and marking:
    - hazard labels relevant to the material's classification
    - handling labels, for example:
        - fragile
        - keep away from heat
- Correct documentation
- Segregation of incompatible goods
- Handling and loading standard operating procedures
- Risk assessment and monitoring

Emergency procedures

- Immediate response and evacuation:
  - stop work and secure the area
  - evacuate non-essential personnel
  - establish a safe perimeter
- Notification and communication:
  - notify supervisors and emergency services
- Use of personal protective equipment (PPE)
- Spill containment
- Fire response procedures
- Use of first aid
- Incident reporting
- Decontamination procedures

Marshalling		
Knowledge	**Skills**	
The procedures for marshalling and controlling the movement of aircraft and vehicles, including requirements and importance of distance, speed, and safe positioning of an aircraft and vehicles	Effectively use the correct marshalling hand signals and techniques required to safely position and manoeuvre vehicles into and around the aircraft	
On-demand test		
Indicative assessment criteria		
MA1 Describe correct methods of ensuring **ground service equipment** is driven and operated in an appropriate manner while in the equipment restraint area (ERA), after safety cones and chocks have been deployed **MA2** Describe correct methods of ensuring **hand signal guidance** (banks person/marshaller) is provided when manoeuvring in areas of close proximity to the aircraft, when visibility is limited and when reversing anywhere on the apron **MA3** Explain **correct aircraft marshalling** using hand signals and techniques, to ensure they are clear and in accordance with industry standards **MA4** Identify the **correct vehicle guidance signals** in line with IATA AHM **MA5** Outline your organisation's rules such as **parking and speeding** **MA6** Explain **benefits of working safely**: including to yourself, other people (passengers and colleagues), equipment, the airport, other companies and other people		
Practical observation		
Pass criteria	**Merit criteria**	***Distinction criteria***
MA7 Follow instructions from team leader	**MA8** Understand how following instructions ensures correct completion of task	***MA9*** *Anticipate needs of team leader prior to loading/unloading*
Amplification and guidance		
Ground service equipment • Aircraft tugs/tractors • Ground power unit (GPU) • Air start unit (ASU)		

- Baggage carts/dollies/Charlottes/electronic baggage carts (EBTs)
- Belt loaders
- Aircraft service stairs/passenger boarding stairs
- High loader/container loader/low loader
- Deicing vehicles
- Lavatory service vehicles
- Water service vehicles
- Fuel trucks
- Pushback tractors
- Catering trucks

Hand signal guidance

- Standard marshalling:
    - stop
    - turn left/right
    - slow down
    - chocks inserted/removed
    - proceed forward
- Signals for vehicle movements near aircraft:
    - move forward
    - slow down/stop
    - turn left/right
    - reversing
- Limited visibility:
    - illuminated wands
    - hi-visibility clothing
    - large/exaggerated movements to ensure they are seen
- Tug operations and towing:

- ready for pushback
- brakes on/off
- starting/stopping pushback
- disconnecting tow bar

Correct aircraft marshalling

- Positioning:
  - stand in clear view of the aircraft's pilot(s)
  - unobstructed by equipment/other aircraft/personnel
- Visibility:
  - illuminated wands
  - hi-visibility clothing
- Hand signal consistency with all aircraft
- Clear communication:
  - combine hand signals with verbal communication or radio contact if needed

Correct vehicle guidance signals

- Move forward
- Slow down
- Stop
- Turn left/right
- Reversing
- Clear of obstructions

Parking and speeding

- Aircraft parking:
  - aircraft are parked in designated parking areas:
    - specific to accommodate size/type of aircraft
  - aircraft is correctly positioned within parking stand:

        - aligned with centreline
        - front wheels on the correct marker for the aircraft type as indicated
        - correct distance away from adjacent aircraft/ground equipment
    - aircraft wheels are chocked to prevent accidental movement
    - aircraft engines are properly shutdown
    - aircraft anti-collision lights are switched off prior to approaching
- Vehicle parking:
    - ground service vehicles are parked in designated areas
    - turn off engines unless required for specific operations
- Following airport speed limits
- Awareness of pedestrians/other vehicles
- Awareness of surroundings when manoeuvring
- Communicating with other aircraft handlers for coordination

Benefits of working safely

- Enhanced safety prevents accidents and injuries
- Protects aircraft and equipment from damage
- Reduces delays
- Optimises workflow
- Meets regulatory and legal requirements
- Saves costs

Loading instruction report	
Knowledge	**Skills**
The purpose of a load instruction report (LIR), the key information contained therein and why it is important and relevant to every aircraft movement	Correctly interpret information on an LIR and ensure procedures within own role are conducted according to the report

On-demand test

Indicative assessment criteria

LI1 Identify **information contained on baggage tags and load labelling information**
LI2 Outline your organisation's procedures for reconciling baggage, for example, **AAA procedures**
LI3 Identify **approved airport codes**
LI4 Outline your organisation's procedures for dealing with **different types of load**
LI5 Identify **types of loading conveyances and containers**, e.g. belt loaders, cargo loaders, ULDs
LI6 Explain how to use the loading equipment in a **safe manner** and the complementary safe manual handling procedures
LI7 Explain the **consequences of inappropriate manual handling** of loads
LI8 Identify **appropriate reporting processes**
LI9 Describe the **protection** available for loads in different weather conditions
LI10 Identify **possible hidden dangerous goods items**

Practical observation

Pass criteria	Merit criteria	*Distinction criteria*
LI11 Correctly interpret basic information on the LIR	There are no merit criteria for this component	***LI12*** *Interpret and use advanced information on the LIR*

Amplification and guidance

Information contained on baggage tags and load labelling information

- Passenger information:
  - name
  - flight number

- date of travel
- Baggage information:
  - baggage tag number
  - destination airport code
  - origin airport code
  - baggage handling instructions:
    - fragile
    - handle with care
    - this side up
- Security and compliance:
  - security check stamps
  - dangerous goods declarations
- Load labels:
  - cargo information:
    - cargo description/weight/dimensions
  - handling instructions
  - documentation and tracking

AAA procedures

- Accounting and authorisation (AAA) for carriage:
  - ensuring the luggage is checked for any prohibited/illegal items before being loaded onto an aircraft
- Arrival of baggage:
  - verify that the baggage matches with documentation
  - inspect for damage
- Availability:
  - organise and update baggage status in the handling system
  - facilitate passenger retrieval
- Accuracy:

- cross-check baggage with records such as a Baggage Reconciliation System (BRS)
- document and update reports/records
- confirm delivery or transfer of baggage

Approved airport codes

- IATA airport codes:
  - 3-letter codes used for ticketing, baggage handling and flight planning, for example:
    - LHR – London Heathrow Airport
    - BZZ – RAF Brize Norton
- ICAO airport codes
  - 4-letter codes used for air traffic control and airline operations, for example:
    - EGLL – London Heathrow Airport
    - EGVN – RAF Brize Norton
- Important for:
  - baggage handling as tags use airport codes to ensure correct routing and delivery
  - cargo operations as documentation and logistics rely on airport codes for tracking and managing shipments
  - communication as airport codes facilitate clear and efficient communication between handlers, airlines and air traffic control

Different types of load

- Regular baggage
- Overweight/heavy baggage
- Oversize baggage
- Irregular items such as pushchairs/golf clubs/skis
- Dangerous goods and restricted items

- Animals

Types of loading conveyances and containers

- Aircraft loaders:
  - belt loaders
  - hydraulic loaders
- Pallet trucks
- Tractors
- Carts:
  - baggage carts such as Charlottes or EBTs
  - cargo carts
  - dollies
- Unit load devices (ULDs)
- Palletised containers:
  - pallets
  - pallet nets
- Specialised containers:
  - refrigerated
  - pressure-sealed

Safe manner

- Pre-operation checks:
  - equipment inspection
  - ensure maintenance
  - test equipment regularly
  - daily inspections

- Safe working practices:
    - training and certification
    - adhere to usage instructions
    - use safety features
- Handling and manoeuvring:
    - secure and balance loads
    - move equipment with caution
- Communication and coordination:
    - use standard hand signals and communication devices
- Post-operation procedures:
    - secure equipment and report any issues
    - maintain equipment where necessary

Consequences of inappropriate manual handling

- Physical injury
- Damage to cargo/baggage
- Operational disruption
- Safety risks
- Breach of regulations such as Health and Safety at Work Act or Provision and Use of Work Equipment Regulations (PUWER)

Appropriate reporting processes

- Incident and accident reporting
- Incident and accident documentation
- Safety and maintenance reporting
- Operational reporting:
    - baggage and cargo handling reports

- Health and Safety Executive (HSE) requirements

Protection

- Rain protection:
  - weatherproof covers
  - sealed containers
- Extreme temperatures:
  - insulated containers
  - temperature-controlled containers
  - ventilation/ventilated containers
- Snow/ice covers
- Wind protection:
  - tie-downs and straps
- Humidity:
  - absorbers
- General protection:
  - durable packaging
  - regular inspection and maintenance of equipment
- Protection for special baggage:
  - bring out last
  - protect from the elements

Possible hidden dangerous goods items

- Batteries
- Aerosols
- Chemicals and cleaning agents

- Gas canisters
- Fireworks
- Battery-operated mobility aids
- Sports items
- Dry ice
- Medical equipment such as thermometers (mercury) or oxygen cylinders
- Prohibited items can be mislabelled to avoid detection
- Improper packaged items can lead to leaks or spills

Load and unload	
Knowledge	**Skills**
A team member's responsibility for the safe, correct and timely on-load/off-load operation, and use of **unit load devices (ULD)** and **restraints** to ensure the safety and security of loads	Complete loading and unloading of aircraft safely within the allocated time in accordance with the LIR and organisational procedures, including, restraint/unrestraint of a ULD and baggage nets following supervisor's instruction
On-demand test	
Indicative assessment criteria	
LU1 Explain your responsibilities under any **legislation relevant to the load** to be transferred **LU2** Explain your organisation's authorisation and **reporting procedures** **LU3** Identify the **resources you can use for loading and unloading** and equipment relevant to the load being transferred **LU4** Identify hazards and your organisation's procedures relating to **opening and closing access points** **LU5** Identify the characteristics of the load being transferred and any **special handling or storage considerations** including load restraint **LU6** Explain the different **types, functions and operation of loading/unloading equipment** relevant to the load being loaded and the safety features and how to use them correctly **LU7** Explain your organisation's procedures relating to the **transferring of loads during poor weather** **LU8** Explain how to **prepare the aircraft holds prior to loading** **LU9** Explain how to check the **baggage and/or cargo tags** before loading to confirm the correct destination of the load **LU10** Explain **why the on-load is completed in accordance with the operator's procedures** to ensure the ground stability of the aircraft (forward holds before aft holds) **LU11** Explain why there is a requirement for sufficient load spreading material and/or supplementary equipment and know the **appropriate restraint values** **LU12** Explain why all bulk hold restraint nets need to be correctly fitted, secured and tensioned; also ensure that loads have not exceeded any **marked loading height limits** **LU13** Explain why all ULDs are required to be properly secured into the aircraft's cargo loading system. All locks, latches and guides raised/set as required, particularly for **partial loads and NOFITS**. **LU14** Explain why it is important to **check passenger numbers/distribution** in accordance with the loadsheet/load form	

LU15 Explain why it is important that the aircraft hold quantities/distribution need to be in accordance with the **loading instructions** including void holds/positions confirmed and annotated as empty
LU16 Identify that if cabin baggage is transferred to the hold, it has been verified that the baggage contains no spare lithium batteries and that the **LIR/mass and balance documentation** has been amended to reflect
LU17 Explain why all **company material (COMAT)** such as aircraft spares, rotables and consumables that are classified as dangerous goods need to be labelled and declared as such
LU18 Outline why **ULDs containing dangerous goods** require a class hazard label, required to be displayed on its exterior a ULD tag with red hatchings on both sides
LU19 Explain why all cargo aircraft only **'CAO' goods** need to be accessible when required
LU20 Explain why the **NOTOC** needs to be completed correctly, with one copy held on the flight deck and another stored on the ground

Practical observation

Pass criteria	**Merit criteria**	***Distinction criteria***
LU21 Identify correct load (pallets and containers, ULDs, loose or bulk loaded items, including outsized/specialised) **LU22** Transfer load to/from loading area **LU23** Ensure load is correctly labelled **LU24** Wear correct personal protective equipment (PPE) when operating **LU25** Identify correct and serviceable ULDs for the load **LU26** Safely load/unload aircraft using equipment **LU27** Complete load/unload within required timescales	**LU28** Sequence loads prior to transfer to maximise load efficiency **LU29** Ensure all supporting documentation is supplied to relevant stakeholders prior to load/unload **LU30** Effectively load/unload aircraft **LU31** Work efficiently as part of a team to load/unload and maximise use of time available	***LU32*** *Assist team leader in load selection* ***LU33*** *Efficiently load/unload aircraft* ***LU34*** *Prioritise and organise work to ensure maximum performance when loading/unloading*

Amplification and guidance

Unit load devices (ULDs)

- Containers:

    - ULDs depending on the aircraft size/configuration/cargo needs
    - pallet containers
    - pallets with nets
- ULDs are standardised to fit specific aircraft types so they can be loaded/unloaded efficiently
- Designed to optimise the use of cargo space
- Protect cargo during transport
- Designed for easy handling by equipment such as forklifts
- Can be used with automated handling systems to further streamline operations

Restraints

- In-hold systems/stops and rollers
- Chains and tensioners
- Lashings
- Tie-downs

Legislation relevant to the load

- ICAO Annex 18 “The Safe Transport of Dangerous Goods by Air”
- IATA Dangerous Goods Regulations
- IATA Cargo Handling Manual
- Health and Safety at Work etc. Act
- Manual Handling Operations Regulations
- PUWER
- CAP 642 – Airside Safety Management

Reporting procedures

- Incident and accident reporting such as HSE

- Incident and accident documentation
- Safety and maintenance reporting
- Operational reporting:
    - baggage and cargo handling reports
    - Digital Airport System for Operations and Resources (DIASOR)

Resources you can use for loading and unloading

- Ground Service Equipment (GSE):
    - cargo loaders
    - belt loaders
    - baggage carts/dollies/Charlottes/EBTs
    - forklifts
    - High/low loaders

Opening and closing access points

- Cargo doors
- Passenger baggage compartment doors
- Aircraft service doors
- Passenger doors
- Cargo hatch latches and locks
- Temperature-controlled cargo compartments
- Aircraft ramps

Special handling or storage considerations

- Dangerous goods

- Perishable goods
- Animals
- Fragile cargo

Types, functions and operation of loading/unloading equipment

- Belt loaders:
  - designed to load and unload baggage and small items into and out of the lower deck (belly) compartment
  - positioned next to the aircraft, with one end placed at the cargo door
  - can be extended or retracted to accommodate different aircraft types
  - cargo/baggage is placed on the belt for loading/unloading
  - height can be adjusted to align with different aircraft
- Cargo loaders/high loaders:
  - used to load/unload ULDs, pallets and containers
  - the platform is raised/lowered to match the cargo door height
  - cargo is driven onto the platform, secured and lifted to the cargo door level/aircraft ramp
  - platform may be equipped with rollers/ball mats for easy movement of ULDs
- Container transporters (dollies and trailers):
  - used to transport ULDs, pallets and containers between aircraft and a facility
  - ULDs/containers are placed on dollies which are towed by tractors to the aircraft
  - some have rollers/ball mats for easier transfer
  - dollies can be locked to prevent containers from shifting during transport
  - multiple dollies may be linked together for efficient transport of multiple containers
- Dollies for loose baggage:
  - used to transport individual pieces of baggage/small cargo items with netting to prevent items falling
  - towed by a baggage tractor
  - the cargo may be enclosed or secured with netting to prevent items falling

Transferring of loads during poor weather

- Use of protective equipment for loads
- Reduced vehicle speeds
- Increased vigilance for load securing

Prepare the aircraft holds prior to loading

- Sweep floor to check for foreign object debris (FOD)/remaining equipment
- Ensure enough restraints are available
- In-hold system is operable, locks and stops in place

Baggage and/or cargo tags

- Verify the flight number and match with the loading plan
- Confirm the destination airport (using the IATA code on the tag)
- Check transfer information (if applicable)
- Verify the date of travel
- Verify passenger name (for baggage)
- Check for dangerous goods and handling instructions, if applicable

Why the on-load is completed in accordance with the operator's procedures

- Maintaining aircraft centre of gravity:
    - critical for stability and control
    - must be within a specific range for the aircraft to be safely operated
- Aircraft stability on the ground
- Fuel efficiency and aerodynamics

- Easier weight management
- Loading as per load plan/LIR
- Load forward before aft

Appropriate restraint values

- Typically need to withstand forces of 2.5 g in the direction of travel
- Typically need to withstand forces of 1.5 g in lateral directions
- Ensure restraints exceed minimum required values for extra safety
- Employ straps, tie-downs and nets
- Inspect and maintain equipment regularly

Marked loading height limits

- Adhere to equipment limits
- Apply safety margins:
    - maintain a buffer below the maximum height to account for dynamic factors
    - ensure there is adequate clearance
- Verify cargo compliance and follow any requirements for oversized/hazardous materials

Partial loads and NOFITS

- Partial loads need to be secured to prevent shifting and to maintain balance of the load and the aircraft
- NOFITS:
    - stands for 'No-Fit Areas'
    - position where no container is in place due to lack of need
    - areas within the aircraft that are either not suitable or not allowed for the placement of baggage or cargo due to structural/operational/safety reasons

- examples include:
  - fuel tank proximity
  - cargo hold doors
  - emergency equipment

Check passenger numbers/distribution

- Ensures weight/balance and centre of gravity
- Optimises aircraft performance
- Compliance with safety regulations
- Efficient boarding/disembarking
- Split of males/females/children for weight and balance
- Passengers split on low loads for weight and balance

Loading instructions

- Maintains balance/centre of gravity
- Enhances safety of the hold
- Facilitates maintenance and inspection readiness

LIR/mass and balance documentation

- Check for dangerous goods in baggage such as lithium batteries
- Updates to the load instruction report (LIR):
  - Distribution of load
  - weight limits
  - special handling
- Mass and balance documentation:

- load sheet
- weight and balance calculation
- load plan
- aircraft loading manual

Company material (COMAT)

- Spares, rotables and consumables that are dangerous should be labelled for:
  - safety and risk management
  - ensuring proper handling and storage
  - emergency response preparedness
  - protection of personnel and equipment

ULDs containing dangerous goods

- Class 1 through to class 9 based on the type of dangerous goods they hold
- Clearly labelled with the appropriate hazard symbols and handling instructions
- Accompanied by the necessary documentation
- Use of tag with red hatchings to indicate contents are dangerous goods

'CAO' goods

- Cargo aircraft only:
  - typically include material that pose a significant safety risk if transported in the passenger cabin and may need to be removed quickly
  - can include dangerous goods or special cargo not suitable for passenger aircraft due to their size, weight or nature
  - often have their own set of handling procedures
  - hazards are not suitable for travel on aircraft carrying passengers

NOTOC

- Notification to captain:
  - critical document that provides essential information about dangerous goods loaded onto an aircraft
  - used to inform the crew about the presence, type, location and handling requirements of hazardous materials
  - helps with the proper loading, securing and handling of dangerous goods
  - can advise flight deck if special requirements are needed such as hold heating
  - provides information if the aircraft is diverted

Specialist equipment, including unit load device serviceability	
Knowledge	**Skills**
The requirements for, and operation of, **specialist equipment** and vehicles used on and around the aircraft, including the need for serviceable unit load devices (ULDs), to prevent damage to the aircraft, baggage and cargo and own responsibility as part of the team	Identify the correct **specialist equipment** that is required for specific purposes on, at and around the aircraft to achieve the desired outcome, including serviceability check of ULDs and report on both serviceability and defects in accordance with organisational procedures
On-demand test	
Indicative assessment criteria	
SP1 Identify pieces of **specialist equipment** and which tasks/aircraft types they are suitable for **SP2** Describe the types of defects on **specialist equipment** and the correct procedures for dealing with them **SP3** Outline the regulations in place (**PUWER**) and ensure they are met by your organisation and training provider **SP4** Identify who has **responsibility** for ensuring equipment is safe to operate **SP5** Identify the correct method of operation of the **specialist equipment** in line with your organisation's policies and safe working procedures, and the penalties in place for operating equipment unsafely or in an unsafe condition **SP6** Outline the **sequence and priority of access** to the aircraft for equipment and service providers **SP7** Identify the **types of support** that may be needed in the event of a breakdown **SP8** Identify how to **correctly and safely manoeuvre equipment** around an airfield **SP9** Outline organisational and regulatory standards for the **operational condition of vehicles** **SP10** Explain the effect that **poor weather conditions** including snow and ice, high winds, rain/surface water, poor visibility, lightning and heat have on driving airside **SP11** Explain **how to recognise whether aircraft are moving or about to move** **SP12** Outline your organisation's procedures for **operating emergency cut-off switches, phones and alarms** **SP13** Identify the **condition, suitability and serviceability** of the GSE and ULDs both pre-use and after-use	

Practical observation		
Pass criteria	**Merit criteria**	***Distinction criteria***
SP14 Check **specialist equipment**/vehicles prior to use to ensure serviceability **SP15** Use **specialist equipment** correctly to complete task	**SP16** Select correct **specialist equipment**/vehicle for the task	*There are no distinction criteria for this component*
Amplification and guidance		
Specialist equipment • Aircraft tugs/tractors • Ground service equipment (GSE) • Air start unit (ASU) • Baggage carts/dollies/Charlottes/EBTs • Belt loaders • Aircraft service stairs/passenger boarding stairs • High loader/container loader/low loader • De-icing vehicles • Lavatory service vehicles • Water service vehicles • Fuel trucks • Pushback tractors • Catering trucks • Chocks and cones • Aircraft jacks • ULDs • Pallets **PUWER** • Provision and Use of Work Equipment Regulations		

- Work equipment must be suitable for its intended use
- Equipment must be maintained and in safe condition
- Equipment must have appropriate safety features
- Employees must be provided with adequate training and instruction on the safe use of equipment
- Regular inspections and testing must be carried out to ensure equipment remains in working order

Responsibility

- Employers and airport operators
- Equipment manufacturers and suppliers
- Operators/ground staff
- Regulatory bodies

Sequence and priority of access

- Lists the services taking place
- Gives a summary of or can provide a timeline of activities/critical path
- Knows which services have priority over others
- Initial inspection of the aircraft by ground crew
- Fuelling
- Catering services
- Cleaning services
- Passenger and baggage handling
- Specialist services:
    - de-icing

Types of support

- Technical support:
    - maintenance/repair crews
- Operational support:
    - replacement equipment
    - alternative arrangements

- Logistical support:
    - spare parts
    - transportation
- Safety/emergency support
- Customer service support

Correctly and safely manoeuvre equipment

- Pre-manoeuvre check:
    - inspect equipment and documentation
- Understand airfield layout and access points
- Use proper signalling and communication
- Follow safety protocols:
    - adhere to speed limits
    - avoid blind spots
- Operate equipment smoothly
- Use spotters/banksmen when reversing
- Clear obstacles and adjust for weather conditions
- Coordinate with other personnel
- Secure equipment and report any issues after use

Operational condition of vehicles

- Conduct maintenance/repairs when necessary
- Conduct daily checks/routine inspections
- Keep maintenance/incident records
- Ensure adequate training has been carried out

Poor weather conditions

- Snow and ice:
    - reduced traction

    - increased stopping distance
    - visibility issues
    - handling difficulties
- High winds:
    - vehicle stability affected
    - load securing
- Rain/surface water:
    - hydroplaning risk
    - slippery surfaces
- Poor visibility/fog:
    - increased reaction time
    - navigation difficulty
- Lightning:
    - safety risks
    - potential operational delays/equipment damage
- Heat:
    - overheating vehicles
    - surface condition changes

How to recognise whether aircraft are moving or about to move

- Visual cues:
    - aircraft lights (anti-collision)
    - observable movement
    - engine activity
- Signals from ground personnel:
    - marshalling hand signals
    - communication with air traffic control/ground control
- Operational procedures:
    - pre-movement checks by flight crew

    - gate and ramp preparation
- Noise levels and aircraft positioning
- Positioning of banksman at the rear of an aircraft

Operating emergency cut-off switches, phones and alarms

- Cut-off switches:
    - locate and understand the switch
    - activate promptly in an emergency
    - notify personnel and follow-up with inspection
- Emergency phones:
    - identify locations
    - dial appropriate emergency number(s)
    - provide clear information and follow instructions
- Emergency alarms:
    - recognise alarm type
    - respond by stopping operations, evacuate if needed and report
    - participate in follow-up actions and review

Condition, suitability and serviceability

- Check condition prior to loading
- Check for adequate loading and contents are secured to avoid movement in-flight
- Pre-use:
    - visual inspection
    - operational checks
    - safety equipment
- Post-use checks:
    - post-use inspections
    - fill in maintenance logs if necessary
    - repair and service if necessary

Servicing	
Knowledge	**Skills**
Own role in aircraft servicing/turnaround management, aircraft services, pre/post-use checks of holds and all hold lock	Identify the services required to facilitate an aircraft arrival, departure or turnaround and prepare/configure aircraft holds for departure
Professional discussion	
Indicative assessment criteria	
SV1 Describe the following services used by the aircraft: • engineering BF/AF • fuelling • de-icing • water (potable and domestic) • in-flight catering • waste management • cleaning • aircraft turnaround (including loading and unloading) **SV2** Outline your responsibilities under any legislation relevant to the service you are applying **SV3** Explain how to obtain authorisation to apply services **SV4** Identify the resources you can use for services and equipment relevant to the service being applied **SV5** Identify hazards and your organisation's procedures relating to **opening and closing access points** **SV6** Identify any special handling or storage considerations including load restraint **SV7** Explain the different types, services, functions and operation of loading/unloading equipment relevant to the aircraft and the safety features and how to use them correctly **SV8** Outline your organisation's procedures relating to the transferring of services during poor weather	

Practical observation		
Pass criteria	**Merit criteria**	***Distinction criteria***
SV9 Prepare the aircraft hold/floor in accordance with loading requirements	There are no merit criteria for this component	*There are no distinction criteria for this component*
Amplification and guidance		
Opening and closing access points • Cargo doors • Passenger baggage compartment doors • Aircraft service doors • Passenger doors • Cargo hatch latches and locks • Temperature-controlled cargo compartments		

Click here to return to contents

Assessment summary

The end-point assessment for Aviation Ground Operative - Aircraft Handling is made up of 3 components:

1. 2 x 60-minute on-demand tests, each consisting of 30 scenario-based questions
2. A 1-hour practical observation
3. A 30-minute professional discussion

The assessments can be taken in any order.

As an employer/training provider, you should agree a plan and schedule with the apprentice to ensure all assessment components can be completed effectively.

Each component of the end-point assessment will be assessed against the appropriate criteria laid out in this guide, which will be used to determine a grade for each individual component.

On-demand tests

The core test is **not** graded above a **pass**

- To achieve a **pass,** apprentices must achieve 18 out of 30

The specialist test is graded pass/merit/distinction

- To achieve a **pass**, apprentices must achieve 18 out of 30
- To achieve a **merit**, apprentices must achieve 21 out of 30
- To achieve a **distinction**, apprentices must achieve 24 out of 30

Practical observation

- To achieve a **pass** in the practical observation, **all** pass criteria must be achieved
- To achieve a **merit** in the practical observation, the apprentice must achieve **all** of the pass criteria and achieve **at least 5** of the 7 core merit criteria and **at least 5** of the 6 aircraft handling merit criteria
- To achieve a distinction in the practical observation, the apprentice must achieve **all** of the pass criteria, **all** of the merit criteria and **all** of the distinction criteria

Professional discussion

The professional discussion is **not** graded above a **pass**

- To achieve a **pass** in the professional discussion, **all** of the pass criteria must be achieved
- Additionally, any practical observation pass criteria **not** covered by the selected scenario will need to be covered

Grading

The specialist function on-demand test and the practical observation are both graded pass/merit/distinction. The core knowledge on-demand test and the professional discussion are not graded above a pass. The table below demonstrates the different grading combinations and the resulting overall grade.

A grade of at least a pass must be achieved in all 4 assessments.

Core knowledge on-demand test	Professional discussion	Specialist function on-demand test	Practical observation	Overall grade
Pass	Pass	Pass	Pass	**Pass**
Pass	Pass	Pass	Merit	**Pass**
Pass	Pass	Pass	Distinction	**Merit**
Pass	Pass	Merit	Pass	**Pass**
Pass	Pass	Merit	Merit	**Merit**
Pass	Pass	Merit	Distinction	**Merit**
Pass	Pass	Distinction	Pass	**Merit**
Pass	Pass	Distinction	Merit	**Merit**
Pass	Pass	Distinction	Distinction	**Distinction**

Retake and resit information

Apprentices must pass all assessment activities to pass the apprenticeship overall. Should an apprentice fail 1 assessment activity, then this can be retaken without a further period of training and development. If the apprentice fails 2 or more activities a period of further training and development lasting a minimum of 2 months must take place before a resit.

There is no maximum number of times an apprentice can be assessed; however, a maximum of 2 attempts at each assessment activity can be made in any 90-day period.

If the professional discussion is **not** passed at the first attempt, the overall grade will be capped at a **pass**.

When undertaking a resit or retake, the assessment method(s) will need to be re-attempted in full, regardless of any individual assessment criteria that were passed on any prior attempt. The EPA Report will contain feedback on areas for development and resit or retake guidance and a retake checklist to be submitted when the professional review has taken place.

Apprentices who achieve a pass grade cannot resit or retake the EPA to achieve a higher grade.

Click here to return to contents

Assessing the on-demand tests

The following knowledge areas of the Aviation Ground Operative - Aircraft Handling standard will be assessed by 2 on-demand tests. The core on-demand test consists of 30 scenario-based questions and will last for **60 minutes**. The pass mark is **18 out of 30**. The core on-demand test is not graded above a pass. The specialist function on-demand test consists of 30 scenario-based questions and will last for **60 minutes**. The **pass** mark is **18 out of 30**, the **merit** mark is **21 out of 30** and the **distinction** mark is **24 out of 30**.

The topics covered within the core knowledge test are listed below.

- Safety
- Security
- Compliance & legislation
- Communication
- Disruption incidents & emergencies
- Dangerous goods

The topics covered within the aircraft handling specialist knowledge test are listed below.

- Marshalling
- Loading instruction report
- Load and unload
- Specialist equipment, including unit load device serviceability

In each paper, questions will cover each of the areas above; however, not every aspect of every area will be covered in every test.

Before the assessment

- While on-programme, the employer/training provider should brief the apprentice on the areas to be assessed by the on-demand test
- In readiness for end-point assessment, the apprentice should complete a mock test

Mock examinations and practice assessments for both the core and aircraft handling on-demand tests are available in both paper and on-screen format from the Highfield Assessment website.

On-demand tests criteria

The following pages include the criteria that are covered by the **core** on-demand test.

Safety
SA1 Understand how to act within standard operating procedures at all times
SA2 Identify legislation and organisational procedures covering health and safety
SA3 Identify the location and the hazards associated with the ramp/dispersal area
SA4 Understand the health, safety and hazards associated with aircraft handling
SA5 Identify surface markings, operating and emergency areas for aircraft, vehicles and pedestrians on the ramp area
SA6 Identify personal protective equipment (PPE) and describe when to wear it
SA7 Describe dangers from foreign object debris (FOD) and the importance of keeping areas clean and tidy at all times
SA8 Describe dangers from birds and other wild animals and the importance of ensuring that the area does not attract them
SA9 Describe how to use equipment and vehicles on the ramp area
SA10 Outline the benefits of safe working practices
SA11 Identify the consequences of not operating safely in an airport environment
SA12 Identify the main causes of incidents/accidents in an airport
SA13 Identify hazardous materials and outline the procedures for using them
SA14 Describe procedures for reporting incidents/accidents airside
SA15 Describe the effects of severe weather airside and the precautions to take

Security
SE1 Identify signs of suspicious behaviour
SE2 Outline the limits of your authority
SE3 Identify specified, banned, illegal and dangerous items
SE4 Explain threat or risk awareness
SE5 Identify relevant aviation security documents
SE6 Identify relevant aviation security authorities
SE7 Outline your responsibility in relation to security
SE8 Outline your organisation's procedures for restricting access

Compliance & legislation
CL1 Explain the requirements for compliance in the aviation environment
CL2 Outline procedures that must be followed to ensure compliance
CL3 Explain the impact of not following procedures and ensuring compliance
CL4 Explain the impact of the aviation operation on the environment
CL5 Identify environmental controls in the aviation operation

Communication
CO1 Describe available lines and methods of communication **CO2** Identify relevant communications equipment and explain organisational procedures relating to its use **CO3** Explain organisational procedures regarding malfunctioning equipment **CO4** Identify relevant aviation guidelines, procedures and standard phrases **CO5** Identify commonly used aviation codes relevant to your job role and sources of information for less commonly used codes **CO6** Know the phonetic alphabet **CO7** Explain the difference between confidential and commercially sensitive information, and describe your organisation's systems for processing and storing this information **CO8** Explain organisational procedures for passing on messages and alternative communication routes in the event of an equipment failure **CO9** Manage requests for information from: seniors, colleagues or external sources

Disruption incidents & emergencies
DI1 Get help to identify an incident/emergency and be able to describe its main features **DI2** Know how the incident/emergency affects you and other people **DI3** Know how people would like to be informed about the progress and solution of the incident/emergency **DI4** Identify problem-solving methods that can be adopted to address the incident/emergency **DI5** Identify factors that may affect the way you deal with the incident/emergency **DI6** Identify which people could help you resolve the incident/emergency **DI7** Outline rules and regulations that you have to consider when solving the incident/emergency **DI8** Know how to overcome difficulties when solving incidents/emergencies **DI9** Follow a plan that takes into account any issues that may arise **DI10** Explain how you will know when an incident/emergency has been resolved **DI11** Know how to access additional support available post-incident

Dangerous goods
DG1 Acknowledge and understand the general principles of storage, carriage and handling of dangerous goods **DG2** Identify classifications of dangerous goods **DG3** Explain dangerous goods handling requirements **DG4** Explain the emergency procedures in the event of a dangerous goods incident

The following pages include the criteria that are covered by the **aircraft handling** on-demand test.

Marshalling
MA1 Describe correct methods of ensuring ground service equipment is driven and operated in an appropriate manner while in the equipment restraint area (ERA), after safety cones and chocks have been deployed **MA2** Describe correct methods of ensuring hand signal guidance (banks person/marshaller) is provided when manoeuvring in areas of close proximity to the aircraft, when visibility is limited and when reversing anywhere on the apron **MA3** Explain correct aircraft marshalling using hand signals and techniques, to ensure they are clear and in accordance with industry standards **MA4** Identify the correct vehicle guidance signals in line with IATA AHM **MA5** Outline your organisation's rules such as parking and speeding **MA6** Explain benefits of working safely: including to yourself, other people (passengers and colleagues), equipment, the airport, other companies and other people

Loading instruction report
LI1 Identify information contained on baggage tags and load labelling information **LI2** Outline your organisation's procedures for reconciling baggage, for example, AAA procedures **LI3** Identify approved airport codes **LI4** Outline your organisation's procedures for dealing with different types of load **LI5** Identify types of loading conveyances and containers, e.g. belt loaders, cargo loaders, ULDs **LI6** Explain how to use the loading equipment in a safe manner and the complementary safe manual handling procedures **LI7** Explain the consequences of inappropriate manual handling of loads **LI8** Identify appropriate reporting processes **LI9** Describe the protection available for loads in different weather conditions **LI10** Identify possible hidden dangerous goods items

Load and unload
LU1 Explain your responsibilities under any legislation relevant to the load to be transferred **LU2** Explain your organisation's authorisation and reporting procedures **LU3** Identify the resources you can use for loading and unloading and equipment relevant to the load being transferred **LU4** Identify hazards and your organisation's procedures relating to opening and closing access points **LU5** Identify the characteristics of the load being transferred and any special handling or storage considerations including load restraint **LU6** Explain the different types, functions and operation of loading/unloading equipment relevant to the load being loaded and the safety features and how to use them correctly **LU7** Explain your organisation's procedures relating to the transferring of loads during poor weather **LU8** Explain how to prepare the aircraft holds prior to loading

Load and unload
LU9 Explain how to check the baggage and/or cargo tags before loading to confirm the correct destination of the load **LU10** Explain why the on-load is completed in accordance with the operator's procedures to ensure the ground stability of the aircraft (forward holds before aft holds) **LU11** Explain why there is a requirement for sufficient load spreading material and/or supplementary equipment and know the appropriate restraint values **LU12** Explain why all bulk hold restraint nets need to be correctly fitted, secured and tensioned; also ensure that loads have not exceeded any marked loading height limits **LU13** Explain why all ULDs are required to be properly secured into the aircraft's cargo loading system. All locks, latches and guides raised/set as required, particularly for partial loads and NOFITS **LU14** Explain why it is important to check passenger numbers/distribution in accordance with the loadsheet/load form **LU15** Explain why it is important that the aircraft hold quantities/distribution need to be in accordance with the loading instructions including void holds/positions confirmed and annotated as empty **LU16** Identify that if cabin baggage is transferred to the hold, it has been verified that the baggage contains no spare lithium batteries and that the LIR/mass and balance documentation has been amended to reflect **LU17** Explain why all company material (COMAT) such as aircraft spares, rotables and consumables that are classified as dangerous goods need to be labelled and declared as such **LU18** Outline why ULDs containing dangerous goods require a class hazard label, required to be displayed on its exterior a ULD tag with red hatchings on both sides **LU19** Explain why all cargo aircraft only 'CAO' goods need to be accessible when required **LU20** Explain why the NOTOC needs to be completed correctly, with one copy held on the flight deck and another stored on the ground

Specialist equipment, including unit load device serviceability
SP1 Identify pieces of specialist equipment and which tasks/aircraft types they are suitable for **SP2** Describe the types of defects on specialist equipment and the correct procedures for dealing with them **SP3** Outline the regulations in place (PUWER) and ensure they are met by your organisation and training provider **SP4** Identify who has responsibility for ensuring equipment is safe to operate **SP5** Identify the correct method of operation of the specialist equipment in line with your organisation's policies and safe working procedures, and the penalties in place for operating equipment unsafely or in an unsafe condition **SP6** Outline the sequence and priority of access to the aircraft for equipment and service providers **SP7** Identify the types of support that may be needed in the event of a breakdown **SP8** Identify how to correctly and safely manoeuvre equipment around an airfield **SP9** Outline organisational and regulatory standards for the operational condition of vehicles **SP10** Explain the effect that poor weather conditions including snow and ice, high winds, rain/surface water, poor visibility, lightning and heat have on driving airside

Specialist equipment, including unit load device serviceability
SP11 Explain how to recognise whether aircraft are moving or about to move **SP12** Outline your organisation's procedures for operating emergency cut-off switches, phones and alarms **SP13** Identify the condition, suitability and serviceability of the GSE and ULDs both pre-use and after-use

Click here to return to contents

Assessing the practical observation

Each practical observation will last **1 hour** and the apprentices will not know in advance which scenario or task they will be given on the day of their assessment. Due to the safety and security required, particularly when an external visitor is required to go airside, the end-point assessor will confirm the assessment activities with the employer between 7 and 14 days in advance of the assessment.

As part of best practical observation practice the assessor will ask questions appropriate to the practical observation to further clarify knowledge and understanding and evidence behaviours. Questioning should be conducted at an appropriate time and not interfere with the completion of the tasks being observed. If necessary, questions can be asked after the practical observation has been completed.

Each scenario covers a different selection of the standard's elements and Highfield Assessment have designed detailed tools and procedures carefully in order to ensure all apprentices are assessed to the same level. Multiple apprentices in the same workplace will be tested over a range of the 3 scenarios and not all complete the same one.

The practical assessment is an observation of the apprentice in the aviation environment and may include real work activities such as loading an aircraft, or simulated activities such as extinguishing an aircraft fire, allowing the apprentice to demonstrate how they have applied their knowledge, skills and behaviours in a real work environment to achieve genuine and demanding work objectives. Areas covered in the scenarios not selected for the practical observation will be covered in the professional discussion.

The practical observation provides the opportunity for substantial synoptic assessment against the relevant elements of the standard. The practical observation must be scheduled when the apprentice will be working in their normal place of work and will also:

- be conducted at a time that avoids seasonal periods of low levels of trading and reflects typical working conditions
- allow the apprentice to demonstrate all aspects of the standard being observed (for example, the apprentice cannot be assessed on loading an aircraft if there is no load available)
- take a synoptic approach to observing the overall competence

The end-point assessor will plan the practical observation in advance with the employer, brief the apprentice fully on the day and follow assessment criteria that are set by Highfield, which will be subject to quality assurance. The practical observation must be carried out in one session.

Practical observation assessment criteria for the core and aircraft handling elements of the standard are detailed in the section below.

Grading the practical observation

Apprentices will be marked against the pass, merit and distinction criteria included in the tables on the following pages (under 'Practical observation criteria').

- To achieve a **pass** in the practical observation, **all** pass criteria must be achieved
- To achieve a **merit** in the practical observation, the apprentice must achieve **all** of the pass criteria and achieve **at least 5** of the 7 core merit criteria and **at least 5** of the 6 aircraft handling merit criteria
- To achieve a distinction in the practical observation, the apprentice must achieve **all** of the pass criteria, **all** of the merit criteria and **all** of the distinction criteria

Before the assessment:

Employers/training providers should:

- plan potential practical observation scenarios to allow the apprentice the opportunity to demonstrate each of the required assessment criteria
- ensure the apprentice knows the date, time and location of the assessment
- ensure the apprentice knows which criteria will be assessed in each scenario (outlined on the following pages)
- encourage the apprentice to reflect on their experience and learning on-programme to understand what is required to meet the standard
- be prepared to provide clarification to the apprentice, and signpost them to relevant parts of their on-programme experience as preparation for this assessment

Specialist function scenarios - Aircraft Handling

1. Aircraft load (outsized/specialised)

As part of an aircraft handling team - Loading and Unloading. You are to assist with the on-loading of an outsized or specialised load on to an aircraft. You are to act under the instruction of the team leader to ensure the loading and handling of the aircraft is conducted in a safe and timely manner in accordance with organisational procedures.

2. Aircraft load (ULDs - pallets and containers, loose or bulk loaded)

As part of an aircraft handling team - Loading and Unloading. You are to assist with the on-load of a palletised load on to an aircraft. You are to act under the instruction of the team leader to ensure that the loading and handling of the aircraft is conducted in a safe and timely manner in accordance with organisational procedures.

3. Aircraft unload (ULDs - pallets and containers, loose or bulk loaded, outsized or specialised)

As part of an aircraft handling team - Loading and Unloading. You are to assist with the unloading of an aircraft. You are to act under the instruction of the team leader to ensure the unloading of the aircraft is conducted in a safe and timely manner in accordance with organisational procedures.

Practical observation mock assessment

It is suggested that a mock assessment is carried out by the apprentice in advance of the end-point assessment with the training provider/employer giving feedback on any areas for improvement. It is the employer/training provider's responsibility to prepare apprentices for their end-point assessment and Highfield recommends that the apprentice experiences a mock practical observation in preparation for the real thing. The most appropriate form of mock assessment will depend on the apprentice's setting and the resources available at the time.

When designing a mock assessment, the employer/training provider should include the following elements in its planning:

- the mock practical observation should take place in a real workplace, or a realistic simulation if the real workplace does not present all the required assessment opportunities
- the participation of other personnel to play the parts of customers and team members:
    - it is strongly recommended that the mock practical observation has been practised beforehand and all personnel involved are properly briefed on their roles
    - the roles should provide the opportunity for the apprentice to demonstrate the pass, merit and distinction level criteria
- a 1-hour time slot should be available for the complete practical observation, if it is intended to be a complete mock practical observation covering all relevant standards; however, this time may be split up to allow for progressive learning
- consider a video recording of the mock assessment, and allow it to be observed by other apprentices, especially if it is not practicable for the employer/training provider to carry out a separate mock assessment with each apprentice
- ensure that the apprentice's performance is assessed by a competent trainer/assessor, and that feedback is shared with the apprentice to complete the learning experience; the mock assessment sheets may be used for this purpose and are available to download from the Highfield Assessment website

Practical observation criteria

During the practical observation, the following standards should be evidenced. The apprentice can only achieve a merit by covering all pass and all merit criteria for the practical observation scenario they have been assigned. The apprentice can only achieve a distinction by meeting the above conditions for a merit, and in addition, covering all distinction criteria for the scenario they have been assigned.

Core assessment criteria

Safety
To pass, the following must be evidenced
SA16 Correctly report hazards if identified **SA17** Act within standard operating procedures at all times
To gain a merit, the following must be evidenced
SA18 Take action to deal with hazards in line with organisational procedures
To gain a distinction, the following must be evidenced
There are no distinction criteria for this component

Compliance & legislation
To pass, the following must be evidenced
CL6 Check area of responsibility complies with procedures and legislative requirements
To gain a merit, the following must be evidenced
CL7 Take action to correct non-compliance
To gain a distinction, the following must be evidenced
CL8 *Proactively ensure compliance with procedures and legislation, e.g. challenge suspicious persons*

Communication
To pass, the following must be evidenced
CO10 Communicate with the right people at the right time using the correct method **CO11** Ensure communication is received and understood **CO12** Ensure all communications are timely and accurate
To gain a merit, the following must be evidenced
CO13 Adapt language and tone to match audience and situation
To gain a distinction, the following must be evidenced
CO14 *Ensure all communications are effective and understood, anticipating additional appropriate information requirements and liaising with key people to facilitate ongoing information flow*

Inter-personal skills
To pass, the following must be evidenced
IP12 Work as part of a team to ensure adequate performance in the role **IP13** Work accurately with supervision
To gain a merit, the following must be evidenced
IP14 Take initiative as part of a team to improve performance in the role within limits of operation **IP15** Work accurately with minimal supervision
To gain a distinction, the following must be evidenced
There are no distinction criteria for this component

Aviation systems
To pass, the following must be evidenced
AS1 Use prescribed systems correctly **AS2** Report faults or errors as they occur **AS3** Meet performance expectation for timescales to complete tasks
To gain a merit, the following must be evidenced
AS4 Take action to maintain systems to prevent faults or errors **AS5** Work efficiently to meet and exceed timescales to complete tasks
To gain a distinction, the following must be evidenced
AS6 *Organise and prioritise work to make the most efficient use of time and complete core and relevant additional tasks within timescales*

Specialist function assessment criteria

Scenarios 1, 2 and 3

Marshalling
To pass, the following must be evidenced
MA7 Follow instructions from team leader
To gain a merit, the following must be evidenced
MA8 Understand how following instructions ensures correct completion of task
To gain a distinction, the following must be evidenced
MA9 *Anticipate needs of team leader prior to loading/unloading*

Loading instruction report
To pass, the following must be evidenced
LI11 Correctly interpret basic information on the LIR
To gain a merit, the following must be evidenced
There are no merit criteria for this component
To gain a distinction, the following must be evidenced
LI12 *Interpret and use advanced information on the LIR*

Load and unload
To pass, the following must be evidenced
LU21 Identify correct load (pallets and containers, ULDs, loose or bulk loaded items, including outsized/specialised)
LU22 Transfer load to/from loading area
LU23 Ensure load is correctly labelled
LU24 Wear correct personal protective equipment (PPE) when operating
LU25 Identify correct and serviceable ULDs for the load
LU26 Safely load/unload aircraft using equipment
LU27 Complete load/unload within required timescales
To gain a merit, the following must be evidenced
LU28 Sequence loads prior to transfer to maximise load efficiency
LU29 Ensure all supporting documentation is supplied to relevant stakeholders prior to load/unload
LU30 Effectively load/unload aircraft
LU31 Work efficiently as part of a team to load/unload and maximise use of time available
To gain a distinction, the following must be evidenced
LU32 *Assist team leader in load selection*
LU33 *Efficiently load/unload aircraft*
LU34 *Prioritise and organise work to ensure maximum performance when loading/unloading*

Specialist equipment, including unit load device serviceability
To pass, the following must be evidenced
SP14 Check specialist equipment/vehicles prior to use to ensure serviceability
SP15 Use specialist equipment correctly to complete task
To gain a merit, the following must be evidenced
SP16 Select correct specialist equipment/vehicle for the task
To gain a distinction, the following must be evidenced
There are no distinction criteria for this component

Servicing
To pass, the following must be evidenced
SV9 Prepare the aircraft hold/floor in accordance with loading requirements
To gain a merit, the following must be evidenced
There are no merit criteria for this component
To gain a distinction, the following must be evidenced
There are no distinction criteria for this component

Click here to return to contents

Assessing the professional discussion

The end-point assessment plan states that the professional discussion will be a structured discussion between the apprentice and the end-point assessor. The employer may be present to support, but not lead, the apprentice and to confirm information at the assessor's request.

The professional discussion will take place either in person or via videoconference. This will be organised by Highfield's scheduling team once the apprentice has been submitted for gateway.

The employer will not be allowed to add any further information or examples to what the apprentice has stated or lead them in any way. Highfield would encourage the employer/training provider and the apprentice to plan for the professional discussion and consider what resources they may bring with them to support them during their professional discussion. This must be their own work and will only be used to support their discussion. The professional discussion should take place after the practical observation, to establish the apprentice's understanding and application of the remaining knowledge, skills and behaviours.

The professional discussion will need to take place in a suitable environment and will typically last for 30 minutes. The discussion will be against the set criteria that are outlined in the following pages and it will be appropriately structured to draw out the best of the apprentice's energy, enthusiasm, competence and excellence.

The professional discussion will recognise areas that have already been covered in the simulated practical observation so as not to reassess an area in which the apprentice has already demonstrated competence. The number of questions asked during the professional discussion will vary according to the breadth and depth of the answers given (and how many follow-on questions are required) to cover all the criteria requirements and give full opportunity for the apprentice to demonstrate all the requirements.

The purpose of the professional discussion is to clarify any questions the end-point assessor has for specified standards:

- confirm and validate judgements about the quality of work
- explore aspects of the work, including how it was carried out, in more detail
- discuss how the apprentice would behave in the scenarios not assigned
- ask questions in relation to personal development and reflection

Grading the professional discussion

The professional discussion is **not** graded above a **pass**. Apprentices will be marked against the pass criteria included in the tables on the following pages (under 'Professional discussion criteria').

- To achieve a **pass** in the professional discussion, **all** of the pass criteria must be achieved
- Additionally, any practical observation pass criteria **not** covered by the selected scenario will need to be covered

Before the assessment:

Employers/training providers should:

- plan the professional discussion to allow the apprentice the opportunity to demonstrate each of the required standards
- ensure the apprentice knows the date, time and location of the assessment
- ensure the apprentice knows which criteria will be assessed (outlined on the following pages)
- encourage the apprentice to reflect on their experience and learning on-programme to understand what is required to meet the standard
- be prepared to provide clarification to the apprentice, and signpost them to relevant parts of their on-programme experience as preparation for this assessment

Professional discussion mock assessment

It is suggested that a mock assessment is carried out by the apprentice in advance of the end-point assessment with the training provider/employer giving feedback on any areas for improvement. It is the employer/training provider's responsibility to prepare apprentices for their end-point assessment and Highfield recommends that the apprentice experiences a mock professional discussion in preparation for the real thing. The most appropriate form of mock assessment will depend on the apprentice's setting and the resources available at the time.

When designing a mock assessment, the employer/training provider should consider the following elements in their planning:

- a 30-minute time slot should be available for the complete professional discussion. If it is intended to be a complete mock assessment covering all relevant standards; however, this time may be split up to allow for progressive learning.
- consider an audio recording of the mock, and to allow the mock to be heard by other apprentices, especially if it is not practicable for the employer/training provider to carry out a separate mock assessment with each apprentice.
- ensure that the apprentice's performance is assessed by a competent trainer/assessor, and that feedback is shared with the apprentice, to complete the learning experience. The mock assessment sheets may be used for this purpose and are available to download from the Highfield Assessment website.
- structured 'open' questions should be used as part of the professional discussion which do not lead the candidate but allows them to express their knowledge in a calm and comfortable manner. Example questions that you can use for a mock assessment are listed below.
    - Security
        - Describe the procedures that must be followed to ensure security at your workplace
        - What are some potential security breaches that you may encounter, and how should you deal with them?
    - Inter-personal skills
        - How should you interact with your colleagues?
        - Tell me about your organisation's policies
    - Disruption incidents & emergencies
        - What information do you need when an incident occurs?
        - Tell me how about how you would deal with an incident

- Dangerous goods
  - Tell me about how your organisation deals with dangerous goods
- Servicing
  - Tell me about the services used by aircraft

Professional discussion criteria

Throughout the professional discussion, the assessor will review the apprentice's competence in all of the pass criteria outlined below. Therefore, apprentices should prepare for the professional discussion by considering how the criteria can be met.

Security
To pass, the following must be evidenced
SE9 Describe how to secure items, areas and data in line with your responsibilities **SE10** Describe your organisation's personal identification requirements **SE11** Identify reporting procedures for suspicious incidents or behaviour **SE12** Identify reporting procedures for discrepancies in the security of actual or potential access points **SE13** Describe how to ensure action is taken in response to an actual or suspected security threat **SE14** Describe the appropriate remedial actions to take when irregularities in security are identified

Inter-personal skills
To pass, the following must be evidenced
IP1 Explain the benefits of developing productive working relationships with colleagues **IP2** Explain how to address conflicts with colleagues **IP3** Describe how to deal with diversity issues **IP4** Outline how to receive and make use of feedback on your performance from colleagues **IP5** Identify the responsibilities of team members in own area **IP6** Outline the processes within the organisation for making decisions **IP7** Outline line management relationships within the organisation **IP8** Identify the organisation's aims, values and culture **IP9** Explain the standards of appearance, behaviour and performance expected in the organisation **IP10** Identify your organisation's guidelines for how to recognise what your customer wants, and respond appropriately **IP11** Respond to requests for information adhering to your organisation's standard timeliness

Disruption incidents & emergencies
To pass, the following must be evidenced
DI12 Interpret incidents/emergencies that have been identified **DI13** Ask suitable questions to check you understand the incident/emergency **DI14** Identify the available solution(s) for resolving the incident/emergency **DI15** Discuss and understand proposed solution(s) to the incident/emergency with others to identify the most suitable solution **DI16** Keep others fully informed about what is happening to resolve the incident/emergency **DI17** Check with others to ensure the incident/emergency has been resolved satisfactorily **DI18** Give clear reasons to others when the incident/emergency has not been resolved satisfactorily **DI19** Be engaged with the job role, remaining calm and assured throughout the working period **DI20** Be able to concentrate on the task in hand and not be distracted by problems **DI21** Prioritise all tasks to ensure effective time management and a calm approach to work

Dangerous goods
To pass, the following must be evidenced
DG5 Ensure dangerous goods are handled effectively in accordance with organisational procedures and responsibilities **DG6** Identify potential dangerous goods hazards **DG7** Operate safely when exposed to dangerous goods

Servicing
To pass, the following must be evidenced
SV1 Describe the following services used by the aircraft: • engineering BF/AF • fuelling • de-icing • water (potable and domestic) • in-flight catering • waste management • cleaning • aircraft turnaround (including loading and unloading) **SV2** Outline your responsibilities under any legislation relevant to the service you are applying **SV3** Explain how to obtain authorisation to apply services **SV4** Identify the resources you can use for services and equipment relevant to the service being applied **SV5** Identify hazards and your organisation's procedures relating to opening and closing access points **SV6** Identify any special handling or storage considerations including load restraint **SV7** Explain the different types, services, functions and operation of loading/unloading equipment relevant to the aircraft and the safety features and how to use them correctly **SV8** Outline your organisation's procedures relating to the transferring of services during poor weather

Click here to return to contents