Unit 20: Ramp Handling

Unit code: H/602/5678
QCF Level 3: BTEC National
Credit value: 5
Guided learning hours: 42

Aim and purpose

The aim of this unit is for learners to gain knowledge and understanding of the demands that are likely to be placed on new ground crew, together with the airside hazards they may face during an aircraft turnround.

Unit introduction

Aircraft do not earn money sitting on the ground. It is essential that aircraft turnround times are kept to a minimum while ensuring safety and efficiency.

Numerous organisations play their part in a well-coordinated effort for every aircraft turnround. Activities must be choreographed and undertaken to the same precision as would be seen in a Formula 1 pit stop or a complex dance routine. This has to be achieved in an unforgiving, fast-moving and commercially demanding environment.

While some fundamental activities apply to every turnround, demands can vary substantially depending on the type of airline (for example full service or ‘no frills’ low-cost carrier (LCC)); the size and type of aircraft; the country from which it has arrived and the country to which it is departing; the length of the flight; and on-the-day situations like the size and type of the commercial load and the weather.

Failure by any of the organisations in any one of the many turnround activities can result in loss of life, injury, damage to aircraft and other expensive equipment, adverse customer service, missed departure times which can lead to extended delays, repercussive disruption to later flights and increased costs and loss of revenue.

This unit gives learners knowledge of the types of organisation involved in ramp handling and gives them the opportunity to understand their roles and procedures as well as developing their skills in integrating their activities. It also gives learners an understanding of baggage, cargo and passenger loading and unloading methods and procedures, and the factors that have an influence on aircraft turnround activities.

The ramp is a challenging arena in which to work and this unit explores the associated regulatory requirements and safety procedures, and their application and monitoring, which contribute to an enviable safety record.

Learning outcomes

On completion of this unit a learner should:

1. Understand how to ensure safe and efficient aircraft turnround
2. Understand aircraft loading and unloading methods and procedures in relation to baggage, cargo and passengers
3. Understand how ramp safety is regulated and maintained.
Unit content

1 Understand how to ensure safe and efficient aircraft turnaround

Organisations involved:
- division of ground handling responsibilities
- airport operator
- airline
- ground handlers
- regulatory and control organisations, e.g. Civil Aviation Authority (CAA), UK Border Force (UKBA), Port Health
- emergency services
- other service providers, e.g. aircraft catering

Roles and operational procedures (airport operators):
- stand allocation, e.g. by aircraft type/size, domestic/international flight, maximisation of on-pier operations
- marshalling, e.g. manual and automated systems, follow-me
- stand clearance
- security, e.g. restricted passenger access

Roles and operational procedures (airline/ground handlers):
- chocking aircraft
- turnaround coordination
- air-bridge operation/steps positioning, no-touch policy (to prevent damage to aircraft)
- passenger disembarkation/embarkation
- technical inspection
- rectification of defects recorded in technical log, e.g. major defect, carried forward defect (CFD)
- provision of ground power (fixed/mobile)
- aircraft servicing, e.g. cleaning, cabin dressing, toilet/water replenishment
- baggage security, e.g. accompanied baggage, AAA, baggage manifests, rush bags
- anti-icing/de-icing
- relevance of holdover duration
- pushback/power-back

Roles and operational procedures (regulatory and control):
- UK Border Force, e.g. immigration control and deportations, customs control including commercial goods and crew belongings
- Port Health including control of passenger-transmitted disease from infected countries and specific control of infectious diseases suspected on board
• police intervention, e.g. anti-terrorist police, Special Branch

Roles and operational procedures (other service providers):
• airside passenger/crew coaching
• aircraft refuelling, e.g. earthing, ground refuelling points, fuel trucks, over/underwing refuelling
• catering
• specialist fumigation

Coordination:
• of organisations
• role of dispatcher
• pre-arrival communication with all involved organisations, e.g. through control centres using IT systems, radio technology, verbal and written briefing
• allocation of equipment and personnel
• liaison between departments, e.g. cargo warehouse and loaders, passenger staff and cabin crew
• coordination at aircraft side, e.g. via dispatcher
• sequencing of activities, e.g. offloading before loading, cabin cleaning before passenger boarding, simultaneous or sequential offloading of aircraft holds, de-icing after doors closed
• positioning of equipment, e.g. ground power, steps, loading equipment, baggage/cargo delivery vehicles, catering vehicles, toilet service unit (TSU)
• pushback coordination (between ground movement control (GMC), flight deck crew, pushback engineer and dispatcher)
• use of standardised words and phrases and phonetic alphabet

Safety of turnrounds:
• using personal protective equipment (PPE), e.g. ear defenders, hard-capped shoes
• management of foreign object debris (FOD)
• awareness of environment and hazards, e.g. moving vehicles, noise and blast, ingestion and propeller strike, preventative measures such as requirement that loading staff must not work alone
• safe lifting practices
• fire prevention, e.g. no smoking, hazardous cargo
• aircraft chocking/stabilising

Efficiency of turnrounds:
• commercial and operational need for punctual departures
• sequence of operations
• timing of each operation
• need for preparation
• importance of teamwork and cooperation
• barriers to efficiency, e.g. weather, inaccurate communications, lack of effective coordination within and across organisations
• breakdown or lack of equipment
• slot times, e.g. purpose, cost factors associated with missed slots

Management of aircraft, vehicles and pedestrians:
• aircraft, e.g. marshalling, stand markings, anti-collision beacons on aircraft
• vehicles, e.g. road markings and routes, restricted areas including taxiways, positioning equipment including banksman when reversing, anti-collision beacons on vehicles, reversing klaxons
• pedestrians, e.g. escorting passengers

Impact of adverse weather:
• conditions, e.g. heat, rain, electrical storms, wind, poor visibility, cold, snow
• impact on turnaround procedures, e.g. protection of live cargo, baggage and embarking and disembarking passengers, danger of lightning strikes, difficult working conditions, need for follow-me vehicles, de-icing and snow clearance
• consequences, e.g. reduced landing/take-off rate, disruption to scheduled time of arrival (STA) and scheduled time of departure (STD), lengthened turnaround times causing delays, reactionary delays, cancellations, increased workloads

2 Understand aircraft loading and unloading methods and procedures in relation to baggage, cargo and passengers

Baggage and cargo loading and unloading methods:
• types of load (loose, pallet, containerised)
• types of equipment (loose-load transporters and loaders, e.g. tugs and trailers, flatbed lorries, mobile conveyor belts; container and pallet transporters and loaders, e.g. tugs and dollies, lorries, high-lift loaders)
• positioning and operating equipment
• matching door sill heights
• allowing for aircraft movement during loading
• methods of opening/closing aircraft doors
• handling of special cargo, e.g. human remains, radioactive material, livestock
• current health and safety regulations in relation to control of substances hazardous to health.
• securing methods, e.g. nets, locks
• documentation, e.g. airway bill, loadsheet and Notification of Dangerous Goods to Captain (NOTOC)

Factors impacting on baggage and cargo loading and unloading:
• aircraft capacity
• distribution of load including segregation of incompatible loads
• weather and time constraints
• incompatible and unserviceable equipment
• damaged baggage/cargo
• absence or mismatch of documentation
• security, e.g. Triple A (AAA – Account and Authorise)
Passenger embarkation and disembarkation:

- boarding methods (air-bridge, steps, airside coach)
- boarding procedures (security checks, timing, manual and automated boarding card acceptance)
- boarding special needs passengers, e.g. unaccompanied minors, passengers with disabilities, passengers with children

Factors impacting on passenger embarkation and disembarkation:

- readiness of crew
- method of boarding or disembarkation, e.g. control of coach boarding if remote stand, passenger safety if walk to aircraft steps
- fuelling while on board (availability of cabin crew to man doors)
- weather
- boarding those with special needs, e.g. passengers with reduced mobility (PRM), passengers with young children
- missing passengers

3 Understand how ramp safety is regulated and maintained

Current health and safety regulations and procedures relating to movement and operation of aircraft, vehicles and personnel:

- health and safety at work
- Civil Aviation Authority (CAA)
- airport bylaws, e.g. valid identity cards for personnel and vehicles, airside driving permits, adherence to road, stand and taxiway markings and speed limits
- correct use of/adherence to automated and hand signals
- air-bridge operator licence
- equipment parking
- in-house regulations

How safe working practices are maintained:

- monitoring and reporting by airport, airline and ground handlers
- mandatory reporting of incidents resulting in actual or potential injury or damage
- mandatory safety induction and refresher training
- compilation and publication of safety incidents and performance
## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

<table>
<thead>
<tr>
<th>Assessment and grading criteria</th>
<th>To achieve a pass grade the evidence must show that the learner is able to:</th>
<th>To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:</th>
<th>To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P1</strong></td>
<td>Identify the organisations involved in aircraft turnaround</td>
<td></td>
<td>D1 Discuss the impacts of non-compliance with safe and efficient aircraft turnaround procedures, methods and procedures in relation to baggage, cargo, passengers and ramp safety regulations</td>
</tr>
<tr>
<td><strong>P2</strong></td>
<td>Describe the roles and operational procedures used by organisations during aircraft turnaround [IE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong></td>
<td>Explain the co-ordination required to ensure safe and efficient aircraft turnaround</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong></td>
<td>Explain issues affecting safety and efficiency during aircraft turnaround</td>
<td></td>
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<tr>
<td><strong>P5</strong></td>
<td>Explain how aircraft, vehicle and pedestrian movements are managed during aircraft turnaround [IE]</td>
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</tr>
<tr>
<td><strong>P6</strong></td>
<td>Explain the impact of adverse weather conditions on aircraft turnaround procedures</td>
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</tr>
<tr>
<td><strong>P7</strong></td>
<td>Describe baggage and cargo loading and unloading methods</td>
<td></td>
<td>M1 Compare the baggage and loading methods, passenger embarkation and disembarkation methods and procedures of different types of flight</td>
</tr>
<tr>
<td><strong>P8</strong></td>
<td>Explain the factors that impact on baggage and cargo loading and unloading</td>
<td></td>
<td></td>
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<tr>
<td><strong>P9</strong></td>
<td>Describe passenger embarkation and disembarkation methods and procedures</td>
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<td></td>
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<tr>
<td><strong>P10</strong></td>
<td>Explain the factors that impact on the embarkation and disembarkation of passengers</td>
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</tr>
</tbody>
</table>
## Assessment and grading criteria

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<th>To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P11</strong> Describe the regulations and procedures relating to the movement and operation of aircraft, vehicles and personnel on the ramp</td>
<td><strong>M2</strong> Analyse the importance of regulations, procedures and safe working practices giving recommendations for improving safe working practices</td>
<td></td>
</tr>
<tr>
<td><strong>P12</strong> Explain how safe working practices are maintained on the ramp</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PLTS**: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

<table>
<thead>
<tr>
<th>Key</th>
<th>IE – independent enquirers</th>
<th>RL – reflective learners</th>
<th>SM – self-managers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CT – creative thinkers</td>
<td>TW – team workers</td>
<td>EP – effective participators</td>
</tr>
</tbody>
</table>
Essential guidance for tutors

Delivery

This unit addresses a complex multi-agency, multi-task subject. In learning outcome 1, learners must understand not only what roles have to be undertaken but also which organisations are responsible for them. Learners could be tasked with compiling a list identifying the roles undertaken by airport operator, airline/ground handler, regulatory authority, and other. This early understanding will assist them in recognising the complexity of ramp handling and how coordination is essential.

The ramp is a harsh environment in which to work and the health and safety of those involved are both at risk. Learners should identify the hazards and recognise how they can be minimised for their own safety as ramp workers and that of their colleagues, passengers, equipment and aircraft. Learners must also understand how aircraft, vehicular and pedestrian movement is managed. Airfield and stand drawings, available from aviation websites, books and local airports, will assist.

Learning outcome 2 takes a closer look at the loading and unloading methods and procedures for baggage, cargo and passengers. Useful sources of support information include websites, aviation books and guest speakers from the industry.

Having covered learning outcomes 1 and 2, tutors should develop a range of scenarios to demonstrate the sequencing and coordination of a turnaround, commencing with a simple example, for example a low-cost carrier (LCC) operating a small aircraft on a domestic turnaround using an air-bridge, developing to a complex example, for example a full service airline with a large aircraft on a remote stand operating a domestic arrival and international departure. This approach identifies the basic turnaround operations, building to complex turnaround operations with many organisations involved. A fun way of doing this is by having two stand layouts with cut-outs of the aircraft and pieces of equipment with teams of learners responding to limited instructions from the tutor. This can often lead to learners making errors from which they can learn in a fun way, for example having a catering onload vehicle position against the aircraft before the catering offload vehicle, spraying the aircraft with de-icing fluid while loaders are still loading baggage, or leaving aircraft steps on while pushing the aircraft out. The winning team is the one that best achieves the correct sequencing.

Learners should be encouraged to compare the differences between two different types of flight which will help with the achievement of the M1. For example, a low-cost carrier (LCC) operating a small aircraft on a domestic turnaround using an air-bridge in comparison with a full-service airline with a large aircraft on a remote stand operating a domestic arrival and international departures. At this stage, it would be appropriate to introduce further debate and/or role play on factors which may impact on baggage, cargo and passenger loading/unloading and the efficiency of the turnaround. Scenarios might include missing passengers, bad weather, opportunities and risks associated with accepting a late group of passengers who have not pre-booked, and breakdown of equipment. Learners could take on the roles of various organisations to identify and resolve the impact on their organisation and on the turnaround.

Learners can be helped with learning outcome 3 by accessing current legislation and regulations, for example health and safety at work, noise at work, the management of health and safety at work, air navigation orders, CAA Airside Safety Management guidelines. The HSE website provides useful information about health and safety in aviation, particularly aircraft turnrounds (go to Air Transport industry > Employers and employees > aircraft turnaround).

Learners should be guided to analyse the legislation and regulations that are involved, they can then look further at safe working practices to be able to recommend how improvements can be made.
It is essential to include one or more visits to an airport during the study of this unit. Though it is difficult to gain airside access in the current security climate, many airports have spectator galleries from which ramp activity can be viewed. Learners should be able to relate what they have learned to what they observe. Case studies can stimulate class debate and the learning process.

The aviation industry is high profile, so learners should be encouraged to seek out media stories and to read some of the many aviation magazines and websites. There is an increasing number of online training resources relating to airports and airlines.

Additionally, many airlines and airports are willing to give presentations either on-airport or off-airport. Speakers from airline or ground handler dispatch departments or airport operator airfield management can be particularly valuable, as are those from one or more of the regulatory organisations (for example UKBA).

Guest speakers could be invited to discuss real-life scenarios relating to non-compliance. Follow-up role play could support these examples to bring 'to life' the consequences of non-compliance.

**Outline learning plan**

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

<table>
<thead>
<tr>
<th>Topic and suggested assignments/activities and/assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to ramp handling, including an explanation of the unit content.</td>
</tr>
<tr>
<td>Introduction to the indicative reading material, including books, internet, journals etc.</td>
</tr>
<tr>
<td>Introduction to Assignment 1</td>
</tr>
<tr>
<td>Discussion – which airports have learners visited. Use learners' real-life experiences of the trips within airports.</td>
</tr>
<tr>
<td>Table-top exercise – what organisations are involved in ramp handling?</td>
</tr>
<tr>
<td>Tutor presentation to outline the hazards and risks that are present in terms of health and safety.</td>
</tr>
<tr>
<td>Discussion to explore how risks could be minimised.</td>
</tr>
<tr>
<td>Desktop exercise using aviation websites, books and local airport public affairs department to understand how aircraft, vehicular and pedestrian movement is managed.</td>
</tr>
<tr>
<td>Video clips to show the ramp and the activities involved.</td>
</tr>
<tr>
<td>Case study to examine ramp operations for one particular airport.</td>
</tr>
<tr>
<td>Guest speaker from ground handler dispatch departments.</td>
</tr>
<tr>
<td>Guest speaker from airport operator airfield management.</td>
</tr>
<tr>
<td>Role play – coordination of organisations and the role of the dispatcher.</td>
</tr>
</tbody>
</table>

**Preparation for assignment**

**Assignment 1: Ensuring Safe and Efficient Aircraft Turnround** (P1, P2, P3, P4, P5, P6)

**Feedback on assignment**
### Topic and suggested assignments/activities and/assessment

<table>
<thead>
<tr>
<th>Introduction to Assignment 2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team activity to take a close look at loading and unloading methods and procedures for baggage, cargo and passengers.</td>
</tr>
<tr>
<td>Guest speaker for learners to gain an insight into methods and procedures.</td>
</tr>
<tr>
<td>Pairing activity to match methods and procedures to baggage, cargo and passengers.</td>
</tr>
<tr>
<td>Role play to allow learners to demonstrate the methods and procedures. Example of this could be having two stand layouts with cut-outs of the aircraft and pieces of equipment with teams of learners responding to limited instructions from the tutor.</td>
</tr>
<tr>
<td>Comparison exercise to compare the differences between two different types of flight.</td>
</tr>
<tr>
<td>Class debate – impact on baggage, cargo and passenger loading/unloading and the efficiency of the turnaround.</td>
</tr>
</tbody>
</table>

#### Preparation for assignment

**Assignment 2: Aircraft Loading and Unloading Methods and Procedures in Relation to Baggage, Cargo and Passengers** (P7, P8, P9, P10, M1)

#### Feedback on assignment

<table>
<thead>
<tr>
<th>Introduction to Assignment 3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research activities to explore regulations for health and safety at work, noise at work, management of health and safety at work, air navigation orders, CAA Airside Safety Management guidelines.</td>
</tr>
<tr>
<td>Debate – how can safe working practices be improved?</td>
</tr>
<tr>
<td>Guest speakers from regulatory organisations, e.g. UKBA.</td>
</tr>
</tbody>
</table>

#### Preparation for assignment

**Assignment 3: How is Ramp Safety Regulated and Maintained?** (P11, P12, M2)

#### Feedback on assignment

<table>
<thead>
<tr>
<th>Introduction to Assignment 4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role play to act out the consequences of non-compliance.</td>
</tr>
<tr>
<td>Guest speaker to discuss real-life scenarios – what happens if ramp procedures are not followed?</td>
</tr>
</tbody>
</table>

#### Preparation for assignment

**Assignment 4: What Happens If Ramp Procedures Are Not Followed?** (D1)

#### Feedback on assignment

### Assessment

A variety of assessment methods could be used including written work, practical activities and role play. It is recommended that more than one assessment method is used to cater for different learning styles within a group.

The assessment criteria shown in the assessment and grading grid can be grouped together to enable learners to expand on one criterion to gain higher grades. Where possible, learners should be encouraged, and given the opportunity, to meet the relevant higher grades at the same time as they attempt the appropriate pass criteria.

Group activities may lend themselves to certain themes or assessments but it is essential that all learners keep a portfolio of their own work and have evidence of individually covering all the criteria they are credited for.

**P1 – P2 – P3 – P4 – P5 – P6**
To achieve P1, learners must identify the organisations involved in aircraft turnaround, and these should fall within the main groups, i.e. airport operator, airline, ground handlers, regulatory and control organisations, other service providers. All organisations listed in the unit content should be covered. Evidence can be based on one particular airport and learners can name the actual organisations involved. Evidence for P1 can be integrated with the evidence for P2.

To achieve P2, learners must describe the roles and operational procedures used by the different types of organisation (airport operator, airline, ground handler and regulatory and control organisations and other service providers). When describing the different operational procedures, at least two ramp handling activities should be included for airport operators, six for airlines/ground handlers/other service providers, and two for regulatory and control bodies.

To achieve P3, learners must explain why coordination is required to ensure safe and efficient aircraft turnaround and how it is achieved. All items listed in the unit content (separated by bullets) should be addressed within the evidence and this would include recognition of the type of coordination and communication methods used and the need for sequencing activities. Examples can be provided to support written or verbal evidence.

To achieve P4, learners must demonstrate an appreciation of the hazardous environment by identifying at least three hazards, explaining how they are minimised, and explaining at least one problem that can affect the efficiency of the turnaround. Evidence for P3 and P4 can be integrated.

To achieve P5, learners must explain how aircraft, vehicle and pedestrian movements are managed during aircraft turnaround. This could be based on the turnaround of one aircraft, and all items listed in the unit content need to be included in the evidence. Learners should support their evidence with examples, maps and diagrams.

To achieve P6, learners must explain the effects of at least four types of weather condition on aircraft turnaround and the actions taken to resolve/minimise those effects. Learners should include real examples to support their evidence and illustrate their findings.

P7 – P8 – P9 – P10 – M1

To achieve P7, learners must describe baggage and cargo loading and unloading methods. This will require a correct identification of the types of load (for example loose, palletised, containerised) and a description of the equipment and procedures used for each. Learners must also identify and describe at least two types of special cargo and the associated methods for handling.

To achieve P8, learners must provide three examples to demonstrate their understanding of factors that can impact on baggage and cargo handling, and explain why they have that impact.

To achieve P9, learners must describe the main passenger embarkation and disembarkation methods and procedures, highlighting the differences depending on the method used (i.e. via air-bridge, steps or coach).

To achieve P10, learners must give two embarkation examples and one disembarkation example to demonstrate an understanding of the factors that impact on passenger embarkation and disembarkation, for example heavy rain, and explain why they have that impact, and how they are managed. Evidence for P9 and P10 can be integrated.

To achieve M1, learners must compare the baggage and loading methods, passenger embarkation and disembarkation methods and procedures of at least two types of flight. The following two flight examples could be used, a low-cost carrier (LCC) operating a small aircraft on a domestic turnaround using an air-bridge, and, a full service airline with a large aircraft on a remote stand operating a domestic arrival and international departure. If other examples are used they must enable the learner to fully achieve M1.
P11 – P12 – M2

To achieve P11, learners must describe, demonstrating their knowledge of, legislation, airport bylaws and other procedures relating to the movement and operation of aircraft, vehicles and personnel on the ramp which ensure safety. They should describe the procedures used to meet such requirements, for example ground movement control (GMC) of aircraft and vehicles, identity passes and permits and the use of standardised procedures.

To achieve P12, learners must explain how monitoring, reporting, training and publication of safety incidents and performance all contribute to maintaining safe working practices.

To achieve M2, learners must analyse the importance of regulations, procedures and safe working practices giving recommendations for improving safe working practices. Learners should look closely at how safe working practices are maintained on the ramp, and give recommendations on how these practices could be improved.

D1

To achieve D1, learners must discuss the impact of non-compliance with safe and efficient aircraft turnround methods and procedures in relation to baggage, cargo, passengers and ramp safety regulations. Learners should be able to look closely at the impact of what would happen if ramp handling procedures were not followed. Learners should draw on evidence from all three learning outcomes in their response.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Pearson assignments to meet local needs and resources.

<table>
<thead>
<tr>
<th>Criteria covered</th>
<th>Assignment title</th>
<th>Scenario</th>
<th>Assessment method</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1, P2, P3, P4, P5, P6</td>
<td>Assignment 1: Ensuring Safe and Efficient Aircraft Turnround</td>
<td>You are an experienced ramp handler at an international UK airport. You are to design a leaflet to be given to new employees, taken on for an apprenticeship, that gives them an understanding of how to ensure safe and efficient aircraft turnround.</td>
<td>Leaflet</td>
</tr>
<tr>
<td>P7, P8, P9, P10, M1</td>
<td>Assignment 2: Aircraft Loading and Unloading Methods and Procedures in Relation to Baggage, Cargo and Passengers</td>
<td>You are an experienced ramp handler at an international UK airport. You are to deliver training that helps new employees to understand aircraft loading and unloading methods and procedures in relation to baggage, cargo and passengers.</td>
<td>Presentation Role play Report</td>
</tr>
<tr>
<td>P11, P12, M2</td>
<td>Assignment 3: How is Ramp Safety Regulated and Maintained?</td>
<td>You are an experienced ramp handler at an international UK airport. You are to write a report that describes regulations and procedures and explains how safe working practices are maintained.</td>
<td>Report</td>
</tr>
</tbody>
</table>
### Criteria covered | Assignment title | Scenario | Assessment method
---|---|---|---
D1 | Assignment 4: What Happens If Ramp Procedures Are Not Followed? | You are an experienced ramp handler at an international UK airport. You are to write a report which discusses the impact of non-compliance with safe and efficient aircraft turnaround methods and procedures in relation to baggage, cargo, passengers and ramp safety regulations. | Report

### Links to other BTEC units
This unit forms part of the BTEC Aviation sector suite. This unit has particular links with the following unit titles in the aviation suite.

<table>
<thead>
<tr>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 31: Airport Baggage Processing</td>
<td>Unit 4: Inter-relationships Within the UK Aviation Industry Unit 7: Customer Service in the Aviation Industry Unit 15: Passenger Terminal Management Within the Aviation Industry Unit 21: Aircraft Dispatch Unit 27: Airfield Operations</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### Essential resources
Learners must have access to library and research facilities and current trade publications.

### Employer engagement and vocational contexts
Industry visits and visits from guest speakers from the industry are recommended. Learners should have access to accurate and up-to-date industry case studies.
### Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

<table>
<thead>
<tr>
<th>Skill</th>
<th>When learners are …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent enquirers</td>
<td>describing roles and operational procedures used by organisations during aircraft turnaround and explaining how aircraft, vehicle and pedestrian movements are managed.</td>
</tr>
<tr>
<td>Team workers</td>
<td>role playing aircraft loading and unloading methods and procedures in relation to baggage, cargo and passengers</td>
</tr>
<tr>
<td>Self-managers</td>
<td>managing own workload and time.</td>
</tr>
</tbody>
</table>

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.
### Functional Skills — Level 2

<table>
<thead>
<tr>
<th>Skill</th>
<th>When learners are ...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICT — Use ICT systems</strong></td>
<td></td>
</tr>
<tr>
<td>Select, interact with and use ICT systems independently for a complex task to meet a variety of needs</td>
<td>planning a presentation on ensuring safe and efficient aircraft turnaround</td>
</tr>
<tr>
<td>Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used</td>
<td></td>
</tr>
<tr>
<td>Manage information storage to enable efficient retrieval</td>
<td>writing their assignments – ongoing</td>
</tr>
<tr>
<td>Follow and understand the need for safety and security practices</td>
<td>using the internet</td>
</tr>
<tr>
<td>Troubleshoot</td>
<td>as required</td>
</tr>
<tr>
<td><strong>ICT — Find and select information</strong></td>
<td></td>
</tr>
<tr>
<td>Select and use a variety of sources of information independently for a complex task</td>
<td>using the internet for research purposes</td>
</tr>
<tr>
<td><strong>ICT — Develop, present and communicate information</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Enter, develop and format information independently to suit its meaning and purpose including:  
  - text and tables  
  - images  
  - numbers  
  - records | planning a presentation on ensuring safe and efficient aircraft turnaround |
| Bring together information to suit content and purpose | |
| Present information in ways that are fit for purpose and audience | |
| Evaluate the selection and use of ICT tools and facilities used to present information | |
| **English** | |
| Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts | planning a presentation on ensuring safe and efficient aircraft turnaround |
| Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively | writing a report – What happens if ramp procedures are not followed? |