

# Unit 31: Airport Baggage Processing

<b>Unit code:</b>	<b>J/601/6472</b>
<b>QCF Level 2:</b>	<b>BTEC Specialist</b>
<b>Credit value:</b>	<b>3</b>
<b>Guided learning hours:</b>	<b>20</b>

## ● Aim and purpose

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding to enable them to correctly prepare passenger baggage for onward travel. This will enable the learner to sort, check and manifest accompanied and unaccompanied passenger baggage while meeting the security requirements laid down in the UK by the DfT. In addition, it will enable the learner to understand customer airline requirements for special handling due to class of travel or onward connections. The knowledge provided within this unit is fundamental to the security of the aircraft in flight. Any discrepancies in the baggage manifest and actual load could have serious implications for the safety of the aircraft. This unit is appropriate for all learners who plan to work as part of the team responsible for the preparation and sorting of baggage. It may also overlap with other job functions where the preparation of baggage is part of the work group function.

## ● Unit introduction

Every day, hundreds of thousands of pieces of passenger baggage are checked in, loaded, unloaded and reunited with their owners following flights all around the world. The vast majority of passengers don't give this a second thought as they say goodbye to their suitcase at the check-in desk but how do the systems in place ensure that only a small percentage of bags goes astray?

Baggage processing starts as soon as check-in opens, but to function efficiently, planning and preparation is required to make sure that systems, equipment and staff are in place. Once the aircraft has landed, the offload/onload procedure must be coordinated in the same way as a Formula 1 pit stop. Equipment and staff must be ready to remove the inbound bags and cargo, while the outbound load is already standing by to be loaded. Without well-coordinated baggage processing, this could not happen.

As with many aspects of the aviation industry, time is of the essence. Processing must take place as quickly as possible to ensure that aircraft depart on time, but accuracy cannot be compromised – safety and security are always the main priority and the knowledge provided within this unit is fundamental to the security of the aircraft in flight.

## ● Learning outcomes

**On completion of this unit a learner should:**

- 1 Know how to check the serviceability of baggage equipment
- 2 Understand how to interpret baggage labels
- 3 Understand the security requirements for transporting passenger baggage
- 4 Know how to complete baggage manifests.

# Unit content

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## 1 Know how to check the serviceability of baggage equipment

Baggage transport equipment:

- bulk loading, e.g. carts, tugs, conveyors, lifting platforms
- container loading, e.g. dollies, lower-deck loaders

Checks:

- brakes
- lights
- beacon
- indicators
- horn
- fuel quantity
- operating functions
- loose items
- debris in cab
- tow pin in place

Actions on finding defects:

- report to supervisor
- take to vehicle workshop
- placard unit 'unserviceable' (U/S)

## 2 Understand how to interpret baggage labels

Information on label:

- airline name
- flight number
- date
- final destination
- en-route transit points
- unique identifier
- sequence
- barcode

Types of baggage:

- single destination
- online transfer
- interline transfer

Need for segregation:

- class
- route, e.g. single destination, transfer
- fragile
- needed on arrival, e.g. wheelchair, pushchair

Special handling labels:

- heavy (HEA)
- fragile
- short connection (SHOCON)
- priority, e.g. first class
- crew

Required actions:

- two-person lifting
- handle with care
- load on top
- load near door
- place in separate hold

### **3 Understand the security requirements for transporting passenger baggage**

Security requirements:

- carts/containers loaded securely
- loads never unattended
- accompanied by AAA card

Requirements for unaccompanied bags (rush bags):

- manifested
- noted on load plan
- captain advised
- security certificate obtained

Security checks for unaccompanied bags (rush bags):

- X-ray from two angles
- explosive detection used
- security certificate issued

## 4 Know how to complete baggage manifests

Information on baggage manifests:

- date
- flight number
- destination
- sequence of AAA card
- container/cart number

Requirements for signing baggage manifests:

- security certificate held for unaccompanied bags
- bags loaded tally with AAA cards
- bags of any offloaded passengers removed
- person signing trained in AAA procedures

## 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.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<b>P1</b> Identify equipment used to transport baggage	<b>M1</b> Illustrate the checks and actions for one piece of baggage transport equipment found to have defects	<b>D1</b> Analyse the consequences of not following the correct procedures for equipment checks, baggage labelling and security requirements
<b>P2</b> Describe the checks that should be made when using equipment to transport baggage [IE]		
<b>P3</b> Describe the actions that should be taken on discovering defects		
<b>P4</b> Identify the information on baggage labels	<b>M2</b> Explain the importance of baggage labels containing the correct information	
<b>P5</b> Describe the different types of baggage		
<b>P6</b> Explain why different types of baggage may need segregation [IE]		
<b>P7</b> Describe the different types of special handling labels used by airlines		
<b>P8</b> Describe the actions each type of special handling label requires		

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<p><b>P9</b> Describe the security requirements for transporting passenger baggage</p> <p><b>P10</b> Identify the non-security requirements for unaccompanied baggage (rush bags)</p> <p><b>P11</b> Explain the different types of security checks for unaccompanied baggage [IE]</p> <p><b>P12</b> Identify information required on baggage manifests</p> <p><b>P13</b> Describe requirements for signing baggage manifests</p>	<p><b>M3</b> Compare the security related differences between accompanied and unaccompanied bags</p>	

**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.

<b>Key</b>	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

# Essential guidance for tutors

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## Delivery

The security procedures discussed in this unit make it very unlikely that on-site visits will be possible to support delivery. It may, however, be possible to secure the services of an airline or handling agent staff, familiar with the processes, to reinforce classroom input.

PowerPoint images can be used to great effect, illustrating the various types of baggage handling equipment available. YouTube can also be used – there are a number of sequences showing the on and offload processes. It is even possible to access some airline training material using this medium.

A demonstration of the different vehicles and equipment used to service bulk-loaded and containerised aircraft will highlight to learners the fact that not all aircraft are the same. As a result of these differences, baggage process operatives must become familiar with the different types of ground service equipment (GSE) and how they should be used. Despite the differences, most pre-use safety checks share a common theme. These are listed in the unit content. It would be interesting for learners to discuss the requirements and why they are important, together with the potential outcomes if they were not carried out, and these discussions will help towards the achievement of the higher grades (M1 and D1). Images from the internet can illustrate accidents and incidents. Once a vehicle or equipment defect has been found, it is important that learners are aware that a reporting process exists. This will vary from site to site, so a generic approach may be required.

To explain the format of the baggage label, it would be helpful to have some real examples in class. Learners may be able to bring in labels from holiday flights or family business trips to interpret. While it is not apparent to most travellers, baggage is not all loaded in the same way. The reason for the differences may be found on the baggage label (for example destination, routing) or on a supplementary label (for example heavy, fragile). A group discussion to explore the reasons for segregation and required action should cover the unit content and help learners towards a higher level of understanding for the achievement of M2.

Aircraft security is the prime motivation behind many of the baggage processes that take place at an airport. To introduce the topic, a brief background on how things can go wrong (for example Lockerbie) and how regulations change to reduce the risk (for example AAA) would be worthwhile. It is important to emphasise the responsibilities of all airside staff in maintaining a secure baggage environment. Measures such as transporting baggage securely and never leaving it unattended should be examined. The differences between accompanied and unaccompanied bags (rush bags) and how they must be processed should be discussed, this will give learners the opportunity to achieve M3. Further discussions on the consequences of incorrect baggage labelling will help towards achievement of D1.

The baggage manifest is a crucial document that must be completed before a flight departs. It states that all baggage loaded on the aircraft in question has been processed in compliance with current security regulations. As such, once signed, it becomes a legal document. All the criteria found in the unit content must be in place before the manifest is signed. Having an example of a manifest in class would aid understanding. With this knowledge and understanding learners can be guided to understand what could happen if the manifest was completed incorrectly. This would help with the learner's knowledge towards the achievement of the higher grade (D1).

## 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.

Topic and suggested assignments/activities and/assessment
Introduction to airport baggage processing including an explanation of the unit content. Introduction to the indicative reading material, including books, internet, journals etc.
Introduction to Assignment 1. PowerPoint presentation that contains images to effectively show the types of baggage-handling equipment used to transport baggage. YouTube clips to show the on and offload processes. Individual paper-based exercise to examine airline training material.
Tutor talk/presentation to demonstrate or visually show (through video/clips/photos) the different vehicles and equipment used to service bulk-loaded and containerised aircraft. Pairing exercise on how the differences of aircraft will determine the vehicles and equipment that are used. Discussion on the requirements of pre-use safety checks. Debate – Why are safety checks important? What happens if safety checks are not carried out? Photographic images to illustrate accidents and incidents. Q&A session on the types of defect that can occur and how they are reported.
<b>Preparation for assignment</b> <b>Assignment 1: Equipment, the Checks and Action for Defects</b> (P1, P2, P3, M1) <b>Feedback on assignment</b>
Introduction to Assignment 2. Learners to bring in examples of real-life labels from holidays to interpret. Research to determine the different types of baggage. Discussion – Is baggage always loaded the same way? What are the differences? YouTube clips. Group activity to determine the consequences of baggage labels being completed incorrectly.
<b>Preparation for assignment</b> <b>Assignment 2: Luggage labels; How they are interpreted</b> (P4, P5, P6, P7, P8, M2) <b>Feedback on assignment</b>

## Topic and suggested assignments/activities and/assessment

Introduction to Assignment 3.

Group discussion – Why is security important?

Tutor input – the requirements for transporting passengers.

Case study – Lockerbie – What can go wrong?

Class research activity to show how regulations can reduce the risk (e.g. AAA).

Small-group activity to show how to maintain a secure baggage environment.

Small-group discussion – Why should baggage be transported securely and never be left unattended?

Comparison exercise to determine the differences between accompanied and unaccompanied (rush bags) and how they should be processed.

Real-life manifest used to explain to learners what it is for and the requirements for signing.

### Preparation for assignment

**Assignment 3: Security Requirements** (P9, P10, P11, P12, P13, M3)

### Feedback on assignment

Introduction to Assignment 4.

Group discussion – consequences of incorrect baggage labelling.

Group exercise – recap the consequences of not following correct procedures for equipment checks.

Q&A to recap the consequences of not following security procedures.

### Preparation for assignment

**Assignment 4: The Consequences** (D1)

### Feedback on assignment

## Assessment

Evidence can be submitted through written reports or case studies, records of activities undertaken and oral presentations.

### P1 – P2 – P3 – M1

To achieve P1, learners must identify at least three types of bulk-loading equipment and three types of container-loading equipment used to transport baggage.

To achieve P2, learners must briefly describe all the checks listed in the unit content that should be made when using baggage transport equipment.

To achieve P3, learners must describe the three types of action that should be taken when discovering defects.

Learners should be able to link P2 and P3 by providing examples. A suggested activity to meet these assessment criteria would be for learners to prepare a short PowerPoint presentation illustrating the types of vehicle and equipment used to service both bulk-loaded and containerised aircraft. The presentation could describe the safety checks that should be undertaken and the actions required if faults are discovered.

To achieve M1, learners should be able to illustrate the checks for one piece of baggage transport equipment including the actions that should be taken on discovering defects. This could be in form of a flow chart or illustrated/annotated diagram that shows when and how each check should be carried out and the precautionary actions that are put in place to prevent accidents when defects are discovered.

## **P4 – P5 – P6 – P7 – P8 – M2**

To achieve P4, learners must identify the information on two different baggage labels. Tutors could provide a minimum of two typical baggage labels and ask learners to identify numbered elements, ensuring that all items in the unit content are included.

To achieve P5, learners must describe the different types of baggage including single destination, online transfer and interline transfer baggage.

To achieve P6, learners must explain why different types of baggage may need to be loaded separately, covering all the items listed in the unit content and providing examples.

To achieve P7, learners must briefly describe the five different types of special handling labels that may be attached to passenger baggage and, to achieve P8, they should briefly describe the actions that must be taken by baggage processing staff for each of the special handling labels used.

To achieve M2, learners should explain why it is important for baggage labels to contain the correct information, for example to ensure that they get to the correct destination safely and without breakage. Learners are not expected to produce an extra piece of work, they should extend their knowledge from the pass criteria and show an explanation for P4, P5, P6 and P7, P8. To support their explanations, learners may want to include the consequences of baggage labels being completed incorrectly and this will strengthen their evidence for M2 and also map towards the achievement of D1.

## **P9 – P10 – P11 – P12 – P13 – M3 – D1**

To achieve P9, learners must describe the requirements and systems in place to ensure that baggage is transported securely, covering all the items listed in the unit content.

To achieve P10, learners must identify the non-security requirements that must be fulfilled before unaccompanied baggage (rush bags) can be accepted on a passenger aircraft. Learners must then explain how security procedures ensure that unaccompanied baggage (rush bags) is safe to load on passenger aircraft to achieve P11.

To achieve P12, learners must identify essential information required on baggage manifests, and describe the requirements that must be satisfied before a baggage manifest may be signed to achieve P13.

To achieve M3, learners should compare accompanied and unaccompanied bags. This should not be in terms of the definitions for each but mainly the security differences between the two.

To achieve D1, learners should analyse the consequences of not following the correct procedures for equipment checks, baggage labelling and security requirements. Learners should include detailed examples to support their analyses, covering at least one equipment check (for example the tow pin not being in place could lead to the breakdown of the equipment and ultimately delayed flights), two for incorrect labelling and two for security requirements. Learners could include details of actual situations provided by those working or having worked in the industry.

## 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 Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, M1	Assignment 1: Equipment, the Checks and Action for Defects	You are working at one of the UK's busiest international airports. You have been asked to put together a leaflet that describes the equipment used to transport baggage, the checks that must be carried out and the actions that should be taken on discovering defects.	Leaflet with illustration
P4, P5, P6, P7, P8, M2	Assignment 2: Luggage Labels: How They Are Interpreted	Following the success of your leaflet you have been asked to give a presentation on how to interpret baggage labels.	Presentation
P9, P10, P11, P12, P13, M3	Assignment 3: Security Requirements	You have been asked to write a report which covers security requirements for transporting passenger baggage.	Written report 1-to-1 interview
D1	Assignment 4: The Consequences	Your final task is to address new recruits during a Q&A session. The session will analyse the consequences of not following the correct procedures for equipment checks, baggage labelling and security requirements, providing industry examples.	Q&A

## 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.

Level 2	Level 3	Level 4
n/a	Unit 4: Inter-relationships Within the UK Aviation Industry Unit 7: Customer Service in the Aviation Industry Unit 19: Handling Air Passengers Unit 20: Ramp Handling Unit 21: Aircraft Dispatch	n/a

## Essential resources

Learners must have access to an AAA card, baggage labels, including special handling labels (e.g. HEA, SHOCON, FRAGILE), baggage manifest, rush bag tags. Learners should also have access to the internet, and images of different baggage types (e.g. heavy, fragile) and ground service equipment (GSE).

## Employer engagement and vocational contexts

If possible an airport visit for learners to gain a visual understanding of the baggage process would be helpful. Guest speakers who are familiar with the airport baggage process, and are using current systems within the airport environment, would also be able to add to the vocational context of the unit.

## Indicative reading for learners

### Textbooks

Ashford N, Stanton H and Moore C – *Airport Operations* (2nd edition) (McGraw-Hill, 1997)  
ISBN 978-0070030770

Shanks N, Bradley A – *Handbook of Checked Baggage Screening: Advanced Airport Security Operation* (Wiley-Blackwell, 2004) ISBN 978-1860584282

### Journal

*Airports International* – Key Publishing Ltd

### Other publication

IATA – *Baggage Services Manual, 7th Edition* (IATA, 2006) 9362-07

## Websites

[www.caa.co.uk/default.aspx?catid=1767&pagetype=90&pageid=9848](http://www.caa.co.uk/default.aspx?catid=1767&pagetype=90&pageid=9848) Civil Aviation Authority (baggage security)

[www.caa.co.uk/default.aspx?catid=1767&pagetype=90&pageid=9849](http://www.caa.co.uk/default.aspx?catid=1767&pagetype=90&pageid=9849) Civil Aviation Authority (banned/dangerous goods)

[www.direct.gov.uk/en/TravelAndTransport/Foreigntravel/AirTravel/DG\\_176922](http://www.direct.gov.uk/en/TravelAndTransport/Foreigntravel/AirTravel/DG_176922) Government information on dangerous and restricted items

[www.iata.org/whatwedo/passenger/passenger\\_baggage/Pages/baggage\\_safety.aspx](http://www.iata.org/whatwedo/passenger/passenger_baggage/Pages/baggage_safety.aspx) IATA (passenger baggage information)

## 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.

Skill	When learners are ...
<b>Independent enquirers</b>	examining airline training material for baggage processing.

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.

Skill	When learners are ...
<b>Self-managers</b>	managing own work for assignments
<b>Effective participators</b>	participating in group discussions on the consequences of incorrect baggage labelling.

## ● Functional Skills — Level 2

Skill	When learners are ...
<b>ICT — Use ICT systems</b>	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	presenting a leaflet on equipment checks and action for defects
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	planning of a leaflet on equipment checks and action for defects
Manage information storage to enable efficient retrieval	planning of leaflet and presentation
Follow and understand the need for safety and security practices	ongoing
Troubleshoot	as required.
<b>ICT — Find and select information</b>	
Select and use a variety of sources of information independently for a complex task	planning a presentation on how luggage labels are interpreted
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	researching the different types of baggage.
<b>ICT — Develop, present and communicate information</b>	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> <li>• text and tables</li> <li>• images</li> <li>• numbers</li> <li>• records</li> </ul>	planning a presentation on how luggage labels are interpreted
Bring together information to suit content and purpose	delivering a presentation on how luggage labels are interpreted
Present information in ways that are fit for purpose and audience	planning a presentation on how luggage labels are interpreted
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	planning a presentation on how luggage labels are interpreted
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	writing a report on the consequences of not following the correct procedures for equipment checks, baggage labelling and security.