

Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge)

Specification

BTEC Specialist qualification

First teaching September 2010

Issue 3

Edexcel, BTEC and LCCI qualifications

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This specification is Issue 3. Key changes are listed in the summary table on the next page. We will inform centres of any changes to this issue. The latest issue can be found on the Pearson website: qualifications.pearson.com

This qualification was previously known as:

Edexcel BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) (QCF)

The QN remains the same.

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All information in this specification is correct at time of publication.

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Summary of Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) specification Issue 3 changes

Summary of changes made between previous issue and this current issue	Page number
All references to QCF have been removed throughout the specification	
Definition of TQT added	Page 1
Definition of sizes of qualifications aligned to TQT	Page 1
TQT value added	Page 3
QCF references removed from unit titles and unit levels in all units	Page 11
Guided learning definition updated	Page 11

Earlier issue(s) show(s) previous changes.

If you need further information on these changes or what they mean, contact us via our website at: qualifications.pearson.com/en/support/contact-us.html.

BTEC Specialist qualification title covered by this specification

Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge)

Qualifications eligible and funded for post-16-year-olds can be found on the funding Hub. The Skills Funding Agency also publishes a funding catalogue that lists the qualifications available for 19+ funding.

The qualification and unit codes will appear on learners' final certification documentation.

The Qualification Number for the qualification in this publication is:

Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) 501/0488/3

This qualification title will appear on learners' certificates. Learners need to be made aware of this when they are recruited by the centre and registered with Pearson.

This qualification is accredited by Ofqual as being part of Apprenticeships.

Welcome to BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge)

Focusing on the BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge)

This qualification provides learners with the underpinning skills, knowledge and understanding in health and safety, security and communications required to work in an aviation environment. Learners will also be able to choose an optional unit from a range of aviation operation functions, to develop skills, knowledge and understanding in the relevant area. This qualification is recognised as a component of the Apprenticeship Framework.

The Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) provides opportunities for the learner to progress into employment in the aviation industry, or to specialist qualifications, such as a Level 2 Diploma in Aviation Operations on the Ground.

This qualification has been developed in conjunction with employers.

Straightforward to implement, teach and assess

Implementing BTECs couldn't be easier. They are designed to easily fit into your curriculum and can be studied independently or alongside existing qualifications, to suit the interests and aspirations of learners. The clarity of assessment makes grading learner attainment simpler.

Engaging for everyone

Learners of all abilities flourish when they can apply their own knowledge, skills and enthusiasm to a subject. BTEC qualifications make explicit the link between theoretical learning and the world of work, by giving learners the opportunity to apply their research, skills and knowledge to work-related contexts and case studies. These applied and practical BTEC approaches give all learners the impetus they need to meet and the skills they require for workplace or education progression.

Recognition

BTECs are understood and recognised by a large number of organisations in a wide range of sectors. BTEC qualifications are developed with key industry representatives and Sector Skills Councils (SSC) to ensure that they meet employer and learner needs — **in this case the SSC GoSkills.**

All you need to get started

To help you off to a flying start, we've developed an enhanced specification that gives you all the information you need to start teaching BTEC. This includes:

- a framework of equivalencies, so you can see how this qualification compares with other Pearson vocational qualifications
- information on rules of combination, structures and quality assurance, so you can deliver the qualification with confidence
- explanations of the content's relationship with the learning outcomes
- guidance on assessment, and what the learner must produce to achieve the unit.

Don't forget that we're always here to offer curriculum and qualification updates, local training and network opportunities, advice, guidance and support.

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What are BTEC Level 2 Specialist qualifications?

BTEC Specialist qualifications are work-related qualifications available from Entry to Level 3 in a range of sectors. They give learners the knowledge, understanding and skills they need to prepare for employment in a specific occupational area. The qualifications also provide career development opportunities for those already in work. The qualifications may be offered as full-time or part-time courses in schools or colleges. Training centres and employers may also offer these qualifications.

Sizes of Specialist qualifications

For all regulated qualifications, Pearson specify a total number of hours that it is estimated learners will require to complete and show achievement for the qualification – this is the Total Qualification Time (TQT). The TQT value indicates the size of a qualification.

Within the TQT, Pearson identifies the number of Guided Learning Hours (GLH) that we estimate a centre delivering the qualification might provide. Guided learning means activities, such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, that directly involve tutors and assessors in teaching, supervising and invigilating learners. Guided learning includes the time required for learners to complete external assessment under examination or supervised conditions.

In addition to guided learning, other required learning directed by tutors or assessors will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.

As well as TQT and GLH, qualifications can also have a credit value – equal to one tenth of TQT, rounded to the nearest whole number.

TQT and credit values are assigned after consultation with users of the qualifications.

BTEC Specialist qualifications are generally available in the following sizes:

- Award – a qualification with a TQT value of 120 or less (equivalent to a range of 1–12 credits)
- Certificate – a qualification with a TQT value in the range of 121–369 (equivalent to a range of 13–36 credits)
- Diploma – a qualification with a TQT value of 370 or more (equivalent to 37 credits and above).

Pearson BTEC Level 2 Certificate

The Pearson BTEC Level 2 Certificate offers an engaging programme for those who are clear about the vocational area they want to learn more about. These learners may wish to extend their programme through the study of a related GCSE, a complementary NVQ/competence or other related vocational or personal and social development qualification. These learning programmes can be developed to allow learners to study complementary qualifications without duplication of content.

For adult learners the Pearson BTEC Level 2 Certificate can extend their knowledge and understanding of work in a particular sector. It is a suitable qualification for those wishing to change career or move into a particular area of employment following a career break.

Key features of the Pearson BTEC Level 2 in Aviation Operations on the Ground (Knowledge)

The Pearson BTEC Level 2 in Aviation Operations on the Ground (Knowledge) has been developed to give learners the opportunity to:

- engage in learning that is relevant to them and that will provide opportunities to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life
- meet a nationally recognised, Level 2, vocationally related qualification
- progress to employment in a particular vocational sector
- progress to related general and/or vocational qualifications.

National Occupational Standards

Where relevant, Pearson BTEC Level 2 qualifications are designed to provide some of the underpinning knowledge and understanding for the National Occupational Standards (NOS), as well as developing practical skills in preparation for work and possible achievement of NVQs/Competency qualifications in due course. NOS form the basis of National Vocational Qualifications (NVQs)/Competency qualifications in the sector. Pearson BTEC Level 2 qualifications do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context.

Each unit in the specification identifies links to elements of the NOS/Competency qualifications in *Annexe C*.

The Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) relates to the Aviation Operations NOS.

Rules of combination

The rules of combination specify the credits that need to be achieved, through the completion of particular units, for the qualification to be awarded. All accredited qualifications have rules of combination.

Rules of combination for the Pearson BTEC Level 2 qualifications

When combining units for a Pearson BTEC Level 2 in Aviation Operations on the Ground (Knowledge), it is the centre's responsibility to ensure that the following rules of combination are adhered to. The rules of combination for this qualification have been developed by the SSC GoSkills along with employer and industry groups.

The Total Qualification Time (TQT) for this qualification is 130.

Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge)

- 1 Qualification credit value: a minimum of 13 credits from Groups A and B1.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 13 credits.
- 3 All credits must be achieved from the units listed in this specification.

Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge)

The Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) is a 13-credit and 108-guided-learning-hour (GLH) qualification that consists of three mandatory units **plus** optional units that provide for a combined total of a minimum of 13 credits.

Learners must complete all units in Group A to obtain 12 credits, and then select one of the optional units from Group B1 to achieve a minimum total of 13 credits. Learners undertaking the Technical Certificate in the Aviation Operations on the Ground framework must take the three additional credits in Group B2.

Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge)			
Unit	Group A – Mandatory units	Credit	Level
1	Health and Safety within Aviation	4	2
2	Aviation Security	4	2
3	Aviation Communications	4	2
Unit	Group B1 – Optional units		
4	Airport Check-in Services	6	2
5	Aircraft Boarding and Arrival Services	4	2
6	Airport Baggage Processing	3	2
7	Loading and Unloading of Aircraft	3	2
8	Airport Baggage Facilities	2	2
9	Aviation passengers with special requirements	1	2
10	Aircraft Load Instruction Reports	2	2
11	Aircraft Marshalling	2	2
12	Support Flight Operations	2	2
13	Aircraft Dispatch Process	3	2
Unit	Group B2 – Additional units		
ERR1	Employment Rights and Responsibilities in the Passenger Transport Sector	3	2

Assessment

All units within this qualification are internally assessed. The qualifications are criterion referenced, based on the achievement of all the specified learning outcomes.

To meet a 'pass', a learner must have successfully passed **all** the assessment criteria.

Guidance

The purpose of assessment is to ensure that effective learning has taken place to give learners the opportunity to:

- meet the standard determined by the assessment criteria and
- meet the learning outcomes.

All the assignments created by centres should be reliable and fit for purpose, and should be built on the unit assessment criteria. Assessment tasks and activities should enable learners to produce valid, sufficient and reliable evidence that relates directly to the specified criteria. Centres should enable learners to produce evidence in a variety of different forms, including performance observation, presentations and posters, along with projects, or time-constrained assessments.

Centres are encouraged to emphasise the practical application of the assessment criteria, providing a realistic scenario for learners to adopt, and making maximum use of practical activities. The creation of assignments that are fit for purpose is vital to achievement, and their importance cannot be over-emphasised.

The assessment criteria must be clearly indicated in the assignments briefs. This gives learners focus and helps with internal verification and standardisation processes. It will also help to ensure that learner feedback is specific to the assessment criteria.

When designing assignments briefs, centres are encouraged to identify common topics and themes. A central feature of vocational assessment is that it allows for assessment to be:

- current, ie to reflect the most recent developments and issues
- local, ie to reflect the employment context of the delivering centre
- flexible to reflect learner needs, ie at a time and in a way that matches the learner's requirements so that they can demonstrate achievement.

Qualification grade

Learners who meet the minimum eligible credit value specified by the rule of combination will meet the qualification at pass grade.

In the Pearson BTEC Level 2 Specialist qualifications each unit has a credit value which specifies the number of credits that will be awarded to a learner who has met the learning outcomes of the unit. This has been based on:

- one credit for those learning outcomes achievable in 10 hours of learning time
- learning time being defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria
- the credit value of the unit remaining constant regardless of the method of assessment used or the qualification to which it contributes.

Quality assurance of centres

Pearson BTEC Level 2 qualifications provide a flexible structure for learners, enabling programmes of varying credits and combining different levels. For the purposes of quality assurance, all individual qualifications and units are considered as a whole.

Centres delivering the Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge), must be committed to ensuring the quality of the units and qualifications they deliver, through effective standardisation of assessors and verification of assessor decisions. Centre quality assurance and assessment is monitored and guaranteed by Pearson.

The Pearson quality assurance processes will involve:

- centre approval for those centres not already recognised as a centre for BTEC qualifications
- approval for the Pearson BTEC Level 2 qualifications and units
- **compulsory** Pearson-provided training and standardisation for internal verifiers and assessors leading to the accreditation of lead internal verifiers via the OSCA system
- quality review of the centre verification practice
- centre risk assessment by Pearson of overarching processes and quality standards
- remedial training and/or assessment sampling for centres identified through standardisation or risk assessment activities as having inadequate quality, assessment or internal verification processes.

Approval

Centres are required to declare their commitment to ensuring the quality of the programme of learning and providing appropriate assessment opportunities for learners that lead to valid and accurate assessment outcomes. In addition, centres will commit to undertaking defined training and online standardisation activities.

Centres already holding BTEC approval are able to gain qualification approval online. New centres must complete a centre approval application.

Quality assurance guidance

Details of quality assurance for the Pearson BTEC Level 2 qualifications are set out in centre guidance which is published on our website (qualifications.pearson.com).

Programme design and delivery

Mode of delivery

Pearson does not normally define the mode of delivery for Pearson BTEC Entry to Level 3 qualifications. Centres are free to offer the qualifications using any mode of delivery (such as full-time, part-time, evening only, distance learning) that meets their learners' needs. Whichever mode of delivery is used, centres must ensure that learners have appropriate access to the resources identified in the specification and to the subject specialists delivering the units. This is particularly important for learners studying for the qualification through open or distance learning.

Learners studying for the qualification on a part-time basis bring with them a wealth of experience that should be utilised to maximum effect by tutors and assessors. The use of assessment evidence drawn from learners' work environments should be encouraged. Those planning the programme should aim to enhance the vocational nature of the qualification by:

- liaising with employers to ensure a course relevant to learners' specific needs
- accessing and using non-confidential data and documents from learners' workplaces
- including sponsoring employers in the delivery of the programme and, where appropriate, in the assessment
- linking with company-based/workplace training programmes
- making full use of the variety of experience of work and life that learners bring to the programme.

Resources

Pearson BTEC Level 2 qualifications are designed to give learners an understanding of the skills needed for specific vocational sectors. Physical resources need to support the delivery of the programme and the assessment of the learning outcomes, and should therefore normally be of industry standard. Staff delivering programmes and conducting the assessments should be familiar with current practice and standards in the sector concerned. Centres will need to meet any specific resource requirements to gain approval from Pearson.

Where specific resources are required, these have been indicated in individual units in the *Essential resources* sections.

Delivery approach

It is important that centres develop an approach to teaching and learning that supports the vocational nature of Pearson BTEC Level 2 qualifications and the mode of delivery. Specifications give a balance of practical skill development and knowledge requirements, some of which can be theoretical in nature. Tutors and assessors need to ensure that appropriate links are made between theory and practical application and that the knowledge base is applied to the sector. This requires the development of relevant and up-to-date teaching materials that allow learners to apply their learning to actual events and activity within the sector. Maximum use should be made of learners' experience.

Functional Skills

Pearson Level 2 BTEC Specialist qualifications give learners opportunities to develop and apply Functional Skills. Functional skills are, however, not required to be achieved as part of the BTEC Specialist qualification(s) rules of combination. Functional Skills are offered as stand-alone qualifications. For a mapping of the BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) to Level 1 Functional Skills standards, please see *Annexe D*.

Access and recruitment

Pearson's policy regarding access to its qualifications is that:

- they should be available to everyone who is capable of reaching the required standards
- they should be free from any barriers that restrict access and progression
- there should be equal opportunities for all wishing to access the qualifications.

Centres are required to recruit learners to BTEC qualifications with integrity. This will include ensuring that applicants have appropriate information and advice about the qualifications and that the qualification will meet their needs. Centres should take appropriate steps to assess each applicant's potential and make a professional judgement about their ability to successfully complete the programme of study and meet the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study, and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Pearson's policy on learners with particular requirements.

Centres will need to review the entry profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to a higher level qualification.

Restrictions on learner entry

The Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) is accredited for learners aged 16 and above.

Access arrangements and special considerations

Pearson's policy on access arrangements and special considerations for BTEC and Pearson NVQ qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the 2010 Equality Act) without compromising the assessment of skills, knowledge, understanding or competence.

Further details are given in the policy document *Access Arrangements and Special Considerations for BTEC and Pearson Edexcel NVQ Qualifications*, which can be found on the Pearson website (qualifications.pearson.com). This policy replaces the previous Pearson policy (Assessment of Vocationally Related Qualifications: Regulations and Guidance Relating to Learners with Special Requirements, 2002) concerning learners with particular requirements.

Recognition of Prior Learning

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

Pearson encourages centres to recognise learners' previous achievements and experiences whether at work, home or at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning.

RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be sufficient, reliable and valid.

Unit format

Each unit has the following sections.

Unit title

This is the formal title of the unit that will appear on the learner's certificate.

Unit reference number

Each unit is assigned a unit reference number that appears with the unit title on the Register of Regulated Qualifications.

Level

All units and qualifications have a level assigned to them. The level assigned is informed by the level descriptors defined by Ofqual, the qualifications regulator.

Credit value

All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can only be awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.

Guided learning hours

Guided Learning Hours (GLH) is the number of hours that a centre delivering the qualification needs to provide. Guided learning means activities that directly or immediately involve tutors and assessors in teaching, supervising, and invigilating learners, for example lectures, tutorials, online instruction and supervised study.

Unit aim

The aim provides a clear summary of the purpose of the unit and is a succinct statement that summarises the learning outcomes of the unit.

Unit introduction

The unit introduction gives the reader an appreciation of the unit in the vocational setting of the qualification, as well as highlighting the focus of the unit. It gives the reader a snapshot of the unit and the key knowledge, skills and understanding gained while studying the unit. The unit introduction also highlights any links to the appropriate vocational sector by describing how the unit relates to that sector.

Learning outcomes

The learning outcomes of a unit set out what a learner is expected to know, understand or be able to do as the result of a process of learning.

Assessment criteria

The assessment criteria of a unit specify the standard a learner is expected to meet to demonstrate that a learning outcome, or set of learning outcomes, has been met. The learning outcomes and assessment criteria clearly articulate the learning achievement for which the credit will be awarded at the level assigned to the unit.

Unit content

The unit content identifies the breadth of knowledge, skills and understanding needed to design and deliver a programme of learning to meet each of the learning outcomes. This is informed by the underpinning knowledge and understanding requirements of the related National Occupational Standards (NOS), where relevant. The content provides the range of subject material for the programme of learning, and specifies the skills, knowledge and understanding required for achievement of the unit.

Each learning outcome is stated in full, and then the key phrases or concepts related to that learning outcome are listed in italics, followed by the subsequent range of related topics.

Relationship between content and assessment criteria

The learner should have the opportunity to cover all of the unit content.

It is not a requirement of the unit specification that all the content is assessed. However, the indicative content will need to be covered in a programme of learning in order for learners to be able to meet the standard determined in the assessment criteria.

Content structure and terminology

The information below shows how the unit content is structured, and gives the terminology used to explain the different components within the content.

- Learning outcome: this is shown in bold at the beginning of each section of content.
- Italicised sub-heading: it contains a key phrase or concept. This is content which must be covered in the delivery of the unit. Colons mark the end of an italicised sub-heading.
- Elements of content: the elements are in plain text and amplify the sub-heading. The elements must be covered in the delivery of the unit. Semi-colons mark the end of an element.
- Brackets contain amplification of content which must be covered in the delivery of the unit.
- 'eg' is a list of examples, used for indicative amplification of an element (that is, the content specified in this amplification could be covered or could be replaced by other, similar material).

Essential guidance for tutors

This section gives tutors additional guidance and amplification to aid understanding and a consistent level of delivery and assessment. It is divided into the following sections.

- *Delivery* – explains the content's relationship to the learning outcomes, and offers guidance about possible approaches to delivery. This section is based on the more usual delivery modes but is not intended to rule out alternative approaches.
- *Assessment* – gives amplification of the nature and type of evidence that learners need to produce in order to achieve the unit. This section should be read in conjunction with the assessment criteria.
- *Essential resources* – identifies any specialist resources needed to allow learners to generate the evidence required for each unit. The centre will be asked to ensure that any requirements are in place when it seeks approval from Edexcel to offer the qualification.
- *Indicative resource materials* – gives a list of learner resource material that benchmarks the level of study.

Units

Unit 1: Health and Safety within Aviation	16
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Unit ERR1: Employment Rights and Responsibilities in the Passenger Transport Sector	111

Unit 1: Health and Safety within Aviation

Unit reference number: L/601/6456

Level: 2

Credit value: 4

Guided learning hours: 32

Unit aim

The aim of this unit is to allow the learner to develop knowledge and understanding of the principles of health and safety within aviation. This will enable the learner to contribute towards maintaining a safe work environment. The significance of health and safety within the industry can be re-enforced by examining relevant case studies of accidents and incidents relating to aviation and the airport environment.

The knowledge provided by this unit can be related to all job roles within the airport environment and the unit is appropriate for any learner before they undertake activities at an airport - regardless of specific job.

Unit introduction

Airports can be exciting places, but there are many dangers that must be managed to ensure that staff and passengers are not put at risk. At times airports can be extremely busy, with aircraft arriving and departing every few minutes. Many of us have experienced airports as part of our holiday journeys – most of us don't give a second thought to how the bags, food, fuel, passengers and crew all end up safely on the correct aircraft. In order to make all the pieces of this puzzle fit together, it is essential that health and safety is regarded as the most important element of all airport workers' jobs.

By examining the hazards that exist airside, new staff will be in a stronger position to stay safe and take personal responsibility for their own wellbeing and that of their colleagues.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Know how to prevent and minimise risks and hazards airside	1.1 identify different types of airside hazards 1.2 identify different types of airside risks 1.3 identify differing types of aircraft hazards 1.4 identify different types of aircraft risks 1.5 describe how risks from airside and aircraft hazards can be prevented or minimised 1.6 describe airside surface markings 1.7 describe the correct procedures for reporting safety breaches 1.8 identify the correct persons to report to when a breach of safety has been identified
2 Understand how to contribute to airport safety	2.1 identify the main points of local airport rules and regulations 2.2 describe the procedures for fire reporting 2.3 describe the process for reporting accidents and damage locally 2.4 identify the personal protective equipment (PPE) used airside 2.5 explain personal responsibility for own safety, and that of others

Unit content

1 Know how to prevent and minimise risks and hazards airside

Airside: hazards (noise, fumes, vehicles, bags, cargo); risks (staff, passengers, slip, trip, manual handling, collision, crushing)

Aircraft: hazards (jet engines, propellers, flaps, airstairs, doors, taxiing, push-back); risks (staff, passengers, ingestion, blast, foreign object debris (FOD), collision)

Prevention and minimisation of risks and hazards: initial training; refresher training; assessment; licensing; inspections by eg company, Airport Authority, regulatory body; risk assessment; reporting; supervision

Airside surface marking: apron; taxiway; runway; roads; painted; signs; lights; pedestrian walkways

Reporting safety breaches: persons to report to (company supervisor, airport authority, air traffic control (ATC), aircraft engineer); reporting procedures (written report, photograph, follow-up, learning from potential accidents); safety breach situations eg immediate attention, routine situations, urgent situations

2 Understand how to contribute to airport safety

Airport rules and regulations: Air Navigation Order (ANO) (CAP393); Licensing of Aerodromes (CAP168); aerodrome manual; company procedures; restricted items; restricted access; smoking; driving

Fire reporting: immediate actions; subsequent actions; phone numbers (internal, external)

Reporting accidents: types of vehicle accidents (involving vehicles, pedestrians, aircraft); level of damage/injury (fatal, serious, moderate, slight, potential); report to eg company supervisor, airport authority, aircraft engineer, ATC, Health and Safety Executive (HSE); learning from accidents

Personal protective equipment (PPE): high visibility; footwear; gloves; ear protection; eye protection; foul weather protection

Personal responsibility – self and others: Health and Safety at Work Act (HASAW) (1974); reporting dangerous occurrences; reporting unsafe equipment; following standard operating procedures (SOPs)

Essential guidance for tutors

Delivery

Most learners will be aware of the need to remain safe in their own personal environment, whether that be at school, college or in a social setting. The purpose of this unit is to build on that fundamental knowledge by introducing learners to aviation risks and situations that may be unfamiliar to, and unimagined by, them.

Health and safety needs to be delivered with energy and enthusiasm, to retain the interest of learners throughout, as it is possibly one of the most important units they will study. Most airports have a health and safety department staffed by very enthusiastic individuals who are often willing to share their knowledge. Frequently they will agree to visit centres to spread their message where a site visit is not possible.

Hazards and risks can be difficult to separate, but for the purposes of this unit, a *hazard* is considered to be the cause, and the *risk* is the potential result – for example a badly-driven vehicle is a *hazard* which presents a *risk* of collision to staff and passengers. Hazards and risks have been sub-divided into *airside* and *aircraft* – clearly there will be some crossover because at an airport, all aircraft hazards are airside – the distinction is intended to promote the discussion of hazards and risks solely caused by aircraft and those caused by other factors (eg vehicles, manual handling, noise, fumes).

Once the *hazards* and *risks* have been identified, it is essential that learners are aware of procedures that *minimise* the potential for harm and damage. Most learners will be familiar with the concept of training, assessment and qualification – this can be expanded to a workplace scenario. The level of training assessment and licensing varies according to the tasks, but every job airside that involves *hazard* and *risk* also requires some form of qualification. For example, to drive a baggage conveyor airside, the operator would have to be in possession of a full UK driving licence; have passed the Airport Operators Association (AOA) Airside Driving test; be qualified locally at the airport in question and would also be tested and licensed on the particular type of vehicle. In parallel with the training and regulation illustrated above, airports also have systems in place. One important system is surface markings and signs. These are readily available on the internet (CAP168), and could be effectively included on the chart with an explanation of their meaning.

To demonstrate the links between hazards and risks, it would be interesting for learners to create a large flow chart (A3 paper or larger, or computer based) with pictures of the *hazards* across the top, feeding down to pictures of associated *risks* underneath. This chart could then be further expanded to include links to written descriptions of how particular risks are minimised.

Within the classroom it is possible to source many images from the internet that can be used to illustrate both hazards and risks. It would be an excellent introduction to the subject to show a series of pictures of a busy apron, asking learners to identify the hazards and their associated risks. The discussion session could then be extended to discover how these can be reduced. Prevention and minimisation of risks and hazards is an interesting subject, and tutors should emphasise the importance of training (initial and refresher), and the need for assessment, licensing and inspections (both internal and external). When covering inspections, learners should be made aware of the different levels of inspection, including inspections by company supervisors, by airport authorities and by

agencies such as CAA and HSE creating an auditable trail. Risk assessment should be covered with some practical applications.

Further debate could then follow on the most appropriate way in which to report any safety breaches, with a view to preventing serious incidents. Particular emphasis should be given to the safety implications of *not* reporting safety breaches involving aircraft.

To understand local regulations it is necessary for learners to contextualise how airports fit into the national system. HASAW (1974), CAP393 and CAP168 are all key elements. HASAW can be introduced as the overarching piece of health and safety legislation that covers all workplaces – giving shared responsibility for safety to employers and employees. The two CAPs can then be introduced to demonstrate how, because of the specialised nature of the industry, some regulations fall within the jurisdiction of the Civil Aviation Authority (CAA). Encouraging learners to explore the contents pages of the CAPs provides a good insight into the scope of the regulations. To conclude this section, learners must become aware of personal and collective responsibility for health and safety. This can be explored by posing potential safety breaches (eg speeding, smoking, unescorted passengers, not wearing PPE) then discussing who should be responsible for reporting them.

Using the knowledge gained in learning outcome 1, learners could be split into groups to discuss the most appropriate way in which to report a selection of accidents or incidents that may occur on the apron. These accidents could involve staff, passengers or equipment. They could be minor or serious. In large classes, it might be possible to introduce role play (some learners involved in the accident, others preparing a report in its most appropriate format) to discover the most tenacious investigators among the groups.

A health and safety representative, or even a competent member of airside staff, would be able to provide a demonstration of required PPE, and explain its function.

Assessment

Assessment for this unit should be evidenced, wherever possible, through learners' own workplace roles or, if this is not possible, through classroom activities or simulations. Evidence can be submitted through written reports or case studies, records of activities undertaken and oral presentations.

To meet 1.1, learners will need to identify at least five different types of airside hazard, one for each of the types listed in the content.

To meet 1.2, learners will need to identify at least eight different types of airside risk, one for each of the types listed in the content.

To meet 1.3, learners will need to identify at least seven different types of aircraft hazard, one for each of the types listed in the content.

To meet 1.4, learners will need to identify at least seven different types of aircraft risk, one for each of the types listed in the content.

For 1.1, 1.2, 1.3 and 1.4, evidence for identification can be presented in written format using illustrations, or through oral presentations using visual aids.

Having identified the risks and hazards in 1.1, 1.2, 1.3 and 1.4, learners can meet 1.5 by describing how these risks and hazards can be prevented or minimised. These descriptions should cover at least five of the eight types listed in the content. The descriptions should be brief and supported by reference to industry examples.

To meet 1.6, learners should describe airside surface markings covering all the items listed in the content. These descriptions should be short, in written format or evidenced through oral presentations using visual aids. Learners in the workplace could, ideally, identify and describe real airside surface markings.

To meet 1.7 and 1.8, learners will conclude the assessment of learning outcome 1 by describing the correct procedures for reporting safety breaches and identify the correct persons to report to when a breach of safety has been identified. Learners should be able to differentiate between a range of situations, eg spoken word for situations requiring immediate attention; written report to follow-up a verbal report, and routine situations; photographs for evidence; immediate supervisor for routine occurrences; control authorities (police, fire, ambulance, Border Agency) for urgent situations; ATC for flight safety concerns and Airport Authority for airfield safety or security issues. Learners should ensure they cover all items listed in the content across a range of situations.

For all criteria within learning outcome 2, learners must relate topics to how they contribute to health and safety. It might be appropriate for learners to produce a portfolio explaining in fundamental terms how individual workers can contribute to everybody's safety airside. Each heading could be illustrated, as there are plenty of suitable images available on the internet. Initially, the sources and types of regulation should be identified as described in the unit content.

To meet 2.1, learners should identify the main points of each of the local airport rules and regulations listed in the content.

Systems for reporting fires and accidents or damage differ from airport to airport. A generic approach should therefore be taken when describing the procedures for fire reporting in order to meet 2.2. All items listed in the content should be covered within the descriptions.

To meet 2.3, learners should describe the process for reporting local accidents and damage, differentiating between fatal, serious, moderate, slight and potential levels of damage/injury and identifying who to report to. Learners should cover the three types of vehicle accident listed (vehicles, pedestrians, aircraft). Learners should also include a short description of the process of learning from accidents. Descriptions can be in written format or using oral presentation.

To meet 2.4, learners must identify the personal protective equipment (PPE) used airside. Learners can use images of PPE (possibly sourced from the internet), or real equipment from the workplace. Learners should name typical protective equipment and briefly state its purpose. Evidence can be in written format using images or presented using real equipment. All items listed in the content must be covered.

In order to meet 2.5, and as a conclusion to the unit, learners should explain why all staff must take personal responsibility for themselves and others while airside. This could include examples of what may happen if this did not happen. All items listed in the content should be covered, and evidence can be in written format or orally presented, using industry examples to support the explanations.

Essential resources

- PPE samples (Hi-Vis jacket, ear defenders, protective footwear)
- Internet access

Indicative resource materials

Texts

Ashford N, Matin Stanton H P, Moore C – *Airport Operations* (McGraw-Hill, 1997)
ISBN 978 0070030770

Doganis R – *The Airline Business* (Routledge, 2005) ISBN 978 0415346153

Miyagi M – *Serious Accidents and Human Factors: Aviation Safety Through Incident Reporting Analysis* (WileyBlackwell, 2005) ISBN 978 1860584732

CAA – CAP 393

CAA – CAP 168

Journals

Airports International – Key Publishing Ltd

Flight International – Reed Business Information Ltd

Websites

www.caa.co.uk Civil Aviation Authority

www.hse.gov.uk Health and Safety Executive

www.youtube.com YouTube is an effective source of clips to demonstrate engine blast and ingestion

Unit 2: Aviation Security

Unit reference number: Y/601/6458

Level: 2

Credit value: 4

Guided learning hours: 32

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of the importance of security within aviation. This will enable the learner to contribute to a secure air travel environment. The significance of robust security systems within the industry is re-enforced by relevant case studies of accidents and incidents relating to aviation security within the airport environment.

The knowledge in this unit is fundamental to all activities within the airport environment. This unit is appropriate for all learners before they undertake activities at an airport - regardless of specific job.

Unit introduction

In recent years, airport security has become an issue that frequently hits the headlines – usually for the wrong reasons. Airports and airlines are part of a high-profile industry that remains attractive to the general public but unfortunately also to international criminals and terrorists.

There are many ways in which unscrupulous individuals attempt to breach aviation security. The result is an array of security systems that are designed to protect airports, airlines, passengers and staff and to deter those who may wish to cause harm. The threat is always changing, so it is important that security systems keep pace with the risk.

Within this unit we shall identify the legal framework designed to protect the industry, then explore the types of threat and the risks they pose, together with the industry's response. While it is not easy to gain access to airport security screening areas, there is plenty of material in the public domain (for example International Civil Aviation Organization (ICAO), Civil Aviation Authority (CAA), Department for Transport (DfT) and trade journals) on which to base case studies and practical exercises.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Understand threats to security	1.1 describe how potential security risks can impact on aviation business 1.2 explain appropriate responses to security breaches 1.3 describe the personal responsibility in relation to security risks 1.4 identify the main role of key aviation regulatory bodies 1.5 identify restricted zones
2 Understand procedures which minimise threats to security	2.1 identify legislation relating to security in the aviation environment 2.2 summarise the key features of legislation that relate to security in the aviation environment 2.3 describe the security procedures and protocols in the airport environment 2.4 explain the importance of security procedures and protocols 2.5 describe the key stages of AAA

Unit content

1 Understand threats to security

Potential security risks: to staff and to passengers; weapons eg knife, gun; improvised explosive devices (IED); other improvised weapons eg glass, cutlery, needle, scissors; hijack of aircraft (on the ground, in the air); unattended bags in airport; unaccompanied bags on aircraft; impact on aviation business (airline, airport) eg delays, cancellations, aircraft damage, financial, reputation

Security breaches: unauthorised access to restricted zones by persons known and unknown; issues with ID eg forged identity passes, stolen identity passes; inappropriate responses to security questions at check-in; carriage of restricted items identified at screening (in hold baggage, on the aircraft)

Responses: removal of restricted items (liquids, blades, explosives); use of CCTV eg to track suspicious persons, to identify unattended baggage; use of security questions eg at check-in; arrest of passengers and of staff; emergency procedures for specific security breaches eg unauthorised persons in restricted zones, explosive devices found on aircraft, unattended baggage located at airport; role of police and special branch

Personal responsibility: staff following company procedures and awareness of risks (check-in, security, boarding, cabin crew); passengers' compliance with rules eg unattended baggage, restricted items; awareness of security breaches by staff and passengers

Role of aviation regulatory bodies: role in relation to maintaining security; International Civil Aviation Organization (ICAO); European Aviation Safety Agency (EASA); Department for Transport (DfT); Civil Aviation Authority (CAA)

Restricted zones: airside locations; landside locations

2 Understand procedures which minimise threats to security

Legislation: Aviation and Maritime Security Act 1990; Anti-terrorism, Crime and Security Act 2001; by-laws

Security procedures and protocols: for passengers, baggage and cargo; screening and searching; equipment eg archway metal detector (AMD), wand, x-ray; personnel eg uniformed patrols, undercover patrols, dog-handlers; importance eg to minimise threats to security, duty of care, legal obligation, public image, public confidence

The Accounting and Authoring of Hold Baggage for Carriage by Air (AAA): key stages (bag tag, unique number, bar code, bingo card, reconciliation, manifest)

Essential guidance for tutors

Delivery

Learners already working at the airport will be familiar with airport security systems and will appreciate the importance of security within the airport environment. For those learners not yet in aviation employment, gaining access to active airfield security departments may be difficult. Because of the nature of the job, most security providers are reluctant to share their operational procedures with external groups. As a result, it may be necessary to provide a class-based unit with practical activities to support the input.

Many learners will have experienced airport security systems while passing through airports, sometimes feeling that officers are over-strict. Through this unit, security processes and protocols will be clarified and explained. The police units at many airports have an 'outreach' system designed to engage potential airport workers. An early visit by a police or security officer would ensure that the seriousness of the topics being discussed is apparent.

In order to benefit fully from the unit, learners must be introduced to the potential risks of security breaches followed by systems to prevent risks becoming reality, most of which are responses to previously identified threats. To make sense of the methods, learners should be guided through the processes sequentially as they occur at a typical airport. Classroom input can be re-enforced by individual observation, assuming that some learners have passed through airport security (either on a visit or on a flight). If this is not possible or practical, role play can be used to replicate some of the security systems. Using plans of actual airports, learners must be able to identify restricted zones, their purpose, and how they are controlled.

Once risks and responses are established, learners should be made aware of the importance of all staff taking personal responsibility for security – in other words, they should not assume that 'somebody else' will report that suspicious bag in the terminal or the unidentified stranger airside. Equally, passengers must be aware that security is a shared responsibility.

To support the above practical elements of aviation security, learners must be guided through the key aspects of legislation. They should understand how security incidents worldwide (examples found in news reports and trade journals) lead to recommendations from bodies such as ICAO, and cascade down through regional and national bodies (EASA, CAA, DfT) to become law.

The primary UK legislation that covers security is listed in the unit content. By looking through the introductory pages of the relevant documents (available at <http://www.opsi.gov.uk/acts>) it is possible to gain a broad understanding of the scope of the laws without becoming bogged down in the detail. Learners would also be expected to consider which by-laws are used at their local airport to benefit security.

To reinforce the understanding of security systems in place (LO1), learners should be exposed to a practical demonstration of how the systems work. It may be possible to arrange a visit to a non-operational part of an airport to see the x-rays, AMDs and wands in action. If this is not possible, this element could be introduced earlier, (backed up by video clips and slides) by the visiting speaker.

One of the most important security rules introduced in recent years is the AAA baggage reconciliation system. Access to a stock of baggage tags is unlikely, so learners could be encouraged to create their own tags and bingo cards (either on paper or computer) based on images available from the internet. It is essential that all learners become familiar with the purposes of the component parts of both.

Assessment

Assessment for this unit should be evidenced, wherever possible, through learners' own workplace roles or, if not possible, through classroom activities or simulations. Evidence can be submitted through written reports or case studies, records of activities undertaken and oral presentations.

To meet 1.1, learners must describe at least five potential security risks and describe how these can impact on aviation businesses. One method of assessment for 1.1 could be using a large paper (or a computer) where learners create a schematic diagram of a section of an airport that includes a check-in desk, security screening zone, the landside/airside divide, a boarding gate and the apron. Within the diagram they should highlight areas where potential security issues may be a problem and describe how they might affect the airport/airline. It would be possible to integrate 2.3 by learners describing the systems in place to control the security risks and also 1.5 by identifying, on the diagram, the restricted zones.

To meet 1.2, learners must explain the use of appropriate responses to a minimum of four security breaches, one for each item listed in the content. The full range of responses should be covered across the entirety of the evidence.

To meet 1.3, learners must briefly describe the responsibility that everybody has in relation to security risks. The description can be in written format or in the format of a verbal presentation and must cover the range within the content.

To meet 1.4, learners must identify the main role of the four key aviation regulatory bodies as defined in the content. Learners could create a flowchart of the main regulators – showing the nominal cascade of responsibility – to allow them to identify the key roles of each body. To meet 1.5, learners must identify restricted zones both landside and airside. Evidence can be in the format of a written list, annotations on a map of an airport, or as part of a verbal presentation with illustrations/charts to support evidence.

To meet 2.1 and 2.2, learners must identify the two Acts as given in the content, and briefly summarise the key parts of the Acts that relate to aviation security. This may be in written format or could be an oral presentation with supporting evidence.

To meet 2.3 and 2.4, learners must describe the security procedures and protocols in the airport environment and then explain their importance. This evidence can be linked to other criteria in learning outcome 1. Learners can present their evidence in written format - perhaps using charts and diagrams or using a combination of role play and presentation, demonstrating how security procedures and protocols are followed and explaining their importance. Learners must relate their evidence to passengers and baggage and cargo and must cover the three main topics (screening and searching; equipment; personnel).

To meet 2.5, learners must describe the key stages of AAA, covering all the items listed in the content within their evidence.

Essential resources

- Internet access
- Suitcase/carry-on case
- Baggage tags/bingo cards (possibly made in class)

Indicative resource materials**Texts**

Ashford N, Matin Stanton H P, Moore C – *Airport Operations* (McGraw-Hill, 1997)
ISBN 978 0070030770

Doganis R – *The Airline Business* (Routledge, 2005) ISBN 978 0415346153

Thom T – *Aviation Law and Meteorology* (Air Pilot Publisher Ltd, 2007)
ISBN 978 1843360667

IATA Dangerous Goods Regulations

Websites

www.asi-mag.com	Aviation Security International magazine
www.caa.co.uk	Civil Aviation Authority
www.dft.gov.uk	Department for Transport
www.easa.eu.int	European Aviation Safety Agency
www.icao.int	International Civil Aviation Organization
http://www.opsi.gov.uk/acts/acts1990	Office of Public Sector Information – Acts of UK Parliament 1990
www.telegraph.co.uk	The Telegraph newspaper
www.timesonline.co.uk	The Times newspaper

Unit 3: Aviation Communications

Unit reference number: Y/601/6461

Level: 2

Credit value: 4

Guided learning hours: 34

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of the principles of communication within aviation. This will enable the learner to communicate relevant information, both formally and informally, to all relevant and interested parties. Accurate communication within the industry is paramount.

The knowledge gained from this unit is fundamental to all activities within the aviation industry. This unit is appropriate for all learners prior to them undertaking activities at an airport regardless of specific job.

Unit introduction

Communication is much more than just talking. It assumes an exchange of information that is clear, accurate and understood correctly by both parties. In the hectic environment frequently experienced in a busy airport, this is not always as straightforward as may be thought. Not only do we need to examine types of communication and their uses but we also must discover how barriers to communication can cause inconvenience, delays, expense and even unsafe situations.

This is a unit that lends itself to the on-the-job training model. All the learning outcomes can be covered by learners working under supervision. In the classroom, there is great scope for role play as, of course, communication involves more than one person – sometimes large groups.

Many people find talking in public uncomfortable. Frequently, job roles within the aviation industry require staff to speak with self-assurance, authority and diplomacy to members of the public and other staff. On completion of this unit, learners should have been given the opportunity to exercise and strengthen their communication skills.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Be able to carry out effective aviation communications	1.1 communicate using correct communication methods and protocols 1.2 explain systems used for aviation communication 1.3 identify communication methods used in aviation 1.4 describe the terminology used in aviation communication 1.5 explain the importance of accuracy in aviation communication 1.6 identify protocols that should be adhered to when communicating 1.7 explain time-related codes relevant to aviation
2 Be able to carry out effective transfer of aviation information	2.1 receive and relay appropriate and accurate information to appropriate persons 2.2 explain the reasons for storing aviation communication 2.3 identify the flight documents involved in the transfer of flight information 2.4 identify appropriate persons that require flight documents 2.5 identify the types of information that must be transferred 2.6 explain the implications of failures in communication

Unit content

1 Be able to carry out effective aviation communications

Communicate: clear voice; even pace; steady volume; correct wording

Communication methods and systems: voice eg fixed line telephone, mobile phone, hand-held radio, air to ground radio, public address system; unspoken eg lights, hand signals, alarms; written eg email, SITA, SMS, manuals, Flight Information Display system (FIDS), signs, noticeboard

Terminology and accuracy: choice of words; Civil Aviation Authority (CAA) radiotelephony manual; phonetic alphabet; reasons; AIRIMP; potential outcomes of errors eg, confusion, delays, costs, safety breaches

Protocols: standard radiotelephony (R/T) procedures; ensure understanding; confirm understanding; request clarification; use of jargon eg, for staff, passengers

Time codes: local time; Coordinated Universal Time (UTC); 'zulu'; elapsed time

2 Be able to carry out effective transfer of aviation information

Receive and relay accurate information: receive eg verbally, electronically, written; record if necessary; relay to appropriate people eg staff, public

Reasons for storing aviation communications: audit; evidence; incident investigation

Flight documents and appropriate persons: documents eg passenger manifest, cargo manifest, AAA documents, load sheets, boarding gate reports; personnel eg flight dispatcher, flight deck crew, loading supervisor, cabin crew

Types of information: flight departures; flight delays; special requests; passenger numbers; baggage loads

Failures in communication: causes eg power failure, noisy environment, incorrect information; implications eg confusion to passengers and staff, incorrect actions, delays, costs, serious incidents

Essential guidance for tutors

Delivery

Good, accurate communication is fundamental to the safe and efficient operation of any airport or airline. This is especially so during the high-pressure environment of the turnround. Low-cost carriers have brought new benchmarks for reducing the amount of time an aircraft spends on the ground. It is not uncommon for a 180-seat aircraft to arrive with a full load of passengers and baggage, disembark and reload with another full complement in less than 30 minutes. Without effective communication between colleagues, staff from other agencies and of course the passengers, this would not be able to take place. It is necessary for learners not only to appreciate what good communication is, but also the barriers to, and consequences of poor communication.

Many learners are able to listen to airband radios. If the centre is near an airport, a radio could be brought into the class to monitor conversations between aircraft and air traffic. This should provide an example of how good verbal communication can take place with work colleagues. Learners can be challenged to interpret the messages – what did it mean, why was it clear to the recipient, was it clear and fully understood by a non-aviation person? This highlights the danger of using jargon and the assumption of understanding. Learners could then be invited to devise their own series of aviation-related messages which could be passed verbally to colleagues, ideally without seeing each other. Peer assessment (overseen by the tutor) could be used to judge whether the message is clear and understood. During these practical activities, learners should use the phonetic alphabet and relevant aviation jargon.

While verbal communication is widely appreciated as a medium for conveying information instantly, most learners will also be familiar with non-spoken systems such as SMS (text) and email. This can be extended to include Flight Information Display Systems (FIDS). All of these are becoming increasingly used in the aviation industry and are especially useful in a noisy environment. Traditional systems such as reference books, notices or memos may seem old-fashioned, but they still have an important place in the communication armoury.

Often forgotten is the unspoken, unwritten means of communication frequently used in aviation. Hand signals, pictograms, signs and lights are frequently used in the airport environment.

The group should be encouraged to consider different types of information (urgent, routine, simple, complex) that need to be conveyed to a variety of recipients (staff, passengers, external agencies) and decide which medium is the most appropriate in each case.

Some information must be stored – the main reasons are included in the unit content. Usually these are written documents that will determine the communication method that must be used. Examples of documents should be produced to illustrate the types. Loadsheets, loading instructions, manifests and weather reports are typical of documents that must be stored.

In conclusion, a group discussion could be used to explore the potential consequences of communication failures. In order to cover this fully, the sections should be broken down into three parts: 1) communication types; 2) barriers to good communication; 3) potential consequences.

Assessment

Assessment for this unit should be evidenced, wherever possible, through learners' own workplace roles or, if not possible, through classroom activities or simulations. Evidence can be submitted through written reports or case studies, records of activities undertaken and oral presentations.

Assessment criterion 1.1 must be met through practical activities (in the workplace or simulated) and this could form the summative assessment for learning outcome 1, and be assessed after meeting assessment criteria 1.2 to 1.7. Alternatively, 1.1 could be the starting point for the unit assessment and 1.2–1.7 could be assessed through oral questioning or written evidence based on the real or simulated activities undertaken to meet 1.1.

Assessment criterion 2.1 must be met through practical activities (real or simulated) covering the full range in the content, and this criterion could be integrated with 1.1. For example, to simulate aviation communications, learners could work in pairs to select different types of information that need to be communicated, eg loadsheet, boarding call, weather charts, passing passenger figures. Learners could decide the most appropriate means of transmission and who are the most appropriate persons to send and receive this information. Individually, learners would have to demonstrate a clear and professional transmission of detailed information to their partners, including use of the phonetic alphabet, different time codes and an instruction and the use of real or simulated hand-held radios, ensuring that the communication is clear, unambiguous and understood. The partner should then respond appropriately. Both 'transmissions' should demonstrate the protocols, terminology and accuracy required. Tutors should ensure that the full coverage of the content range is possible through the practical activities.

To meet 1.2, learners must explain the different communications methods and systems used in aviation. From the range within the content, learners must include three for voice; one for unspoken and two for written. The explanations should be brief, with examples provided, and these can be presented in written or verbal format.

To meet 1.3, learners must identify the full range of communication methods used in aviation, this can be in the form of a list, presented in written or verbal format.

To meet 1.4, learners must describe the full range of terminology used in aviation communication. The descriptions should be brief but must be supported by examples and may be evidenced in written or verbal format.

To meet 1.5, learners must explain the importance of accuracy in aviation communication and should include the consequences of inaccurate communication, providing examples in written or verbal format.

To meet 1.6, learners must identify the protocols that should be adhered to when communicating, including the full range within the content, presenting evidence in verbal or written format and supporting evidence with examples. This identification can be in the form of a detailed list.

To meet 1.7, learners should explain the use of time-related codes relevant to aviation. Evidence can be presented in written format or verbally, and learners can use examples to support their explanations. The full range within the content must be covered.

Evidence to support learners' knowledge and understanding for 1.2–1.7 can be linked to the practical activities undertaken to meet 1.1 and 2.1. Gaps in range coverage within the practical activities can be evidenced separately to ensure achievement.

To meet 2.2, learners must give a minimum of four reasons for storing aviation communication, and this can be presented in written or verbal format, using industry examples to support evidence.

To meet 2.3 learners must provide a list, including identification of a minimum of six flight documents involved in the transfer of flight information. To meet 2.4, learners must provide a list of appropriate persons that require these flight documents and for 2.5, learners must identify the types of information being transferred within these documents.

Evidence for 2.3 and 2.4 can be integrated with partial coverage of 2.5. For example learners could produce a chart on which samples of flight documents can be illustrated. In each case a statement identifying the type of information contained should be attached to partially demonstrate 2.5. From this, links can be made to the appropriate people who may send and receive these documents, to demonstrate 2.4.

To fully meet 2.5, learners must identify all types of information that must be transferred as listed in the content. Some evidence can come from the activity relating to flight documents but other types of information will need to be added to the list.

To meet 2.6, learners must explain the implications of failures in communication. Evidence can be gathered from other assessment activities within the unit. Explanations can be in written or verbal format and must include at least three causes and three implications and be supported with industry examples.

Essential resources

- A large piece of paper or card
- Flight documents (samples)
- Hand-held radio (or internal phone system)
- Internet access
- Mobile phone
- PA system

Indicative resource materials

Texts

CAA – CAP413 (radiotelephony manual)

IATA Reservations Interline Message Procedures – Passengers (AIRIMP)
(www.IATA.org/ps/publications/Pages)

Websites

www.caa.co.uk Civil Aviation Authority
www.mindtools.com Communication skills

Unit 4: Airport Check-in Services

Unit reference number: M/601/6465

Level: 2

Credit value: 6

Guided learning hours: 42

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of the principles of checking-in aviation passengers and baggage. This will enable the learner to process passengers for travel, including checking that documents are valid and processing baggage according to laid-down procedures. The learners will also be able to check-in passengers using manual check-in procedures.

The knowledge provided within this unit is fundamental to all activities within the aviation industry. This unit is appropriate for all learners prior to them undertaking activities at an airport in a passenger services role.

Unit introduction

Frequently, the first airline representative that the traveller meets at the start of their journey is the check-in agent. For a straightforward check-in, this encounter will be brief and should be uncomplicated. On occasions, however, the process may be lengthy, or more complex, and require the skills and diplomacy of a well-trained member of staff to ensure that check-in is completed to the satisfaction of both the airline and the passenger and to ensure security for all. Not only must the check-in agent ensure that all travel documents are correct, they must also be able to check the validity of visas, calculate excess baggage charges, and accurately record passenger and baggage details, while being welcoming and efficient.

On completion of this unit, you will have experienced many of the situations you would be likely to face when working at check-in for an airline or handling agent, and should have gained confidence in dealing with situations outside your normal experience.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Be able to process check-in documentation for travel	1.1 process different types of travel documents 1.2 deal with passenger check-in issues relating to travel documentation 1.3 describe different methods of check-in 1.4 identify ticket checks for acceptance to travel 1.5 explain the importance of recording baggage details and weight according to IATA requirements 1.6 identify passport checks for acceptance to travel 1.7 explain the difference between a British citizen and a British subject 1.8 identify the implications of travel for British citizens compared to British subjects 1.9 describe how to check if a visa is required 1.10 identify the visa checks for acceptance to travel 1.11 describe the four different types of Schengen visa

Learning outcomes	Assessment criteria
<p>2 Be able to process passengers' hand and hold baggage</p>	<p>2.1 process passengers' hand-and hold baggage to meet airline and regulatory standards</p> <p>2.2 deal with passenger check-in issues relating to hand and hold baggage</p> <p>2.3 identify the Dangerous Goods Regulations that relate to check-in</p> <p>2.4 identify unacceptable hand-baggage items</p> <p>2.5 describe how to check allowances for baggage</p> <p>2.6 explain methods for dealing with unacceptable hold baggage</p> <p>2.7 identify appropriate security questions</p> <p>2.8 explain what to do with items that may need special handling</p> <p>2.9 identify details included on a bag tag</p> <p>2.10 identify different types of baggage labels</p> <p>2.11 explain the procedure for checking in firearms and ammunition</p>
<p>3 Be able to allocate seating for passengers</p>	<p>3.1 allocate suitable seats to passengers according to their needs and aviation regulations</p> <p>3.2 deal with passenger check-in issues relating to seating</p> <p>3.3 explain the different seating methods used by airlines</p> <p>3.4 explain the appropriate seating for passengers with special requirements</p> <p>3.5 identify passengers unsuitable for seating at emergency exits</p> <p>3.6 describe the importance of seating in relation to the weight and balance of the aircraft</p>

Unit content

1 Be able to process check-in documentation for travel

Documents: tickets; e-tickets; ticketless; passports; forms of identity; visa; passenger manifest; flight close-out/boarding report

Processing: e-check-in (self-check-in, online check-in); bag drop (online check-in); manual check-in; boarding cards; bag tags; seat chart

Checking: passport expiry date; passport photo; signature; condition of passport; difference British citizen/British subject; visa validity (requirement, date, transit/multiple/single entry, Shengen types – A, B, C and D); valid forms of identity; name; date; flight; route

Dealing with passenger documentation check-in issues: appropriate handling of issues eg empathy, coping with anger, upset and emotion, offering solutions, referring to supervisors/managers/security; issues eg invalid passport, invalidity of visa, incorrect ticket (manual or e-ticket) for travel, incorrect ID for travel, late arrival for check-in

2 Be able to process passengers' hand and hold baggage

Baggage acceptance: security questions; acceptable standards; regulations (Dangerous Goods Regulations relating to check-in); allowable weights/pieces; tags (flight details, AAA, bar code); excess baggage charges

Unacceptable items: differences between hand and hold baggage; dangerous items eg blades, firearms, chemicals, liquids, fireworks, lead-acid batteries; overweight; out-size; poorly packed

Special handling procedures for: heavy bags; fragile items; sports items (eg skis, bicycles); standby; firearms and ammunition; baggage labels (heavy, fragile, short connection, priority, limited release)

Dealing with passenger hand-and hold baggage check-in issues: appropriate handling of issues eg empathy, coping with anger, upset and emotion, offering solutions, referring to supervisors/managers/security; issues eg unacceptable hand baggage items, overweight, oversized baggage

3 Be able to allocate seating for passengers

Seat allocation: computer allocation; manual selection; free seating; class eg first, business, economy; weight and balance implications

Passenger requirement: family group; family with infant; elderly; disabled; unaccompanied minor; young passenger

Unsuitable for emergency exit: disabled; elderly; children; infants

Dealing with passenger seating check-in issues: appropriate handling of issues eg empathy, coping with anger, upset and emotion, offering solutions, referring to supervisors/managers; issues eg obese passengers, pre-allocation problems, unavailability of seating for groups or nervous flyers

Essential guidance for tutors

Delivery

Most check-in activities take place 'landside' at an airport. It is likely, therefore, that a visit to a local airport may be possible to support class-based input. In small groups, it would be beneficial simply to observe and listen to the check-in procedures as they take place, perhaps comparing a charter or low-cost check-in with that of a full service operator. It would be extremely useful to encourage an airline employee (perhaps a former learner) with a knowledge of current check-in procedures, to demonstrate and explain the process within the class room.

This is a 'hands-on' unit, with plenty of opportunity for role play, peer assessment and personal development. It is important therefore that delivery encourages learner participation from the outset.

To deliver this unit effectively, it will be necessary to first expose learners to the documents, then, through practical sessions, to explain their use.

Samples of the paperwork used during the check-in process should be used to help explain the first element of the unit. Learners could be encouraged to bring in their own passports - perhaps some will contain visas that could be examined. Drivers' licences, identity cards, credit cards and other personal documents could be compared to discover which would be acceptable at check-in and which would not. Learners could also bring in examples of e-tickets from holidays, together with suitcases to be used in role play. In all cases, explanations of validity, expiry, date limits and other restrictions must be explored.

It may be difficult to obtain actual examples of boarding cards, baggage tags and other auditable airline documents, so creation of your own to simulate the paperwork may be the answer. A contact in the industry could design the template that you use, based on actual documents.

The acceptance, or rejection, of baggage is an important part of the check-in process. Using actual bags (hand baggage and checked baggage) learners should be shown what is acceptable, what is not, and why. Use the unit content as an indicative list for banned items. Explain why there are differences between hand baggage and checked baggage regulations. Simulated banned items may be included to promote realism. It may not be possible to bring 'special handling' items into the class - pictures and explanations may have to suffice. The baggage-tag format must be explained along with the 'triple A' procedure, to enable learners to interpret the text and understand the security implications of baggage acceptance.

While most learners will appreciate the need for families to be seated together, they may not be aware of the processes required to enable this to happen. An explanation of system pre-allocation, manual allocation and free seating, together with class type and weight and balance implications, should be delivered. Other special requests and requirements, indicated in the unit content, must be explored, with learners suggesting the reasons for the requests, and stating whether they are acceptable or not.

To re-enforce the theory, small groups could represent travellers, while others take turns to be the check-in agent. Visas, tickets, bags, various family groups and special needs or requests can all be included in the simulated check-in activity.

Tutors should encourage discussion on the changing role of check-in to ensure up to date delivery. For example many airlines are now encouraging online check-in and this has had a number of implications, including on baggage drops; high charges for hold baggage and increased allowances for hand baggage resulting in many passengers travelling with hand luggage only; some airlines providing self-check-in kiosks for passengers to print out their own boarding cards and luggage labels.

Assessment

Assessment criteria 1.1, 1.2, 2.1, 2.2, 3.1 and 3.2 must be practical activities either undertaken in the workplace or in simulated situations. All other criteria should support these activities and can be undertaken before the practical activities take place or after completion of the practical activities.

All other criteria (1.3 to 1.11, 2.3 to 2.11, 3.3 to 3.6) can be assessed in the workplace by oral questioning with supporting evidence, or outside of the workplace in written format or oral presentation with visual aids.

For example, learners could create a training leaflet, designed to introduce new members of staff to the regulations and knowledge required by a check-in agent employed by an airline's ground handling agent (GHA). The leaflet could be divided into headings and subheadings following the unit content and the individual assessment criteria.

Assessment criteria 1.3 – 1.11

Documents – learners should start with a brief description of the different types of check-in available (e-check-in, self-check-in, online check-in, manual check-in) to meet 1.3. The different types of documentation (travel and personal documents), as listed in the content, should be identified, together with required checks for validity to meet 1.4. An explanation of the importance of recording baggage details and weight according to IATA requirements should be evidenced to meet 1.5. A full list of passport checks for acceptance to travel should be provided, as listed in the content, to meet 1.6. Learners should explain the difference between a British citizen and a British subject to meet 1.7, and identify the implications of travel for British citizens compared to British subjects to meet 1.8. To meet 1.9 and 1.10 learners must identify which nationals require visas, and describe how to conduct a visa check. The section should be completed with a description of the four types of Schengen visa in order to meet 1.11.

Assessment criteria 2.3 – 2.11

Baggage – learners should start with a description of the two main types of baggage acceptance (standard check-in and e-ticket bag drop) and how to check allowances including excess baggage, in order to meet 2.5. They should list the types of label that may be used during the check-in process to meet 2.10, and identify the details/information found on the labels (bag tags) to meet 2.9. Learners must state the regulatory and airline standards relating to hold and hand baggage acceptance, identifying the Dangerous Goods Regulations that apply, to meet 2.3. They should give examples of unacceptable types or items of hand and hold baggage to meet 2.4, and explain the actions that should be taken to meet 2.6. Learners need to identify the security questions that must be posed to all passengers depositing baggage to meet 2.7. Learners will need to provide examples of items that need special handling, explaining the processes involved, to meet 2.8.

In certain circumstances, firearms may be accepted on passenger flights. Learners should complete this section by explaining the procedures involved in acceptance of firearms and ammunition to meet 2.11.

Assessment criteria 3.3–3.6

Seating – Learners must explain how airlines use different seating allocation methods (as listed in the content) to meet 3.3, and how passengers with special requirements are seated to meet 3.4. Within this section, to meet 3.5 learners should identify which categories of passenger should not be seated by emergency exits. Finally, to meet 3.6, learners must describe how seating allocations affect aircraft weight and balance.

Assessment criteria 1.1–1.2, 2.1–2.2, 3.1–3.2

These assessment criteria require practical assessment; this may be achieved in the workplace, or via role-play activities to simulate the check-in environment and activities. Travellers with hand baggage, hold baggage (including excess, prohibited or inadequately packed), tickets, passports, visas (including invalid or out-of-date), special seating requests (including family groups, with infant or disabled) should be 'checked-in' by learners. All learners must have the opportunity to demonstrate the assessment criteria by acting as the check-in agent. To meet the criteria, travel documents must be checked (1.1), baggage must be 'weighed' and checked-in and baggage tags issued (2.1), seats must be allocated and boarding cards issued (3.1). In all cases, a range of issues must be dealt with and resolved efficiently by the check-in agent. To meet 1.2, 2.2 and 3.2, learners must deal with at least two issues for each of the three subject areas: documentation, baggage and seating.

Recording Performance

Evidence submitted for criteria requiring the practical demonstration of skills must be supported by observation reports signed and dated by the assessor explaining how and where specific criteria have been met. Range coverage should also be clearly tracked on the observation report or on checklists attached to the report. Learners should also sign the reports as being a correct record of their performance and achievement. Some supporting evidence, for example photographs, external supervisor or peer evaluations, audio or DVD recordings, should also be provided where appropriate. If performance is being observed by third parties, a witness statement must be completed providing feedback on performance mapped to assessment criteria and range coverage. It is useful for a sample of learners to be internally verified at the same time as they are being assessed by the tutor, where appropriate.

Essential resources

- Check-in desk (or substitute)
- Documents – tickets, passports with visa, boarding passes, baggage tags, passenger manifests
- Internet access
- Items of hold and hand baggage
- Security questions

Indicative resource materials

IATA – *Dangerous Goods Regulations 2010* (IATA, 2010) ISBN 978 9292332174

Websites

www.caa.co.uk

Civil Aviation Authority (dangerous goods leaflet)

http://www.direct.gov.uk/en/TravelAndTransport/Foreigntravel/AirTravel/DG_176922

Government information on dangerous and restricted items

www.theschengenoffice.com

Schengen visa information

Unit 5: Aircraft Boarding and Arrival Services

Unit reference number: F/601/6468

Level: 2

Credit value: 4

Guided learning hours: 40

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of how to safely and correctly board passengers onto, and escort them from, the aircraft. The unit encompasses health and safety regulations, as well as security and immigration requirements for both departing and arriving passengers.

This unit is appropriate for all learners prior to them undertaking activities at an airport.

Unit introduction

Efficient and timely boarding is a crucial part of airline operations. A flight is not likely to depart on time if boarding is not planned for and executed in an organised way. Being part of the boarding team can be an exciting experience as you will be working against the clock, and having to resolve problems in a short time frame. Any mistakes made during boarding can have a major impact on the departure, possibly resulting in delays, security alerts, passenger and baggage offloads and - in extreme circumstances - flight cancellations. Not only must you be able to work under pressure in the boarding team, you must also remember that this is a customer service role. You will be faced with many non-routine situations that will have to be dealt with calmly and promptly. For example, late or missing passengers, wheelchair users, passengers with excessive hand baggage and lost boarding cards all have the potential to disrupt flight boarding – it is your job to make sure that the process goes smoothly.

Equally importantly, the arrivals team is responsible for meeting, disembarking and overseeing inbound passengers. You are in charge of ensuring the health and safety of passengers as they move from aircraft to the terminal, presentation to UK Border Agency staff and for baggage services, especially dealing with lost or damaged bags.

On completion of this unit, you should be aware of the varied roles performed by boarding and arrivals staff. Several types of document will be examined to ensure familiarity, together with exposure to the types of problems, and the solutions, that you may face from day-to-day.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Be able to board passengers onto aircraft	1.1 prepare for the boarding process 1.2 carry out the boarding process 1.3 explain what information is needed before boarding the flight 1.4 identify the types of passengers who may need pre-boarding 1.5 identify the main boarding duties 1.6 describe the safety and security requirements associated with boarding passengers 1.7 describe all post-boarding procedures
2 Be able to make boarding announcements	2.1 make professional announcements using the correct voice techniques and body language 2.2 explain the appropriate times to make passenger announcements 2.3 describe how to make clear professional announcements using correct voice techniques 2.4 explain how body language can affect the announcement 2.5 explain the consequences of poor announcements
3 Be able to deal effectively with problems during boarding	3.1 deal effectively with passenger problems at the gate 3.2 explain how to deal effectively with any discrepancies at the gate 3.3 explain the decontrolling procedures in order to comply with regulatory standards 3.4 describe the procedure for dealing with transit passengers

Learning outcomes	Assessment criteria
<p>4 Be able to escort arriving passengers safely</p>	<p>4.1 collect relevant information before meeting the flight</p> <p>4.2 meet and escort passengers safely</p> <p>4.3 describe the importance of flight-arrival information</p> <p>4.4 explain the methods available for moving passengers from the aircraft to a terminal</p> <p>4.5 explain the health and safety responsibilities of the arrivals agent</p> <p>4.6 describe the authorities to which passengers need to be directed to</p> <p>4.7 describe the procedures for meeting and escorting passengers safely</p>

Unit content

1 Be able to board passengers onto aircraft

Preparation: allocation of boarding gate; flight information (number, time, destination); time at gate; documents; boarding cards; passenger count; special requirements

Boarding: clearance to board; identify (by reservation information, observation, sensitive questioning) and assist types of passengers for pre-boarding eg wheelchair, young passenger, families, elderly, first class; safety (controlled boarding, guidance on walkways, escorting on apron); security (boarding card check, verify with head-count on aircraft) communication, eg boarding supervisor, check-in, load control, dispatcher, cabin crew; verify boarding cards/headcount; gate bag report

Post boarding: boarding report; discrepancy report; collect/destroy boarding cards; secure doors; check boarding area for left items

2 Be able to make boarding announcements

Preparation: prepare announcement, eg flight number, destination, time, gate number; special instruction, eg delay, cancellation, gate change, late passenger

Announcement: use of microphone; voice (clear, steady pace, steady tone, volume, correct terminology); body language; timing of announcement, eg not too soon to risk causing gate congestion, allowing sufficient time for on-time departure

Consequences of poor announcements: passenger confusion; mis-boarding; delays; customer service; reputation

3 Be able to deal effectively with problems during boarding

Problems and discrepancies: gate change; missing passenger (baggage implications); missing passenger document, eg boarding pass, passport, identity card; unacceptable passenger, eg drunk, abusive; unacceptable hand baggage

De-controlling: reasons; procedures, eg duty-free buy-back, security, UK Border Agency; offload (boarding system, passenger manifest, baggage – AAA)

Transit passengers: definition; scheduled transit; interrupted flight; process

4 Be able to escort arriving passengers safely

Preparation: information (flight number, origin, scheduled time of arrival (STA), estimated time of arrival (ETA), passenger numbers, specials, aircraft stand, arrival gate)

Methods: transfer of passengers from aircraft to terminal eg airbridge, coach, walking

Safety: procedures eg sufficient escorts, designated walkways, passenger guidance systems (PIGS), cones under aircraft; health and safety responsibilities (to passengers, to self)

Authorities: UK Border Agency (customs and immigration); police; special branch

Essential guidance for tutors

Delivery

It is unlikely that learners not yet in employment at an airport will be able to observe actual boarding or arrival because of the security restrictions that now exist. As a consequence, most of this unit is likely to be delivered in the classroom. Access to PA announcement scripts from industry contacts would be beneficial.

This is a 'hands-on' unit, with plenty of opportunity for role play, peer assessment and personal development. It is important, therefore, that delivery encourages learner participation from the outset.

Before exploring the physical tasks of boarding or meeting arrivals, it is essential that learners are shown the need for preparation. The main points are listed in the unit content – learners could discuss the likely outcomes of not being prepared. It may be possible to simulate some boarding activities within the class, perhaps processing and escorting groups from the 'departure lounge' in one room to the 'aircraft' in another, re-enforcing the theoretical input. This could be reversed to imitate the arrival procedure. It would be beneficial if a member of airline or handling agent staff, up to date with boarding procedures, could add validity by including examples experienced in the workplace.

Announcements can be experienced in many settings. Learners could be exposed to a variety of public address calls in train stations, supermarkets, and of course, the public areas of airports that are more easily accessed. A visit (organised or individual) to hear both good and less professional broadcasts could be arranged, deciding whether the messages were clear, easily understood and achieved their desired purpose. In particular, learners should hear, and understand the need for, final calls for boarding and late passenger announcements. In-class discussions and comparisons of the merits of different announcements could follow. Using flight numbers, destinations and times that can be accessed on most airport or airline websites, all learners should be encouraged to compose and make simulated boarding, delay and missing passenger announcements to rest of the class.

Safety theory, already introduced in Unit 1: Health and Safety within Aviation, could be revisited and given context, by applying the boarding and meeting roles of the Passenger Services Agent (PSA) as listed in the unit content. A task could be highlighted, then learners could suggest hazards and appropriate precautions.

Many of the potential discrepancies experienced by boarding and arrivals staff may be beyond the imagination of learners who are not familiar with the job. As a consequence, it will be necessary to explain what they may be, why they may occur and the potential outcome if not managed. The role of the control authorities (UK Border Agency, police) should also be introduced.

Assessment

Within this unit, learners will need to demonstrate that they can board passengers onto an aircraft, conduct a boarding announcement, deal with problems during the boarding process, and meet and escort arriving passengers to meet the practical learning outcomes and associated assessment criteria. Those already working at the airport will be able to perform these tasks as part of their employment. Learners not yet in work will be required to undertake the tasks in simulated situations. All the practical assessment criteria (1.1, 1.2, 2.1, 3.1, 4.1 and 4.2) can be integrated into one practical assessment, or assessed in separate scenarios if required. Learners must also provide supporting written or verbal evidence for the remaining assessment criteria, to demonstrate that they have the underpinning knowledge and understanding for the practical activities.

The following non-practical assessment criteria can be presented in written or verbal format. To meet 1.3, learners should explain the information that is required before boarding the flight, covering all items in the unit content. To meet 1.4, learners should identify four types of passenger who may need pre-boarding in a detailed list. To meet 1.5, learners should identify the main boarding duties as listed in the content in a detailed list. To meet 1.6, learners should describe four key safety and security requirements associated with boarding passengers. To meet 1.7, learners should describe all the post-boarding procedures listed in the content.

To meet 2.2, learners should explain the appropriate times to make passenger announcements, and to meet 2.3, describe how to make clear professional announcements using correct voice techniques. All items listed in the content must be covered. To meet, 2.4, learners should provide a short explanation of how body language can affect the announcement and to meet 2.5, learners must explain the consequences of poor announcements, providing a minimum of two industry examples.

To meet, 3.2, learners should explain how to deal effectively with a minimum of three discrepancies at the gate, this can be linked with the practical activity for 3.1. To meet 3.3, learners must explain the decontrolling procedures used to comply with regulatory standards, as listed in the content. To meet 3.4, learners should provide a short description of the procedure for dealing with transit passengers, supporting their evidence with examples.

To meet 4.3, learners must describe the importance of flight arrival information covering all items listed in the content and, to meet 4.4, explain three methods available for moving passengers from the aircraft to the terminal. To meet 4.5, learners must explain the health and safety responsibilities of the arrivals agent, describe the authorities passengers may need to be directed to (for 4.6) and, finally, describe all the procedures for meeting and escorting passengers safely into the terminal to meet 4.7. This can be integrated with 4.1 and 4.2.

An example of an assessment activity for learners to meet the non-practical assessment criteria is for learners to prepare a 'Helpful Hints' booklet designed to assist staff new to roles of boarding and arrival escort. It is suggested that the booklet is created electronically and printed on A5 (or folded A4) paper to create an easily-carried document. Part 1 should include all the requirements for boarding, including preparation for boarding. It should also include descriptions of problems and how they can be solved. Part 2 should relate to the art of making effective announcements, explaining when they should be made and describing how voice techniques enhance the broadcast. Further explanations of how body language can be detected in the voice, and the results of ineffective announcements, should complete this section. Part 3 should give an indication of the problems PSAs could experience during the boarding process. Approved solutions to the issues identified

should be listed. Part 4 should cover the requirements for meeting and escorting arriving passengers, once again using the assessment criteria and unit content as a guide.

All the following assessment criteria require practical assessment either in the workplace or through integrated role-play activities to simulate the boarding and arrival process. For example, using the helpful hints booklet as a guide, learners could take turns in preparing for, and then conducting the boarding process, with fellow learners, tutors and others acting as passengers. The process should include a routine boarding call and at least one other boarding call, eg late passenger or gate change. The simulations should include at least two passenger problems at the gate, eg lost boarding card, missing passenger, abusive passenger or excessive hand baggage so that learners can demonstrate they can deal with these effectively. The role-play activities can be concluded by collecting relevant information and simulating the safe escorting of arriving passengers. For larger groups, this can be made less time-consuming, and more realistic, by learners working in small teams (two or three), the remaining learners being the passengers. Planning, implementing and dealing with associated problems can be discussed among the teams, as would happen in real life. All learners must be allowed to experience all aspects of the role play in order to be assessed.

To meet 1.1, learners must prepare for the boarding process covering all items listed in the content. To meet 1.2, learners must carry out the boarding process covering all items listed in the content with a minimum of four different types of passengers to board.

To meet 2.1, learners must make at least one routine boarding call plus one other professional announcement, using the correct voice techniques and body language.

To meet 3.1, learners must deal effectively with at least two passenger problems at the gate.

To meet 4.1, learners must collect all relevant information before meeting the flight and then meet and escort passengers safely to meet 4.2.

Essential resources

- Blank boarding reports
- Boarding cards
- Boarding gate desk (or equivalent)
- Examples of announcement recordings (good/poor)
- Hand baggage
- Internet access
- Loudspeaker/PA system

Indicative resource materials

Websites

Individual airline websites provide information on the boarding and arrival process. YouTube can also be used to source examples of boarding announcements.

Unit 6: Airport Baggage Processing

Unit reference number: J/601/6472

Level: 2

Credit value: 3

Guided learning hours: 20

Unit aim

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 re-united 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 personnel 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 manpower 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. Linking closely with Units 4, 7, 8 and 10, this unit will explore how it is possible to process baggage rapidly and accurately.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Know how to check the serviceability of baggage equipment	1.1 identify equipment used to transport baggage 1.2 describe the checks that should be made when using equipment to transport baggage 1.3 describe the actions that should be taken on discovering defects
2 Understand how to interpret baggage labels	2.1 identify the information on baggage labels 2.2 describe the different types of baggage 2.3 explain why different types of baggage may need segregation 2.4 describe the different types of special handling labels used by airlines 2.5 describe the actions each type of special handling label requires
3 Understand the security requirements for transporting passenger baggage	3.1 describe the security requirements for transporting passenger baggage 3.2 identify the non-security requirements for unaccompanied baggage (rush bags) 3.3 explain the different types of security checks for unaccompanied baggage
4 Know how to complete baggage manifests	4.1 identify information required on baggage manifests 4.2 describe requirements for signing baggage manifests

Unit content

1 Know how to check the serviceability of baggage equipment

Baggage transport equipment: bulk loading eg carts, tugs, conveyors, lifting platforms; container loading eg 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; bar code

Types of baggage: single destination; online transfer; interline transfer

Need for segregation: class; route eg single destination, transfer; fragile; needed on arrival eg wheelchair, pushchair

Special handling labels: heavy (HEA); fragile; short connection (SHOCON); priority eg 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 off-loaded passengers removed; person signing trained in AAA procedures

Essential guidance for tutors

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 member, familiar with the processes, to re-enforce classroom input.

PowerPoint images can be used to great effect, illustrating the various types of baggage handling equipment available. YouTube can also be employed – there are a number of sequences showing the on-and offload process. 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 open the eyes of many learners to 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 to allow learners to discuss the requirements and why they are important, together with the potential outcomes if they were not carried out. Images from the internet can graphically 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 reasons for the differences may be found on the baggage label (eg destination, routing) or on a supplementary label (eg, heavy, fragile). Again, a group discussion to explore the reasons for segregation and required action may well cover those in the unit content.

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 (eg Lockerbie) and how regulations change to reduce the risk (eg 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. To conclude this section, the differences between accompanied and unaccompanied bags (rush bags) and how they must be processed should be discussed.

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.

Assessment

Assessment for this unit should be evidenced, wherever possible, through learners' own workplace roles or, if this is not possible, through classroom activities or simulations. Evidence can be submitted through written reports or case studies, records of activities undertaken and oral presentations.

To meet 1.1, learners must identify at least three types of bulk-loading equipment and three types of container-loading equipment used to transport baggage. To meet 1.2, learners must briefly describe all the checks listed in the unit content that should be made when using baggage transport equipment. To meet 1.3, learners must describe the three types of action that should be taken when discovering defects. Learners should be able to link 1.2 and 1.3 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 vehicles 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.

The assessment criteria for learning outcomes 2–4 could be covered by a question-and-answer style approach. This could include on-the-job question-and-answer sessions and demonstrations of activities, or, for those delivering the unit in the classroom, tutors could devise a question-and-answer workbook, giving learners opportunities to demonstrate their knowledge and understanding of baggage labelling, baggage security and baggage manifests. Assessment, in whatever form, must ensure that learners evidence each assessment criteria.

To meet 2.1, 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 content are included. To meet 2.2, learners must describe the different types of baggage including single destination; online transfer and interline transfer baggage. To meet 2.3, learners must explain why different types of baggage may need to be loaded separately, covering all the items listed in the content and providing examples. To meet 2.4, learners must briefly describe the five different types of special handling labels that may be attached to passenger baggage and to meet 2.5, they should briefly describe the actions that must be taken by baggage-processing staff for each of the special handling labels used.

To meet 3.1, learners must describe the requirements and systems in place to ensure that baggage is transported securely, covering all the items listed in the content. To meet 3.2, 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) are safe to load on passenger aircraft to meet 3.3.

To meet 4.1, learners must identify essential information required on baggage manifests and describe the requirements that must be satisfied before a baggage manifest may be signed in order to meet 4.2.

Essential resources

- AAA card
- Baggage labels, including special handling labels (eg HEA, SHOCON, FRAGILE)
- Baggage manifest
- Images of different baggage types (eg, heavy, fragile)
- Images of Ground Service Equipment (GSE)
- Internet access
- Rush bag tag

Indicative resource materials**Text**

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

Journals

Airports International – Key Publishing Ltd

Websites

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	Civil Aviation Authority (banned/dangerous goods)
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	IATA (passenger baggage information)

Unit 7: Loading and Unloading of Aircraft

Unit reference number: M/601/6479

Level: 2

Credit value: 3

Guided learning hours: 20

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of the principles of loading and unloading of an aircraft. This will enable the learner to be able to load and unload an aircraft and the requirements of different types of aircraft. It will also give them the knowledge of different types and functions of loading equipment used in the industry.

The knowledge provided within this unit is fundamental to all activities within the airport environment. This unit is appropriate to all learners prior to them undertaking activities at an airport in a ramp agent role.

Unit introduction

The process of loading and unloading may seem straightforward, but to comply with airline and regulatory body requirements, training and some specialist knowledge is required. Each aircraft type has its own characteristics. For example, a load that may fit easily on a Boeing B757 may be too large for a B737. Equally, containers that are used in an Airbus A340 will not fit in the hold of an A320. It is important that loading staff appreciate these, and other, differences.

Equipment used to service the variety of aircraft types that visit a commercial airport also varies. As was indicated in Unit : Airport Baggage Processing, bulk-loaded aircraft require carts and conveyors, whereas containerised aircraft need dollies and lower-deck loaders. Again, these differences must be known by the loading staff.

Once aware of the factors that must be considered, loading staff must be in a position to plan for both the arrival and departure phase of the aircraft turnround. Essential information to allow this includes the aircraft type, the make-up of the inbound load, Ground Service Equipment (GSE) required and the make-up of the outbound load. Without effective equipment planning, the turnround risks being delayed.

The unload and reloading of the aircraft also requires planning. This is usually done by a load controller who creates a loading instruction that must be followed. Experienced loading staff can often identify problems on the loading instruction during the early stages of the on-load process, but in all cases, laid-down procedures must be followed to correct any discrepancies found.

In conclusion, not only is baggage loading a physically demanding job, it also holds a great deal of responsibility. It would not be too dramatic to state that the safety of the aircraft and all on board depends on the skill and ability of the loading staff following established procedures.

Learning outcomes and assessment 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 determine the standard required to meet the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Understand the requirements for preparing to load and unload aircraft	1.1 describe the different types of loading/unloading equipment 1.2 identify the appropriate loading equipment for different loads 1.3 describe the types of information found on loads 1.4 explain the purpose of the load plan prior to the transfer of the load
2 Understand how to load and unload aircraft	2.1 explain the consequences of incorrect loading of the aircraft 2.2 identify the relevant persons to contact for different types of loading discrepancies 2.3 explain the effect of weather conditions on loading/unloading 2.4 describe the considerations when transferring special loads 2.5 describe the hazards associated with operating aircraft hold doors 2.6 describe the factors to be considered when positioning loading/unloading equipment 2.7 explain the purpose of documents that relate to the aircraft loading/unloading

Unit content

1 Understand the requirements for preparing to load and unload aircraft

Loading/unloading equipment: transfer terminal/aircraft eg tugs, flatbacks, carts, container dollies; lifting to/from aircraft eg lifting platforms, conveyors, lower deck loaders

Appropriate loading equipment for different loads: conventional loads (baggage, mail, general cargo); dangerous goods eg flammables, toxins, compressed gas, radioactive; special loads eg human remains, live animals, foodstuffs, high value; Unit Load Device (ULDs) (pallets, containers)

Information found on loads: baggage label (flight number, destination, date, unique identifier, name); air waybill (flight number, destination, date, unique identifier, emergency contact, weight, contents); dangerous goods labels

Purpose of load plan: weight and balance planning; loading instruction; special instruction; dealing with discrepancies

2 Understand how to load and unload aircraft

Consequences of incorrect loading: incorrect loading eg unsafe aircraft (overweight, unbalanced, damage to hold floor); consequences eg offload and reload, delays, costs, security implications

Contacts for discrepancies: dispatcher; loading supervisor; load controller

Effects of weather on loading: high winds; rain; ice and snow; heat

Transferring special loads: considerations eg refrigeration, quarantine, security, sensitivity; special loads eg live animals, chilled produce, high value, human remains

Operating aircraft doors: manual doors; mechanical doors; hazards eg manual handling hazards (injured back, trapped arm, strained shoulder), mechanical operating hazards (stretching to reach controls, trapping self and others), falls from height, baggage/cargo loads falling when opening door

Positioning loading/unloading equipment: type of equipment eg conveyor, transfer platform, lower deck loader, container dollies, baggage carts; factors eg congested apron environment, use of a banksman for guidance, raising equipment to door sill, aircraft movement during load/unload

Purpose of documents: load plan: loading instruction/report (LIR); AAA cards

Essential guidance for tutors

Delivery

The apron can be a congested and hectic environment during the turnround phase. As a result, visits may be difficult to arrange. It is quite possible, however, that a willing member of airline or handling agency staff may be able to provide an insight into their role, covering many of the learning outcomes of this unit.

It is clear that there are many similarities between Units 6 and 7. It may be possible, with careful delivery and assessment planning, to avoid any duplication by teaching the units in tandem. If this is done, care must be taken to maintain a logical flow, and to ensure that all learning outcomes and associated assessment criteria are addressed.

As with Unit 6, delivery may start with images of vehicles and equipment taken from the internet. Learners should be aware that the variety of equipment required for differing aircraft necessitates robust planning to ensure that the correct units are waiting to service the aircraft as it pulls on stand. Not only does the aircraft type determine Ground Service Equipment (GSE) requirements, the actual loads will also have a bearing. Having been exposed to the possible types of equipment, learners could hold a tutor-led discussion to decide on the most appropriate GSE for specific loads on different aircraft.

While learners may be familiar with baggage labels from Unit 6, it is worth bringing them into the class so they can be compared with air waybills. Both are designed to ensure items are loaded correctly and reach the desired destination, and both hold a great deal of information. This detail can be compared and contrasted to allow learners to appreciate the reasons behind their use. Dangerous goods labels could be introduced at this stage to show the differing categories of hazard that are permitted on passenger aircraft.

Load plans are often produced by a load controller several hours before flight departure, based on booked load figures. These are shared with loading staff to allow planning and preparation of manpower and equipment. Learners could be asked to suggest the most important elements that should be included in the document to ensure a safe and efficient turnround. As check-in closes and flights are finalised, a load instruction/report is usually issued, giving the final instructions for loading – basically, what should be put where. Learners should be introduced to the concept of weight and balance. An overweight, or out-of-balance aircraft is not safe to fly. Frequently, it is not possible to fulfil the instruction completely and discrepancies may occur. Learners could be invited to suggest the types of discrepancy, why they occur and how they can be resolved. Major discrepancies may require a completely new load instruction, minor discrepancies can be reported back to load control – usually via the dispatcher.

The next section explores how to load an aircraft. A simple diagram on a white board, equating an aircraft to an old-fashioned balance, with the wings as the pivot, is very effective. Basic maths can be used to predict the effect on forward and aft balance of loading baggage and cargo in different positions. Equally, maximum weight can be calculated. Allocate a specific maximum take-off weight; tell the learners how much the aircraft weighs without baggage (but including passengers crew and fuel); then ask them to calculate how much baggage and cargo is permitted. Following this exercise, learners can be rewarded by some startling images from the internet of occasions where weight and balance calculations or

loading were incorrect. These pictures could promote discussions about the consequential results of errors, eg costs, inconvenience, damage, even fatalities.

Adverse weather can affect loading in surprising ways. If learners are asked how extremes of wind, rain, ice/snow, heat might affect loading, for a variety of items (baggage and different cargo types), the answers should prove interesting. This discussion could be continued to include items that require special handling. Suggestions are found in the unit content, but learners will, no doubt, include others.

The operation of aircraft doors, while routine for the seasoned loader, hold hazards for the unwary. Manual and mechanical doors have their own problems that could result in severe injury if not managed well. There are training video clips on YouTube that would help to illustrate typical door operations.

Also on YouTube, a number of clips showing GSE operations around an aircraft graphically demonstrate how congested and potentially dangerous the turnround environment can be. From these it should be clear that planning and co-ordination between GSE operators is the only way to function safely.

Assessment

If this unit is being delivered as part of a work-based training scheme for new loading staff, a practical approach can be given to the assessment. This could include on-the-job question-and-answer sessions and demonstrations of activities. For those delivering the unit in the classroom, the detailed nature of the unit content lends itself to a question paper and brief answers. Assessment, in whatever form, must ensure that learners evidence each assessment criterion.

To meet 1.1, learners should describe the different types of loading/unloading equipment available and their purposes. Learners should include two that are used to transfer baggage between the terminal and the aircraft and two that lift the baggage to and from the aircraft door.

For 1.2, learners must, as a minimum, identify appropriate equipment used to transfer or load one item from each of the following categories: conventional, dangerous goods and special loads.

For 1.3, learners should describe the types of information found on baggage labels, air waybills and dangerous goods labels. In their description learners must cover all of the detail included in the unit content.

To meet 1.4, learners must explain how the load plan is used to plan the safe loading of aircraft. Learners should cover all of the unit content in their explanation: weight and balance planning, loading instruction, special instruction, and dealing with discrepancies.

To meet 2.1, learners must explain what may happen if an aircraft is loaded incorrectly and the consequences. Learners should include one example of each of the following in their explanation: overweight scenario, unbalanced scenario, damage to hold floor.

To meet 2.2, learners must identify a minimum of three possible loading discrepancies and in each case state who should be contacted. The dispatcher, loading supervisor and load controller should be covered across the assessment evidence. This may be linked to 2.1.

To meet 2.3, learners should briefly explain how extreme weather can affect loading and unloading of aircraft. Heavy rain, strong winds, ice and snow and extreme heat must all be included to fully meet the criterion.

To meet 2.4, learners should select three special loads and describe the considerations needed to transfer them from terminal to aircraft.

To meet 2.5, learners should describe at least one hazard associated with opening a manual hold door, and at least one hazard associated with opening a mechanical hold door.

To meet 2.6, learners should describe the factors that must be considered when positioning the following equipment to an aircraft; baggage cart; conveyor; lower-deck loader. Tutors should ensure all factors from the content are covered across the assessment evidence.

To meet 2.7, learners should explain the purpose of the three types of loading/unloading documents listed in the content.

Essential resources

- Document samples – Load Plan, LIR, baggage label, air waybill, dangerous goods labels, AAA card
- Internet
- Model aircraft (demonstrate balance issues)

Indicative resource materials

IATA – *Dangerous Goods Regulations* (IATA, 2010) ISBN 978 9292332174

Journals

Airports International – Key Publishing Ltd

Websites

http://www.hse.gov.uk/foi/internalops/sectors/cactus/5_05_05.pdf	Health and Safety Executive guidance leaflet for aircraft doors
www.jbtaerotech.com	Examples of loading equipment
www.mallaghan.co.uk	Examples of loading equipment
www.trepel.com	Examples of loading equipment

Unit 8: Airport Baggage Facilities

Unit reference number: M/601/6482

Level: 2

Credit value: 2

Guided learning hours: 15

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and to be able to deal effectively with baggage discrepancies. The knowledge and understanding for this unit includes the procedures and relevant paperwork needed for dealing with baggage discrepancies as well as the personal skills needed when dealing with conflict.

The knowledge provided within this unit is, while particular to baggage facilities, also of use in all areas of customer service.

Unit introduction

Most passenger baggage reaches its intended destination. On occasions, however, this is not the case. A passenger standing by the arrivals carousel in Aberdeen would be quite upset to learn that their baggage was on its way to Abu Dhabi! There are many safeguards designed to prevent this from happening, some of which have been explored in previous units, but as with any system that relies on human input and mechanical handling, mistakes can happen.

The arrivals hall of an international airport can, at times, be extremely busy. If several large international flights arrive within a few minutes of each other, the hall will soon become congested with tired passengers, all impatient to claim their baggage and leave the airport as quickly as possible. Baggage delivery may take longer than desired for a variety of reasons which will only serve to make the waiting passengers more irritated.

Imagine how you would feel if the baggage reclaim area slowly empties, all the other passengers are happily walking out with their suitcases, and you are left watching an empty carousel go round – your baggage has not arrived. This is the situation that faces many passengers – it is a situation that has to be managed by the airline or Ground Handling Agency (GHA) staff responsible for baggage facilities.

The last contact an airline has with their passenger is during the arrivals phase of the journey. It is essential that passengers leave the terminal with positive thoughts of the airline. The industry relies on its good reputation – airlines cannot afford to leave a bad impression with their customers. Losing passenger baggage is never going to make passengers happy, but the way the situation is dealt with by the baggage facilities staff can make a major difference to how the customer views the airline in the long term. If the problem is dealt with courteously and professionally by the ground staff, the passenger may feel that the airline is doing all it can to help. If, on the other hand, the baggage facilities staff show little

interest and appear to be unsure of how to handle the situation, the customer will have little faith in the organisation, and may choose not to travel with them again.

By studying this unit, it will become clear that to be effective in the baggage facilities department you need to have a combination of knowledge (systems, procedures) and diplomacy (customer service, how to deal with people in difficult circumstances).

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Be able to follow procedures for baggage discrepancies	1.1 assist passengers who report a baggage discrepancy 1.2 complete documentation for baggage discrepancies 1.3 describe the procedures to follow for different types of baggage discrepancies 1.4 describe effective communication techniques 1.5 explain the function of the World Tracer System 1.6 explain how to deal with unclaimed and unattended baggage in the baggage hall 1.7 identify relevant people to provide support

Unit content

1 Be able to follow procedures for baggage discrepancies

Assist passengers: passenger attitude eg angry, upset, tired, frightened, worried, impatient, uncooperative, vague; staff approach eg empathy, patience, professional, firm, helpful, re-assuring; non-English speakers

Complete documents: international or domestic arrival; Property Irregularity Report (PIR); UK Border Agency form c1422

Procedures for different discrepancies: loss; damage; theft from baggage; found

Effective communication: body language; tone of voice; choice of words; confident; calm; fairness

World Tracer system: function; access to system

Unclaimed baggage in arrivals: location (on carousel, off carousel); security implications; obtain details from baggage label eg flight, date, route, name; announcements; complete PIR

Support provision: supervisor; airport security; police; UK Border Agency

Essential guidance for tutors

Delivery

Unless learners are employed within baggage facilities, it is anticipated that this unit will be delivered in the classroom. There is great scope for role play, both during the delivery and assessment. The use of a selection of suitcases to support delivery would help.

The loss of any personal item is upsetting. Losing baggage that may contain items of value or sentimental value after a long, tiring flight is particularly distressing. Many learners will have experienced loss of items important to them – perhaps a mobile phone, a watch, an item of jewellery or something very personal such as photographs. If they were asked to picture discovering that loss when they were feeling tired and impatient, just wanting to get home, then they might be able to imagine the feelings of passengers with lost baggage. Having an appreciation of the emotions generated by loss is a good starting point for learning how to manage the outcome.

Once the range of passenger attitudes and feelings has been explored, a good exercise would be to identify suitable approaches staff could use to go through all the lost baggage procedures without enflaming the already tense situation. This could be re-enforced by the use of role play illustrating how simple approaches such as using positive, open body language, a calming tone of voice, and being sympathetic yet firm can all help the staff member remain in control.

Once loss, damage or theft from baggage has been stated by a passenger, baggage facilities staff will need to complete a Property Irregularity Report (PIR) to start the tracing or claims procedure. It will be necessary to issue blank PIRs to learners to enable them to see the kind of information needed and the prescriptive format in which it must be written. Learners must be made aware of the differing requirements depending on whether the inbound flight is domestic or international. In the case of non-EU flights, UK Border Agency form C1422 must also be completed.

Not only does the responsibility for dealing with reports of lost baggage rest with the baggage facilities staff, so too does the job of handling passengers who are claiming damage to, or theft from baggage while in the care of the airline. Learners need to be shown the importance of not expressing personal opinions regarding the likely cause of damage, or location of alleged theft, as this could jeopardise future claims. Finally, in this section, unclaimed baggage is often seen travelling round a reclaim carousel with no apparent owner. The chances are that the owner is standing by an equivalent carousel at another airport, waiting in vain for that suitcase. The job of the baggage facilities staff is to reunite the owner with the bag at the earliest practical opportunity. This could, of course, start by making announcements within the terminal to see if the passenger has simply forgotten to pick up the bag.

In all cases involving missing or found baggage, the World Tracer system is used. Learners must be introduced to the system. The World Tracer website mentioned in the resource section gives a good overview, but tutors may wish to summarise the major points from this for learners to avoid information overload.

As with most jobs, a robust support system must be in place to assist staff who may, at times, feel threatened, vulnerable, unsure, or who feel they are working outside their remit. Learners could be invited to discuss what kind of situations may make a baggage facilities worker feel they need this support, and to whom they might turn. It would be very beneficial to ask a baggage facilities employee to speak to the group or someone who has recent experience of this role. This person may be able to help set up some role-play situations.

Assessment

It is essential that 1.1 and 1.2 are met through role-play situations (or in the workplace for those working in Airport Baggage Facilities). All other assessment criteria for the unit can be assessed in written or verbal format either prior to or linked to the role plays.

To meet 1.1, learners must assist three different passengers displaying different attitudes. One of the passengers must be a non-English speaker. The passengers can be individuals or couples or small groups.

To meet 1.2, learners must complete documents for baggage discrepancies including a PIR and UK Border Agency form C1422. This task can be linked to 1.1.

To meet 1.3, learners must provide a brief description of the procedures to be followed for baggage discrepancies including: loss; damage; theft from baggage; found baggage. This task can be linked to 1.1 and 1.2.

To meet 1.4, learners must describe effective communication techniques used when dealing with passengers including: body language; tone of voice; choice of words; confidence; calmness; fairness. This task can be linked with 1.1.

To meet 1.5, learners must explain the function of the World Tracer System and how to access the system. This can be linked to one of the role-play situations in 1.1.

To meet 1.6, learners must explain how to deal with unclaimed and unattended baggage in the baggage hall, covering all items in the content. Evidence can be in written or verbal format and can be linked to 1.1.

To meet 1.7, learners must identify the relevant persons who can provide support including supervisors, airport security, police, UK border Agency. Evidence can be linked to 1.1 and can be written or verbal.

Role-plays

From the group of learners, choose two or three good actors who can be relied upon to play the part of tired, distressed, confused or non-English speaking passengers. If no such learners are available, or you feel it is more appropriate, you may need to ask colleagues, other learners or external persons to play the parts. Tutors should write the role play situations to ensure full coverage of range for 1.1 and 1.2 and providing sufficient opportunities to cover the full range for 1.3 and 1.5 within the role-plays. Tasks to meet 1.4 and 1.6 can be linked to the role plays but would require supplementary evidence to meet the assessment requirements in verbal or written format.

Learners being assessed must play the role of the baggage facilities agent.

The passengers should confront the baggage agent with a baggage irregularity (chosen from the unit content). The baggage agent must then deal with the situation appropriately (1.1). Passengers should not be openly aggressive, but should be unhappy, demanding and expecting results very quickly. It is assumed the inbound flight was from outside the EU.

The following areas can also be assessed:

Effective communication – body language, voice, words, reaction to the passenger, empathy, control – this should be demonstrated when undertaking the role-play assessment(s), but should also be explained in written or verbal format as supplementary evidence, ie before or after the role play, to fully meet 1.4.

Documentation – completion of PIR, C1422 (1.2) and a description of the reporting process given to the passenger (1.3).

World Tracer system – explanation to the passenger of how the baggage will be traced (1.5).

Calling for support – it is good practice for learners to advise passengers that support will be called for if the situation becomes unacceptable to either party (1.7).

Unclaimed and unattended baggage – on and off the carousel, security implication, obtaining the details from the baggage label (full list from content) and completing a PIR (1.6). This task can be part of the role play with supporting evidence in written or verbal format or assessed separately.

Posters - supplementary evidence

For any assessment criteria (1.3–1.7) not assessed within the role-play scenarios, learners can produce posters designed to be displayed in the staff area of the baggage facilities department, providing guidance to new staff.

A poster, called 'Baggage Discrepancies', should include the main categories of discrepancy (loss, damage, theft of contents, unclaimed (found)). From this, learners can create links describing the processes that must be followed in each case. An explanation of all actions that must be taken when unclaimed baggage is noticed must be included to fully meet 1.3 and 1.6. The lost or found bags should then be linked to the Worldwide Tracer System (WTS). A brief explanation of how the WTS facilitates baggage repatriation should be added to meet 1.5. A summary of which staff can be called on to provide support should conclude the poster which can provide evidence of 1.7.

On a separate poster, called 'Communication Techniques', learners should produce a guide to remind staff of the importance of communicating well with customers. The poster should include images of open and closed body language, people listening, people showing empathy, together with descriptions of how following these and other fundamentals of effective communication allow staff to remain in control in stressful situations (1.4).

Essential resources

- Internet access
- Sample forms – PIR and C1422
- Suitcases (mixture of types)

Indicative resource materials

Websites

http://www.businessballs.com/body-language.htm	Body language
http://search2.hmrc.gov.uk/kbroker/hmrc/forms/viewform.jsp?formId=159	C1422 form
http://www.omanair.com/wy/info_serv/baggage_serv.htm	Sample claim procedure
http://www.security-label.com/prodgrafiken/Page47/Sample4.pdf	Example PIR form
http://www.worldtracer.aero/aboutWT.html	World Tracer system

Unit 9: Aviation Passengers with Special Requirements

Unit reference number: A/601/6484

Level: 2

Credit value: 1

Guided learning hours: 10

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of the different needs of passengers and the products and services that can be offered. This will enable the learner to develop an awareness of passenger needs and how these can be correctly and sensitively dealt with.

This unit is appropriate for all learners prior to them undertaking activities at an airport, especially those interested in a customer service role.

Background knowledge of passports and visas, TIM, tickets and seating methods would be advantageous.

Unit introduction

Not all passengers are able to board aircraft without some form of assistance. The assistance could be as simple as providing guidance within a busy terminal for a nervous first-time flier, or it could involve a complete lift onto the aircraft for an injured passenger or a passenger with a disability. Between these two extremes is a range of requirements that must be understood by airline and ground handling agent (GHA) customer service staff.

Not only morally, but legally, all residents of the UK have the right to expect that any business will make provision for people of limited mobility to access their services. Aviation is no exception. This unit will provide an introduction to the types of passenger requirement you may expect to face as an employee of an airline or GHA. These requirements often have implications for staff not working in the 'front line' roles such as check-in and boarding. Ramp equipment may have to be planned for and operated, extra escorts may be needed, boarding may have to be advanced or delayed to accommodate the special needs, catering may have to be suspended during the pre-board – the list goes on.

Taking care of passengers with extra needs is a vital part of the customer service package airlines offer their passengers. The industry relies on maintaining a reputation of considering the needs of their customers. Ensuring the well-being of passengers with special requirements is a very high-profile part of this task.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
<p>1 Be able to assist passengers who have special requirements</p>	<p>1.1 assist and support passengers with special requirements</p> <p>1.2 identify the special requirements for particular types of passengers</p> <p>1.3 describe the different services that can be offered to passengers with special requirements</p> <p>1.4 describe methods of establishing passengers' needs to ensure that the appropriate services are provided</p> <p>1.5 describe the different considerations when assisting passengers using wheelchairs</p> <p>1.6 describe the different considerations when assisting unaccompanied minors (UNMIN)</p> <p>1.7 identify the conditions classified as MEDA</p> <p>1.8 identify the commonly used IATA codes used for passengers with special requirements</p>

Unit content

1 Be able to assist passengers who have special requirements

Reasons to assist and support passengers with special requirements: eg legislation, moral necessity, company reputation, avoid late boarding, avoid lost passengers

Types of passengers with special requirements: disability eg sight-impaired, hearing-impaired, wheelchair user (WCHR); children eg unaccompanied minor (UNMIN), young passenger (YP), lone parent with small children; nervous passenger; slow walker eg elderly, pregnant; medical eg stretcher, needing oxygen; prisoner with escort

Services: arrange meet and assist (MAAS) at origin and at destination; loan wheelchair; allocated seating; escort through terminal; brief cabin crew; boarding eg pre-board;,, board last, ambulift

Establishing passenger needs: pre-booking; medical certificate; observation; questioning with sensitivity

Considerations for wheelchair users: access to facilities eg check-in, bag drop, shops, toilets, security; provision of loan wheelchair; provision of escort; pre-board or board last; ambulift; airbridge

Considerations for handling unaccompanied minors: complying with regulations eg handover from guardian at check-in, escort through terminal, hand-over to cabin crew; pre-board; allocate seating; advise destination airport; badge or tabard

Conditions classified as MEDA: with medical certificate; conditions eg heart, breathing difficulties, recent injury, diabetes

IATA codes: eg WCHR, WCHS, WCHC, MAAS, UNMIN, YP, PREG, NERV, MEDA

Essential guidance for tutors

Delivery

For those learners not working in aviation, it is expected that most of this unit will be delivered in a classroom setting, but input would benefit from a visit to an airport to see firsthand how effective special-requirement provision is. This could be linked to a visit arranged to look at check-in services (Unit 4: Airport Check-in Services).

To open the unit, it would be useful to engage learners by prompting a tutor-led discussion of their own experiences at airports. Most will probably not have made use of special assistance, but many will have observed it in action, whether it be pre-boarding for families, lift-ons for wheelchair users or escorts for UMs. Learners could be invited to list all the categories they could imagine requiring special assistance, and from that, could decide as a group, the most appropriate type of assistance to provide.

Once a substantial list of considerations and requirements has been made, further discussion could establish the reasons why an airline should go to the trouble of providing these extra services, with their associated cost implications, for example legislation, moral necessity, company reputation, avoid late boarding, avoid lost passengers. While learners will not be assessed specifically on the reasons why to assist and support passengers with special requirements, this understanding will be beneficial to them when working in the aviation environment.

Having decided the range of assistance that may be required and is available, learners should consider the ways in which the *need* for assistance may be established. Sometimes it is simple – the passenger asks for it, or the need is stated on a medical certificate. On other occasions, observation of passengers and sensitive questioning may be needed. It should be remembered that many people who are elderly or who have disabilities are fiercely independent and may take exception to well-meaning offers of assistance.

Two of the most common situations that require special assistance are the handling of wheelchair users and the processing of unaccompanied minors. It should be noted that many passengers requiring wheelchair assistance are not normally wheelchair users, but they need a wheelchair because they are unable to walk the long distances to the gate or from the gate to the aircraft. These passengers are usually elderly or have an injury that impedes their walking ability. These passengers can usually manage the aircraft steps and do not require the Ambulift. Many learners will be familiar with the general requirements that must be in place to facilitate wheelchair access within schools, shops and other business premises. Learners could be asked to build on this existing knowledge and contextualise the requirements within an airport. The requirements for accepting and transporting unaccompanied minors are less likely to be common knowledge – it is probable that step-by-step input will be required to explain the airline's obligations in this area.

Various medical conditions affect passengers in different ways. It is important that learners become aware that some conditions may require the production of a medical certificate before passengers can be accepted for flight. One example is those who need to take on board oxygen bottles to aid their breathing; there are special procedures for these passengers. Other examples can be found in the unit content.

The world of aviation is filled with abbreviations; the area of special assistance is no exception. Learners could be invited to research the meanings of abbreviations, then link them to the conditions already discussed.

There are many sources of information for the topic of airline and airport websites. It would be interesting to compare the stated policies of regional UK, major UK and overseas airports/airlines.

Assessment

For those already in the workplace, many of the assessment criteria will be met during the working day and can be assessed as they occur. For classroom-based learners, a more formal approach will be needed. This could include a mix of creative work and role play. It is suggested that 1.1 is assessed last, as it represents the putting into practice of many of the other criteria.

Evidence for 1.2 to 1.8, could be in the format of a wall chart (either on a sheet of large paper or computer based) or a leaflet, depicting the most frequently experienced circumstances that demand special assistance, and their consequential requirements.

To meet 1.2, learners must identify the special requirements for a minimum of four types of passenger taken from those listed in the content. This can be integrated with the practical role-play activity for 1.1.

To meet 1.3, learners must briefly describe the different services that can be offered to passengers with special requirements including all the items listed in the content. Learners can support their evidence with illustrations and examples.

To meet 1.4, learners must describe the different methods available for establishing passenger needs to ensure that the most appropriate special assistance is provided. Learners should provide examples covering the items listed in the content.

To meet 1.5, learners must describe what has to be taken into consideration when assisting passengers using wheelchairs. Learners should provide examples and these could be two scenarios for two different passengers, providing opportunities to cover all items in the content across the two scenarios.

To meet 1.6, learners must describe what has to be taken into considerations when assisting unaccompanied minors (UNMIN). Learners could provide a detailed flow chart covering all the items listed in the content, and support the flow chart with illustrations.

To meet 1.7, learners must identify, in a list, the conditions classified as MEDA.

To meet 1.8, learners must decode at least six commonly used IATA codes for passengers with special requirements.

To meet 1.1, learners must demonstrate that they can assist and support passengers with special requirements. Learners should use the knowledge gained during the achievement of 1.2–1.8 to carry out role play for a range of passengers. The role play must include one passenger requiring wheelchair assistance and one other type of passenger requiring special assistance, eg impaired sight or hearing, unaccompanied minor, nervous passenger, prisoner with escort.

Fellow learners, tutors or external people should create a situation where a passenger (or group of passengers) present themselves at the check-in desk, requiring special assistance. On the first occasion, the requirement could be pre-booked (eg wheelchair, unaccompanied minor), the second scenario could involve the staff member establishing a need that has not been requested (eg lone parent with small children, elderly passenger). All learners being assessed for this unit must have the opportunity to act as the staff member responsible for providing special assistance. It may be possible to combine the assessment of this unit with Unit 4: Airport Check-in Services, particularly for the practical elements of 1.1.

Essential resources

- Equipment for role play eg wheelchairs, oxygen bottles, stretcher, walking sticks, crutches, pushchairs
- Internet access

Indicative resource materials

Websites

http://www.britishairways.com/travel/disabilityassistanceinfo/public/en_gb	Example of information regarding airport special assistance (BA)
http://www.flybmi.com/bmi/en-gb/flight-and-airport-info/pre-travel/special-assistance/unaccompanied-children.aspx	Example of information regarding unaccompanied minors (BMI)
http://www.flying-with-disability.org/flying_with_a_wheelchair_and_other_mobility_aids.html	Information regarding wheelchair users on flights (generic)
http://www.opsi.gov.uk/acts/acts1995/ukpga_19950050_en_1	Disability Discrimination Act 2005
http://www.uk-air.net/UMsfaq.htm	Information regarding unaccompanied minors (generic)

Unit 10: Aircraft Load Instruction Reports

Unit reference number: J/601/6486

Level: 2

Credit value: 2

Guided learning hours: 15

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding to enable them to correctly interpret information provided in the Load Instruction Report (LIR). This will enable the learner to interpret and communicate written or pictorial information to all interested parties on the planning intentions of the person responsible for mass and balance.

The knowledge provided within this unit is fundamental to the safety of the aircraft in flight and any discrepancies in the interpretation or implementation of a Load Instruction Report 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 safe loading of aircrafts.

Unit introduction

The Load Instruction Report (LIR) is one of the most important documents used during an aircraft turnaround. This is the form that instructs loaders where baggage and cargo must be placed on an aircraft for it to stay within weight and balance limits. If the instruction is incorrectly produced, or is incorrectly followed, there could be serious safety implications for that aircraft, its crew and passengers.

During a shift, loading staff may be instructed to load several different aircraft types ranging from a small, twin-engine commuter (eg, DHC8, JS41) to a large, wide-bodied aircraft (eg B767, A340). All types require Loading Instructions, but the forms may look very different, as would the detail they contain.

Following the instructions as closely as possible is vital. The load controller will have calculated the weight and balance of the aircraft based on the understanding that it will be loaded exactly as indicated on the LIR. Ultimately, the aircraft captain will base aircraft take-off speeds and climb profiles on this same understanding. If the actual loading does not mirror the LIR, then all the calculations become invalid.

For reasons we shall discuss within this unit, it may not be possible to follow the LIR completely. Small variations may be permitted, but these must be reported to relevant staff immediately. We shall examine this procedure in some detail.

This unit links closely to Unit 7: Aircraft Loading and Unloading. You will recognise references from this unit, and should use your previous work as a source of reference throughout.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
<p>1 Be able to interpret Load Instruction Reports</p>	<p>1.1 identify loading positions on different types of Load Instruction Reports (LIR)</p> <p>1.2 describe different types of information included in Load Instruction Reports (LIR)</p> <p>1.3 explain the locations of loading positions relating to aircraft types</p> <p>1.4 identify different types of Unit Load Devices (ULDs)</p>
<p>2 Understand how to implement a Load Instruction Report</p>	<p>2.1 identify the relevant people involved in implementing a Load Instruction Report (LIR)</p> <p>2.2 identify types of special loads</p> <p>2.3 describe factors that should be checked when implementing a Load Instruction Report</p> <p>2.4 explain the sequence of completing a loading instruction report</p>
<p>3 Be able to communicate deviations and alterations of loads</p>	<p>3.1 amend Load Instruction Reports in response to deviations and alterations</p> <p>3.2 identify different types of changes that could be made to the Load Instruction Report</p> <p>3.3 describe the effect of incorrect changes to the load</p> <p>3.4 explain the importance of communicating changes to the relevant people</p> <p>3.5 explain what is meant by the term 'bulking out'</p>

Unit content

1 Be able to interpret Load Instruction Reports

Types of Loading Instruction Report: narrow-body aircraft; wide-body aircraft

Loading positions: narrow body eg lower deck holds, main deck holds; wide body eg containerised holds, bulk hold; hold designation; match aircraft holds to LIR

Information found on Loading Instruction Reports: type of load eg bags, priority, first class, crew baggage, cargo; location of load (hold designation, container position); maximum hold weight; actual load weight/number of pieces; special instructions

Location of loading positions: aircraft types (narrow body, wide body); location of loading positions (within bulk hold, within containerised hold); conventional hold designations; location of hold door

Unit load devices (ULDs): containers eg LD3, LD8, LD11, AKE; pallets

2 Understand how to implement a Load Instruction Report

People involved in Load Instruction Report (LIR) implementation: load controller; loading supervisor; loader; dispatcher; flight deck crew

Special loads: dangerous goods eg toxins, radioactive, flammable; live animals (AVI); perishables eg foodstuffs, flowers; human remains (HUM)

Factors to check: aircraft to be loaded matches that on the LIR; flight details match that on the LIR, (flight number, date, route); holds are empty prior to loading; correct ULD for aircraft type; quantity will fit in hold; hold floor weight is not exceeded; incompatible loads; AAA card and baggage manifest tallies; LIR signed by loading supervisor on completion

Sequence of completing an LIR: load controller (load plan based on booked load, LIR based on actual load); issued to (loading supervisor, loading team, deviations recorded, signed by supervisor, passed to dispatcher)

3 Be able to communicate deviations and alterations of loads

Amend LIR: deviations and alterations eg position unavailable, hold filled with transit bags, incompatible loads, bulk-out, late bags/cargo

Types of changes made to LIR: change load location eg change a container position, divide large load between two holds; additional load eg accept last minute changes LMC baggage/cargo, accept gate bags

Effects of incorrect changes: overweight aircraft; unbalanced aircraft; load in incorrect position for arrival; delays due to re-load

Importance of communicating changes: relevant people eg load controller, dispatcher, loading team, flight deck crew; importance eg ensure actual load matches LIR, comply with AAA regulations, ensure safe loading has taken place

Bulking out: hold too small for load/load too large for hold

Essential guidance for tutors

Delivery

Staff who are already employed as part of a loading team or in the load planning department will be able to gain first-hand experience of all issues included in this unit. If this is the case, it may be possible to deliver and assess elements individually as they actually occur in the workplace. Care must be taken to ensure that the whole range, detailed in the unit content, is covered. For those not employed in the industry, delivery and assessment will be in the classroom with tutors working closely with relevant industry personnel to ensure accurate and up-to-date coverage of the topics.

As with other units in this qualification, airside visits to support classroom learning may be difficult to meet. Not only do security restrictions limit access, but also health and safety considerations will probably preclude close observation of the loading process. Occasionally, Load Control centres are located landside, so a visit may be possible to see the start of the Loading Instruction Report (LIR).

Within the classroom, examples of narrow-body and wide-body LIRs must be used to demonstrate their completion. It would be a good idea to bring a large stock of blanks so learners can create their own examples. The examples used for this unit are manually generated LIRs to aid clarity. However, it would be beneficial for learners to see computer-generated paperwork as a comparison.

By projecting an image of a container-loaded aircraft adjacent to its LIR, it will be possible to picture how the holds and ULD positions on the LIR relate to the aircraft. This can be extended to cover bulk-loaded aircraft. Ideally, the LIR should include a variety of baggage types, cargo types, special loads, containers, pallets, empty positions and bulk load. The group should be issued with a list of code letters used in the LIR. With this information, and tutor guidance, learners should be able to decipher the projected LIR and state how the aircraft is loaded. The differences between bulk holds and containerised holds should be pointed out, along with the type of load they accommodate (loose load and unit load). Divisions within a container hold should be explained, with reference to the aircraft and the LIR. Images of the different types of ULD can be shown. It is worth pointing out the dimensions of these and their capacity to give some context.

The sequence of people involved in creating, following and verifying the LIR must be made clear. This could be expressed on a flowchart, naming the people stating their role.

Within the unit content, a list of factors that must be checked at various stages of the LIR's implementation is provided. This is not an exhaustive list, but is indicative of the main elements that must be confirmed. Learners could be asked to predict the problems that could result if these items were not checked, and an error went unnoticed.

The importance of advising any changes to the loading of the aircraft to the appropriate person without delay must be made clear. Minor amendments can be made to the LIR which is signed by the loading supervisor and passed to the dispatcher. Any major changes must be authorised before they are made, as a new LIR may be required. Reasons for making changes could be discussed within the group – suggestions can be found in the unit content. Equally, the consequences of incorrectly amending the LIR can be considered – by now learners should be able to predict potential outcomes.

Assessment

Assessment for this unit is likely to be report based, accompanied by graphics and diagrams.

To meet 1.1, learners must identify loading positions on two different types of Load Instruction Reports. To meet 1.2, learners must describe different types of information included in Load Instruction Reports. Evidence for 1.2 can be integrated with 1.1. To support assessment of 1.1 and 1.2, tutors may provide learners with completed examples of a bulk-load LIR and a containerised LIR, ensuring that each LIR has a wide variety of baggage and cargo types including special loads, filled and empty containers, pallets, and empty positions. Each load or empty position could be indicated with a letter, and learners asked to provide a description of what is located at each letter to meet the assessment criteria, including, for example:

- a the position within the hold (eg bulk hold 1, containerised position 11L)
- b maximum hold weight
- c the type of load (eg baggage, cargo, special) and actual weight or number of pieces
- d the type of container used (if applicable)
- e any special instructions.

To meet 1.3, learners must explain how loading positions differ between wide-body and narrow-body aircraft (giving at least one example of each). Learners must include bulk and container positions, the hold and position designations, together with hold door locations.

To meet 1.4, learners must identify at least five different types of Unit Load Devices (ULDs). This can be achieved in the workplace with real ULDs, or learners could obtain pictures of commonly used ULDs and name them. It would be useful to include basic data such as dimensions and weights.

To meet 2.2, learners must identify a minimum of four different types of special load, two dangerous and two non-dangerous loads that can be considered special. Evidence for 2.2 can be linked with the Load Instruction Reports used for 1.1 and 1.2.

To meet 2.1, learners must identify the relevant people involved in implementing a Load Instruction Report (LIR). To meet 2.3, learners must describe factors that should be checked when implementing a Load Instruction Report covering all items listed in the unit content. To meet 2.4, learners must explain the sequence of completing a loading instruction report covering all items listed in the unit content.

To support assessment of 2.1, 2.3 and 2.4, learners could create a flowchart depicting the progress of the LIR from inception to final signature. The main boxes across the page would illustrate sequentially the people involved (2.1). Beneath each person listed, a description of the factors they should be checking for, together with the reasons, should be added. Learners must ensure that all factors in the unit content are covered (2.3). To conclude the table, an explanation of why the sequence indicated in the unit content provides the best format for ensuring safe and accurate loading is required (2.4).

To meet 3.1, learners must amend a completed Load Instruction Report in response to at least three different deviations and alterations. In carrying out this task, learners will also meet 3.2 (identification of different types of changes that could be made to the Load Instruction Report). To meet 3.5, learners must explain what is meant by the term 'bulking out'. This can be linked with 3.1 and 3.2. To support assessment of 3.1, 3.2 and 3.5, learners could be provided with an LIR from Load Control, stating the desired position of baggage and cargo. Learners will be advised that one specific hold/position is not available, another is not big enough (bulked out) for the desired load and a small amount of LMC baggage has been accepted. Learners should amend the LIR accordingly, identifying the nature of the changes they have made. This should include an explanation of the term 'bulked out' to fully meet the assessment criteria.

To meet 3.3, learners must describe the effect of incorrect changes to the load, covering all items listed in the unit content. To meet 3.4, learners must explain the importance of communicating at least two changes to the relevant people. To support assessment of 3.3 and 3.4, learners could provide an explanation, in a brief written report, of why it is essential that any changes to an LIR are communicated to the relevant people. This explanation must include details of who these people are, what they would be expected to do with that information and why the information is so important (3.4). To conclude the report, a description of the consequences of making incorrect changes to the LIR, or incorrectly interpreting the LIR, is required (3.3).

Essential resources

- Bulk-load LIR
- Container-load LIR (both blank and completed)
- Table of LIR codes

Indicative resource materials

Texts

IATA – Ground Handling Manual (AHM 30th ed) (IATA, 2009)

Websites

http://www.baworldcargo.com/configs/BAWCconfigurations.pdf	Description of ULDs
http://www.skybrary.aero/index.php/Aircraft_Load_and_Trim#Loading_Procedures	Description of loading procedures
http://www.smartcockpit.com/data/pdfs/flightops/aerodynamics/Getting_To_Grips_With_Weight_and_Balance.pdf	Information on weight and balance that could support any loading unit (PDF)
http://www.vrr-aviation.com/	ULD manufacturer for special loads

Unit 11: Aircraft Marshalling

Unit reference number: L/601/6487

Level: 2

Credit value: 2

Guided learning hours: 16

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of the principles of aircraft marshalling. This will enable the learner to be able to safely marshal an aircraft onto, or off, a stand.

The knowledge provided within this unit is fundamental to all activities within the airport environment.

This unit is appropriate (but not obligatory) for all learners prior to them undertaking activities as a ramp agent.

Unit introduction

As an aircraft taxis onto its parking stand, many people will have seen a person standing in front of it in a yellow coat, furiously waving what appear to be table-tennis bats in the air. While this activity may provide a moment of entertainment for the onlooker, the aircraft marshaller is actually performing a vital safety function in this crucial stage of the arrival phase.

Aircraft are designed to perform at their best when travelling at high speed, several thousand feet above the ground. Their ability to manoeuvre is severely limited when negotiating the congested taxiway and ramp network of a busy airport. Equally, the view from the cockpit can be limited; often the wing tips are very difficult for flight deck crew to see. As a consequence, some form of guidance is usually provided for the final act of aircraft parking.

Not only does the marshaller provide this guidance, he or she is also responsible for checking that the parking stand is suitable for accommodating the aircraft. Checks must be made to ensure there is no debris on the stand, that no vehicles have been left in dangerous locations, and that boarding or disembarking passengers are not going to be endangered by the approaching aircraft.

Once the checks have been done, the marshaller must use clear and confident signals to guide the aircraft safely. This is not a job for the faint-hearted – standing in front of a 350 tonne B747 as it creeps towards you, following your directions, with the knowledge that the safety of the aircraft largely rests on your judgement, can be daunting. However, once familiar with the signals and responsibilities, marshalling can be one of the more rewarding job roles on the ramp. Each arrival is slightly different, each with its own challenges to overcome.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
<p>1 Understand how to prepare for aircraft arrival on stand</p>	<p>1.1 explain the purpose of aircraft marshalling</p> <p>1.2 describe the dangers of carrying out marshalling duties</p> <p>1.3 identify different types of Foreign Object Debris (FOD)</p> <p>1.4 describe the checks required before bringing aircraft to the stand</p> <p>1.5 identify different types of marshalling aids</p> <p>1.6 explain how weather conditions can affect the marshalling procedure</p> <p>1.7 describe Personal Protective Equipment (PPE) used in the marshalling process</p>
<p>2 Be able to marshal aircraft onto and off stand</p>	<p>2.1 use correct hand signals to marshal aircraft onto and off stand</p> <p>2.2 describe the rules, regulations and signals of marshalling an aircraft</p> <p>2.3 describe the actions required to make an aircraft safe prior to personnel approaching</p> <p>2.4 describe the actions required prior to aircraft departure</p>

Unit content

1 Understand how to prepare for aircraft arrival on stand

Purpose of marshalling: safety eg to aircraft, to ground staff, to passengers; guidance eg correct stand, correct stopping point

Dangers of marshalling: noise; ingestion; blast; vehicle collision; dust

Foreign Object Debris(FOD): from engineering activities eg tools, nuts and bolts, oil cans; from caterers eg food, cutlery, cups, bar seals; from loading activities eg wheels and studs from suitcases, handles from suitcases, lashing straps; other eg litter

Checks before bringing aircraft onto stand: stand unoccupied by other aircraft; clear of equipment eg tug, conveyor, bag cart, container dolly, chocks; free of contamination eg FOD, oil/fuel spill; activities on adjacent stands eg boarding/disembarking passengers, service equipment

Marshalling aids: manual eg bats, illuminated wands, hi-vis gloves; mechanical eg aircraft parking and information system (APIS), azimuth guidance for nose-in stand (AGNIS); additional aids eg follow-me vehicle, wing tip guide

Weather: fog eg use of follow-me vehicle, series of marshallers, wing tip guidance; personal precautions eg in high wind, ice and snow

PPE used by marshallers: ear defenders; hi-vis clothing; weather protection; goggles; protective footwear

2 Be able to marshal aircraft onto and off stand

Hand signals: marshaller to flight deck; flight deck to marshaller; standard signals; emergency signals

Rules, regulation and signals: Civil Aviation Publication CAP637 (Visual Signals Handbook) - Rules of the Air Regulations; marshalling signals (this stand, straight ahead, turn left/right, stop, chocks inserted, ground power attached, clear to start engine, disconnect ground power, chocks away, cleared to depart the stand)

Actions to make an aircraft safe: chocks in; engine shut down; anti-collision beacon off; propellers secured (if applicable)

Actions prior to departure: chocks in position; steps away; hold doors checked; FOD check; clear behind; ground power unit (GPU) functioning (if required); engine start; GPU unplugged; chocks away

Essential guidance for tutors

Delivery

Learners who are employed within airline or GHA ramp handling divisions, may gain significant exposure to most of the unit content. It may even be possible for supervised live marshalling to form part of the assessment process.

For those based in the classroom, however, airside visits are difficult to arrange. Watching a marshaller in action is by far the best way to appreciate the skills and confidence required to perform the task, but for most learners input is likely to take place in the classroom, lecture hall even the centre's car park. There are many YouTube video clips of aircraft marshalling. These can be used to great effect when demonstrating the required hand signals. However, tutors should choose the clips with care, some (especially the military versions) are a humorous look at the skill – not to be adopted in civilian aviation!

A good starting point would be the regulations and conventions – why do we need marshallers and what rules do they follow? A group discussion investigating the final elements of the arrival phase of an aircraft as it taxis from the runway should bring to light potential hazards such as poor manoeuvrability, reduced vision from the cockpit and difficulties assessing wing-tip clearance. From this should flow how the marshalling system can reduce these hazards.

The process should be approached logically. Start with the preparation; the stand must be checked to ensure it is safe to accept the aircraft. Suggested obstacles are found in the unit content, but it is likely learners will think of additional debris.

Once satisfied the stand is safe, the marshaller must guide the aircraft to its required stopping position. A look through CAP637, the Visual Signals Handbook (pages 10 to 19) shows all the signals. Copies of these pages could be provided for all learners. As there are a large number of signals on the pages, it would be beneficial to highlight the more frequently used such as; *this stand, straight ahead, turn left/right, stop, chocks in place* together with the signals for *cut engines* and *engine fire*. At this stage, learners should be made aware that, at some airports, Marshallers are also used during the push back/power back manoeuvre off stand. The departure signals are also found in CAP637.

The above assumes daylight marshalling, in good visibility. It is important to point out that both night and adverse weather can change procedures. Illuminated wands are used to increase the visibility of the guidance gestures, and in extreme conditions, a 'follow-me' vehicle may be used in place of a static marshaller.

Linking the potential hazards of the marshaller's role with PPE provided should contextualise the risks and how they are contained. The unit content contains an indicative list of both.

Certain actions must be taken to make an aircraft safe for others to approach following arrival on stand. Local rules and conventions will dictate who is responsible for what action, but frequently the Marshaller will be involved in at least some of them. Equally, the reverse is the case when an aircraft is ready to depart the stand. A list is found for both in the unit content, any signals being found in CAP637.

In conclusion, the part that most learners will have been looking forward to – a practical session involving use of hand signals for arriving and departing aircraft – should be undertaken. Obviously it is impractical to marshal real aircraft in this context, so fellow learners may have to act as aircraft, while the learner being assessed is the marshaller. This may be difficult to control within the classroom, so a large area such as a playing field or car park could be used. This should be marked up to represent standard ramp markings. It may be useful for learners to prepare A4 cards indicating each of the signals required, which can be shown in turn. These can help to bring awareness of the types of signal employed by marshallers, and can also be used during the practical assessment.

Assessment

This unit divides naturally into two parts: Part 1 is evidenced in written or verbal format demonstrating the knowledge and understanding of the role of the marshaller covering assessment criteria 1.1 to 1.7 and 2.2 to 2.4; Part 2 is a practical demonstration of marshalling signals covering 2.1.

Part 1

To meet 1.1, learners must provide an explanation of the purpose of aircraft marshalling in terms of safety and guidance.

To meet 1.2, learners must provide a description of the hazards specific to marshalling as listed in the unit content. It is appropriate to include assessment of 1.7 (see below) with 1.2

To meet 1.3, learners must identify at least six different types of FOD including their source, covering all the areas listed in the content. This can be a list with supporting illustrations.

To meet 1.4, learners must provide a description of the checks that must be undertaken before an aircraft can be guided to the stand. Learners must cover all areas listed in the content and provide examples where appropriate.

To meet 1.5, learners must provide a list of three manual, two mechanical and one other marshalling aid. Learners can support their list with illustrations.

To meet 1.6, learners must provide an explanation of how weather can seriously impact on the marshalling activities. Learners must include at least two personal precautions that must be taken, and two changes to marshalling procedure.

To meet 1.7, learners must describe at least four different types of Personal Protective Equipment (PPE) used in the marshalling process. Learners can support their descriptions with actual PPE or illustrations.

To meet 2.2, learners must provide a description of the rules and regulations that govern aircraft marshalling, together with the signals most frequently used by aircraft marshallers (all those listed in the unit content must be included).

To meet 2.3, learners must describe the actions required to make an aircraft safe to approach after arrival on stand covering all items listed in the content. To meet 2.4, learners must describe the actions required prior to aircraft departure covering all items listed in the content. Learners could produce detailed flowcharts to set out this information.

To support assessment of 1.1 to 1.7 and 2.2 to 2.4, learners could create a written guide, including pictures, diagrams and text, detailing the role of the marshaller to new staff. Each page should have a heading and contain guidance that would be useful to inexperienced marshallers. The guide can be produced on A4 paper and may refer to a larger wall chart containing approved signals (produced by the learner) which would add clarity. An alternative would be for learners to cover some or all of the above criteria in an oral presentation with slides and supporting visual aids. For those in the workplace, the criteria can be achieved through recorded (written, audio or visual) question-and-answer sessions with tutors.

Part 2

To meet 2.1, learners must role play the marshalling of an aircraft as detailed below:

Marshall an 'aircraft' from the taxiway, onto stand, ensuring it stops at the desired point, facing in the desired direction. Correct signals must be used throughout the manoeuvres, which must include:

- | | |
|---------------------------------------|------------------------|
| a this stand | d stop |
| b straight ahead | e chocks inserted |
| c turn left or right (as appropriate) | f connect ground power |

This should be followed by a demonstration of departure signals which must include:

- | | |
|---------------------------|-------------------------------|
| a engine start | c chocks away |
| b disconnect ground power | d cleared to depart the stand |

Recording performance

Evidence submitted to meet criteria requiring the practical demonstration of skills must be supported with observation reports signed and dated by the assessor explaining how and where specific criteria have been met. Range coverage should also be clearly tracked on the observation report or on checklists attached to the report. Learners should also sign the reports as being a correct record of their performance and achievement. Some supporting evidence, for example photographs, external supervisor or peer evaluations, audio or DVD recordings etc should also be provided where appropriate. If performance is being observed by third parties, a witness statement must be completed, providing feedback on performance mapped to assessment criteria and range coverage. It is useful for a sample of learners to be internally verified at the same time as they are being assessed by the tutor.

Essential resources

- Examples of FOD
- Internet access
- Marshalling bats/wands
- Sample PPE
- Space for practical demonstration

Indicative resource materials

Texts

CAA – *CAP 637 Visual Signals Handbook* (CAA, 2007) ISBN 9780117908444

Websites

- | | |
|---|--|
| http://www.caa.co.uk/docs/33/CAP637.PDF | CAA Publication CAP637: Visual Signals Handbook |
| http://www.fmt.se/index.php?id=85 | APIS explained by manufacturer FMT |
| http://www.hse.gov.uk/pubns/apis1.htm#2 | Health and Safety Executive guide to airport PPE |

Unit 12: Support Flight Operations

Unit reference number: R/601/6488

Level: 2

Credit value: 2

Guided learning hours: 14

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding of the principles of Supporting Aviation Operations. This unit is about working as a member of a Ground Operations Unit. You must be able to understand the types of information you are likely to receive or send. You must know who to pass information to. You must understand your role in any aviation emergency either planned or real. This unit is appropriate for all learners prior to them undertaking activities at an aviation ground operations unit.

Unit introduction

Airline operations teams rely on a constant flow of timely and accurate information. For a global airline, the 'Ops' office may be monitoring the status of flights in several continents, covering all the time zones of the world – each with their own potential problems. It is the job of the Ops office to predict issues and put in place measures to prevent them from becoming a problem that could disrupt the smooth operation of the airline. It must be remembered that a delay to a scheduled service from New York to London may not only inconvenience the passengers booked on that flight, but also those on the next flight that aircraft is programmed to operate. Equally, crews on long-haul flights work to very tight limits on their permitted duty times. Any significant delay could render them legally unable to operate the flight.

The Flight Operations department is really the heart of the airline. Information flows in and out, significant elements from this stream of data are used to inform the decision-making processes. It is important for all ground staff who may be a link in that information supply chain to be aware of the vital role they play in maintaining an efficient operation. By exploring some of the areas that frequently feature in flight operations, it should become clear how broad the information network has to be.

Emergency planning and procedures must be tested on a regular basis. Frequently, this involves a simulated (but very realistic) incident that is designed to test the response of all emergency and control bodies involved. The airline and the airport authority play key roles in this process as we shall see in this unit.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Understand the importance of flight operations information	1.1 identify information sources for flight operations 1.2 identify operational information required to support flight operations 1.3 explain the importance of operation information to support flight operations 1.4 identify key people who require operational information
2 Understand aviation emergency procedures	2.1 explain the main components of airport emergency plans 2.2 state the key personnel involved in emergency plans 2.3 describe the types of emergency exercises 2.4 explain how to respond to telephone bomb threats 2.5 describe emergency classifications

Unit content

1 Understand the importance of flight operations information

Information sources (for flight operations information): public sources eg airline timetables, public Flight Information Displays Systems (FIDS); industry sources eg airport MAYFLYs, internal electronic departure/arrival systems, movement boards, MET office

Information required: time-related eg scheduled arrival and departure times (STA and STD), estimated arrival and departure times (ETA and ETD), slot time; airport-related eg route, airfield status at origin and destination, weather reports; aircraft related eg flight number, aircraft registration, aircraft type

Importance of operational information: to allow planning/preparing eg ground staff allocation, managing air crew hours, equipment allocation, special requirements; reducing delays

Key people requiring operational information: office based eg flight operations dept, load controller, crew controller, Air Traffic Control (ATC); ramp based eg dispatcher, ramp supervisor, flight deck crew

2 Understand aviation emergency procedures

Airport emergency plan components: gold command (over-all command); silver command (departmental command); bronze command (individual unit command)

Key personnel: airport based eg airport authority, Air Traffic Control (ATC), Rescue and Fire Fighting Service (RFFS), airline, ground handling agent (GHA); externally based eg local authority fire service, ambulance, police, social services, mortuary services; remotely based eg Air Accident Investigation Branch (AAIB), BA Emergency Procedures Information Centre (EPIC)

Types of emergency exercise: types of incident eg crash on airport, crash off-airport, aircraft fire after landing, aircraft evacuation, bomb threat; types of exercise eg discussion, table top, live

Respond to telephone bomb threat: remain calm; follow bomb threat script; record call (if possible); keep caller on phone as long as possible; listen for background noises; note accent; note phrases used; signal to colleague for assistance; report call to special branch

Emergency classifications: local standby; full emergency; aircraft accident

Essential guidance for tutors

Delivery

In an ideal world, all airport staff should take part in emergency exercises on a regular basis. In reality, this is not always possible due to the timings of exercises, shift patterns and rostered days off. Learners engaged in this unit should be encouraged to take part in planned exercises if possible - the experience will pay dividends. It is unlikely that all aspects will be covered, so some classroom work may be needed.

It may be possible to secure the services of an airport emergency planner, an officer from the RFFS or perhaps an ATC staff member involved in planning, to add some personal input to the classroom delivery. This input would certainly aid learners' understanding, and prevent the unit becoming over-theoretical.

A good starting point would be to guide learners into a discussion, to discover what types of information a central operations department may need to control airline activities at multiple sites and why this control is so important. Knowledge of how airlines and airports function derived from previous units should provide some of the fundamental elements. What may not be so clear is the source of required information. This will probably need tutor input to ensure that all sources are included. Closely linked to this is the question of who may require information from the Ops office. An indicative list for all the above is included in the unit content.

The second half of the unit concentrates on emergency procedures and planning. Of course, it is to be hoped that most of these are never needed, but it is mandated under the terms of the Air Navigation order that emergency plans must be in place and practised regularly. To quote the CAA:

'The United Kingdom (UK) Civil Aviation Authority (CAA) requirements related to licensed aerodromes are contained in Civil Aviation Publication (CAP) 168 - Licensing of Aerodromes. In particular, Chapter 8 defines the UK RFFS requirements and Chapter 9 defines the Emergency Planning requirements based on the ICAO SARPs.'

From this it is clear that some reference must be made to the legal requirement to be prepared for major incidents both on and off the airfield.

Both the control structure and the role of the personnel involved must be explored. It is probable that this will rely heavily on tutor input, as pre-existing knowledge is unlikely. The structure is, by necessity, well defined and prescribed and could effectively be demonstrated in a 'family tree' of responsibilities, starting with 'gold' - the overall command centre, through 'silver' - the senior representative of each organisation on site, down to 'bronze' - controlling individual elements of the emergency response.

This unit would benefit from building relationships with key personnel from local airports and emergency services, as most of learning outcome 2 could include input delivered by airport, police and RFFS representatives.

The different classifications of emergency must be explained – a **local standby**, requiring all front-line emergency response staff to be alert, RFFS to man their appliances, but no further action to be taken. An example of why a local standby could be declared would be a light aircraft approaching the airfield with a rough running engine – no emergency has been declared, but staff are aware in case the incident needs to be upgraded. A **full emergency** implies that all agencies have been informed and will respond as per the emergency procedures. Fire, ambulance, police and others listed in the unit content will activate their part of the emergency plan. An example could be an aircraft on approach to land with an engine fire – no accident yet, but there is a high probability that assistance will be required. An **aircraft accident** is the term used when an aircraft is on the ground, and has suffered some degree of damage, or there is the potential for death or injury among those on board. The response is similar to the full emergency, except there is a more defined set of actions in the knowledge that there is a certain need for urgent assistance. A full description of emergency types is found in CAP168; chapter 9.

Emergency exercises must be conducted, under the watchful eyes of the CAA, on a regular basis, to ensure adequate responses are made to any type of emergency. These are planned in advance, usually by the airport authority, involve multiple agencies and tend to vary the time of day and incident type to cover all possibilities. Suggestions for an emergency exercise scenario, which agencies would be involved in could be made by groups of learners. A practical desk-top session involving teams of learners being faced with various airport emergencies would allow them to discover how each scenario would be handled.

The response to bomb threats is an important exercise for anyone who is likely to answer the telephone in a large organisation. The aviation industry is particularly attractive to those wishing to take advantage of the high-profile nature of the business in order to disrupt normal activities or gain publicity for their cause. Fortunately most calls are hoaxes, but until the risk has been established by a competent assessor, all such calls must be treated as potentially genuine. Many institutions have a standard 'acceptance of bomb threat calls' pro forma. If one can be obtained from college or work premises, this could be contextualised to an airport or airline setting by learners. The importance of following the script as closely as possible must be emphasised.

Assessment

Because of the amount of information and detail required in this unit, it is suggested that assessment is by open-book testing, using a question template. Alternatively, this could be a recorded question-and-answer session with a tutor. However, tutors can also instruct learners to produce their evidence in other written formats or through an oral presentation supported with visual aids. Whichever method of assessment is selected, the evidence produced must be as follows.

To meet 1.1, learners must identify at least describe two public and three industry sources of information that are vital for the smooth running of an airline operations department.

To meet 1.2, learners must identify at least three types of time-related information, and three types of aircraft-related information required to support the smooth running of an airline operations department. To meet 1.3, learners must explain why the information mentioned in 1.2 is so important to the operations department in relation to planning and delay reduction. To meet 1.4, learners must state four key people (job titles) that need accurate information from the operations department.

In order to meet 2.1, learners must explain the main components of airport emergency plans. Learners should cover the three types – gold, silver and bronze.

In order to meet 2.2, learners must state three airport-based agencies, one external agency and one remote agency that are involved in emergency planning and response. In order to meet 2.3, learners must describe two types of airport emergency incident and two types of exercise designed to test staff responses. In order to meet 2.4, learners must explain how to respond to telephone bomb threats covering all items listed in the unit content. Many items can be assessed through a role-play eg remaining calm, following the bomb threat script, keeping the caller talking.

In order to meet 2.5, learners must describe the three main airport emergency classifications as listed in the content.

Essential resources

- Airline timetable
- Bomb threat call form
- CAP168 extract
- Internet access
- MAYFLY
- Weather charts

Indicative resource materials

Website

<http://www.luton.gov.uk/Media%20Library/Word/Chief%20executives/Emergency%20Planning/Airport%20SOP%20version%201.1%20April%2007.doc>

Example Airport Emergency Plan (Luton Airport)

Unit 13: Aircraft Dispatch Process

Unit reference number: Y/601/6492

Level: 2

Credit value: 3

Guided learning hours: 20

Unit aim

The aim of this unit is to enable the learner to develop the necessary knowledge and understanding to correctly carry out the dispatch duties in the turnround of an aircraft. This will include communication on the ramp with all parties concerned in the turnround and co-ordinating the smooth interaction of all departments and individuals involved. In addition the learner will need to understand customer airline requirements for airline-specific special handling requirements.

The knowledge gained from this unit is based on the IATA Airport Handling Manual (AHM) for the turnround of all commercial aircraft, communication and actions.

This unit is appropriate for all learners who plan to work as part of the dispatch turnround process for commercial aircraft.

Unit introduction

The aircraft dispatcher has, arguably, the most challenging job on the ramp. They are responsible for coordinating all the agencies that are required to provide turnround services. While the aircraft is on the ground, it is essential that employees from all service companies work as a team, even though they wear different uniforms, work for different organisations and perform very different tasks. The dispatcher acts like the conductor of a symphony orchestra – making sure all the players keep time, come in when they are supposed to and keep in harmony with each other.

Each flight is unique. It is up to the dispatcher to plan for the arrival, predict any problems, ensure that manpower and equipment are in place and record any discrepancies. Putting in place remedial action if the turnround does not go to plan is also the responsibility of the dispatcher. As a result, it is essential that he or she has a very broad understanding of the roles of all agencies.

By completing this unit, you will be introduced to the type of documentation used by many airlines and GHAs. You will also learn the 'milestones' that are recorded on the flight information sheets that follow the progress of the turnround, and why they are such important data.

Internationally accepted standards are used throughout the aviation industry, the recording and reporting of delays is a frequently used example. We will explore the categories of delay, and why they follow the established format.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Understand how to prepare for aircraft arrival	1.1 identify the information required for an inbound Flight Report Information Sheet 1.2 describe how to complete a Flight Report Information Sheet 1.3 describe the Stand Checks required prior to aircraft arrival 1.4 identify the services that may be required during the turnround process 1.5 identify the resources required on stand prior to aircraft arrival 1.6 describe the requirements for flight arrivals 1.7 describe inbound security procedures/requirements
2 Understand how to co-ordinate the aircraft turnround	2.1 explain the purpose of documentation required during turnround 2.2 identify key people that the Dispatcher would communicate with during the turnround 2.3 identify key functions that the Dispatcher would coordinate during the turnround 2.4 identify types of discrepancies which could occur during the turnround process 2.5 describe the information required by key people 2.6 describe the information required from key people 2.7 explain how to produce a completed AAA manifest declaration form (MDF) 2.8 describe the actions required in response to discrepancies

Learning outcomes	Assessment criteria
3 Understand how to prepare for aircraft departure	3.1 identify the departure information required for a Flight Report Information Sheet 3.2 explain the use of delay codes 3.3 identify key people involved in allocating delay codes 3.4 describe how to finalise the Flight Report Information Sheet with departure information 3.5 identify who should be notified of the departure time and why

Unit content

1 Understand how to prepare for aircraft arrival

Required information to complete a flight report information sheet (arrival): flight number; scheduled time of arrival (STA); estimated time of arrival (ETA); actual time of arrival (ATA); origin; aircraft type; aircraft registration; inbound load (passengers, baggage, cargo); special requirements; location of parking stand; start times of services

Stand checks: stand availability; correct stand for aircraft type; obstructions; FOD; required equipment

Required services during turnround: baggage and cargo handling (loading, transporting, personnel); catering; fuelling; water service; toilet service; engineering; steps; buses (if required); escorts; ambulift (if required)

Resources prior to arrival: marshaller; chocks; ground power (GPU); steps or airbridge

Requirements for flight arrivals: passenger route (domestic, international); UK Border agency

Inbound security: procedures for aircraft, eg cabin checks, hold checks; procedures for passengers eg surveillance, screening transit passengers

2 Understand how to co-ordinate the aircraft turnround

Purpose of documentation: recording actual loads eg passenger manifest, cargo manifest, baggage manifest (joining, transit/transfer, crew), gate baggage report; preparation, planning and recording eg flight information report sheet

Dispatcher communication: with key people eg loaders, load control, fuellers, caterers, engineers, passenger services, cabin crew, flight deck

Key functions coordinated by the dispatcher: ensure staff in place eg marshaller, escorts, gate staff; ensure services performed on time eg catering, cleaning, toilet/water, unloading/loading, fuelling; completion of documentation eg loading instruction report (LIR), load sheet, Notice to Captain (NOTOC), dangerous goods (DG), passenger manifest, baggage manifest, AAA; boarding process eg start, completion

Types of discrepancy during turnround: aircraft-related eg parked on wrong stand, wrong aircraft type, wrong registration; loading-related eg more or fewer bags than on the LIR, more or fewer passengers on the aircraft than at the boarding gate; time-related eg late arrival, late completion of services, staff not available, missed departure slot

Information required by key people: location of load (in and out) on LIR; fuel required; passenger information eg booked load, actual load ready to board, specials, loading complete

Information required from key people: engineering status; loading information eg loading discrepancy, gate baggage, completed LIR; passenger information eg ready to board from cabin crew, missing passengers at boarding gate, specials, boarding complete; services eg fuelling complete, catering complete

Manifest declaration form: mandatory contents (flight number, accompanied baggage total, unaccompanied baggage total, crew baggage, originating baggage, transfer baggage, gate baggage, signature)

Actions required in case of discrepancies: recording eg times, type of discrepancy, reasons; contact service provider eg catering supervisor, fuelling supervisor, loading supervisor; advise relevant people eg crew, flight operations; organise remedial action eg baggage off-load, baggage identification, passenger offload, coordinate with load control

3 Understand how to prepare for aircraft departure

Required information to complete a flight report information sheet (departure): flight number; scheduled time of departure (STD); estimated time of departure (ETD); actual time of departure (ATD); slot time; destination; aircraft type; aircraft registration; outbound load (passengers, baggage, cargo); special requirements; location of parking stand

Delay codes: groups of delay types eg 30-39; specific delays; purpose eg reduces confusion/misunderstanding, complies with IATA Handling Manual

Key people allocating delay codes: departmental supervisors eg engineering, catering, passenger services, loading; dispatcher

Finalise flight report: completion times for services; report delays and discrepancies

Notification of departure time: transit airport (if applicable); final destination airport (to prepare for arrival); airline operations (to monitor flight progress); check-in; passenger services (finalise all processes)

Essential guidance for tutors

Delivery

Staff employed on the ramp will have seen the dispatcher in action on many occasions. By simply observing (or if possible, shadowing) a dispatcher for a few days, a great insight into the frantic pace and varied responsibilities this job role demands will be gained. Many aspects found in the unit content can be covered in this way, although assessment will have to be more formal to ensure all elements have been covered.

For delivery in a class-based environment, a more traditional route must be taken. The role of the dispatcher is very 'hands on' working in the airside environment. As such, it will be difficult to arrange visits to observe first hand. This unit does, however, lend itself to substantial input by an airline or GHA Dispatcher, who is willing to share their knowledge. This would be an ideal opportunity for a former learner to return and encourage learners to meet within the industry.

To provide context for classroom-based elements of delivery, there are some excellent web-based resources that provide an insight into the dispatchers role for example

(www.Itscotland.org.uk/virtualworkexperience/jobroles/transport/loaddispatcher/flash_tcm4493505.asp) and (<http://www.connexions-direct.com/jobs4u/>).

From the outset, learners should be issued with flight information sheets (see end of unit) which are central to the coordination process followed by the dispatcher. It is important that the abbreviations and terminology become familiar to the group – they are standard throughout the industry. It should be pointed out that the form is generic – the format will vary from company to company. Discussions could follow regarding: what information can be obtained before the aircraft arrival; why it is important; from what sources can this information be obtained.

Apart from completing the flight information sheet, other preparation must be made. Learners should be made aware of the physical checks that a dispatcher must make; stand readiness, manpower, equipment and airport facilities. Learners could be asked to suggest the full range of resources that are required for the turnround – this will illustrate the range of the dispatcher's remit.

The communication and coordination role of the dispatcher during the turnround now needs to be explored. Who requires information from the dispatcher and with whom must the dispatcher share data? Of course, things do not always go according to plan. This is when the Dispatcher's skills of problem-solving, diplomacy and expediting are used to the full. Frequently, the issues that must be resolved involve employees or facilities provided by third parties, working to differing terms and conditions, so the solution is not always as simple as may first be imagined. Learners could suggest the kinds of issues that might threaten the smooth running of the turnround process and solutions that could be put in place.

Completion of the baggage manifest declaration is a necessary part of the dispatcher's role. The reasoning behind it has already been covered in Units 6, 7 and 8. This is the conclusion of the loading and AAA process. Learners should be able to state the reasons for the form being completed, and actions that must be taken if any discrepancies are noticed.

Most flights depart at their scheduled time. On occasions, however, delays may occur which must be investigated, recorded and reported. An effective Dispatcher will have been recording all 'on and off' times for service providers eg when did the caterers start, when did they finish. By keeping an accurate record of the processes, delay allocation can be simplified. There are of course other reasons for delays. A comprehensive list of potential delay reasons – controllable (within the powers of people or systems to avoid) and uncontrollable (eg weather related, industrial action overseas) could be prepared by learners. All delays must be coded. A standard list of codes used by most airlines should be issued to the group. From this list, identified delays can be coded. Learners can be asked to note any patterns in the codes, and the reason they are used.

When a commercial aircraft departs, a package of information relating to that flight is transmitted to a number of sources. The group could be asked to suggest what could be included in the transmission, who it should be sent to, and why knowing the actual departure time is important. A sample departure message from a scheduled service (suitably decoded by the tutor) could be used to illustrate the point.

Assessment

There are a number of ways that this unit can be assessed. For example, learners could create an overview of the dispatcher's role and responsibilities to be published in a Ground Handling Agency's in-house staff newspaper. Inclusion of appropriate graphics would enhance the article. Alternatively, learners could present the dispatcher's role in a verbal presentation with slides and supporting visual aids. The evidence could also be presented in the form of a training manual including a flow chart of the role of the Dispatcher and how this role links with other key staff, agencies and organisations. Evidence for 1.1, 1.2, 2.7, 3.1 and 3.4 could be covered by completing a flight report information sheet (inbound and outbound) and a Baggage Manifest Declaration.

To meet 1.1, the learner must identify the information required for an inbound Flight Report Information Sheet. Learners must describe how to complete the inbound section of the Flight Report Information Sheet to meet 1.2. It is recommended that the learner actually completes this form, and in doing so will meet 1.1 and 1.2. A form and sample data has been provided at the end of the unit.

To meet 1.3, the learner must provide a description of all checks listed in the unit content that must be carried out on-stand prior to aircraft arrival.

To meet 1.5, the learner must provide a detailed list of at least four resources that must be available prior to aircraft arrival.

To meet 1.4, the learner must provide a detailed list of at least 10 services that may be needed during the turnaround.

To meet 1.6, the learner must provide a description of terminal requirements for flight arrivals and to meet 1.7, the learner must describe at least three security requirements during the arrival phase.

To meet 2.1, learners must provide an explanation of why two types of manifest and the flight report information sheet are required.

To meet 2.2, learners must provide a detailed identification of the key people with whom a dispatcher would communicate during the turnaround, covering all those listed in the unit content.

To meet 2.5, the learner must provide a description of three types of information supplied by the dispatcher to key staff during the turnround.

To meet 2.6, the learner must provide a description of information required by the Dispatcher during the turnround. This should include engineering, loading, passenger handling and servicing information. To meet 2.3, the learner must provide a detailed list of the main turnround functions coordinated by the dispatcher covering all items in the unit content.

To meet 2.4, the learner must identify four different discrepancies that may occur in the turnround. To meet 2.8, learners should provide a description of required actions for the four discrepancies. Discrepancies and required actions should involve aircraft-related, loading-related, passenger-related and servicing-related incidents across the evidence.

To meet 2.7, learners must explain how to produce a completed AAA manifest declaration form (MDF) including all the mandatory contents listed in the unit content. This explanation can support the completion of the MDF, an example form and data are included at the end of the unit.

To meet 3.1, learners must identify the departure information required for a flight report information sheet. To meet 3.4, learners must describe how to finalise the flight report information sheet with departure information. It is recommended that learners complete the outbound section of this form and by doing so will meet 3.1 and 3.4. An example form and data has been provided at the end of the unit.

To meet, 3.2, learners must provide an explanation of the use of standard delay codes, and to meet 3.3, identify who should be involved in the allocation process. To meet 3.5, learners must provide an identification of who should be made aware of an aircraft's departure time and for what reason.

Essential resources

- Example flight report information sheet and Baggage Manifest Declaration and sample data
- IATA Airport Handling Manual (AHM)
- IATA delay code list
- Internet access

Indicative resource materials

Websites

http://www.b737mrg.net/downloads/b737mrg_delaycodes.pdf	List of delay codes
http://www.connexions-direct.com/jobs4u/	Example job role of Dispatcher
www.iata.com	IATA website
http://www.Itscotland.org.uk/virtualworkexperience/jobroles/transport/loaddispatcher/flash_tcm4493505.asp	Video clip showing role of Dispatcher

Example Flight Report Information Sheet

Flight Information and Dispatch Report					
Date	Dispatcher	A/C Reg	A/C Type	Stand	Dep Gate
Arrival		Departure		Turnround Services	
Flt No		Flt No		Start	Finish
Origin		Dest		Marshaller	
STA		STD		Chocks	
ETA		Slot 1		Steps	
ATA		Slot 2		GPU	
Load		ETD		Caterers	
Pax		ATD		Cleaners	
Bags		Load		Toilet	
Cargo		Booked Pax		Water	
Mail		Catered Pax		Fuel	
Supplementary info	Final Pax			Bags Off	
	Bags			Bags On	
	Cargo			Disembark	
	Mail			Boarding	
	Supplementary Info			Cabin Crew	
			Flight Deck		
			Doors		
Delay Report/Discrepancies				Push	
Flight Deck Data					
				RTOW	
				Block Fuel	
				Trip Fuel	
				Flight Time	

Example Baggage Manifest Declaration

Hold Baggage Manifest Declaration	
Flight Number:	Date:
Total Hold Baggage for the above flight is:	
Accompanied hold baggage	pieces
Unaccompanied hold baggage	pieces
Total hold baggage	pieces
Accompanied Hold Baggage comprises:	
Originating hold baggage	pieces
Transfer hold baggage	pieces
Crew hold baggage	pieces
Gate/other hold baggage	pieces
<p>Appointed Person's Declaration</p> <p>I am satisfied that all reasonable steps have been taken to ensure that:</p> <ul style="list-style-type: none"> • All hold baggage has been loaded and accounted for • All hold baggage is appropriate to the flight and has been identified as accompanied or unaccompanied as appropriate • All checked-in passengers have boarded the aircraft – if not, their hold baggage has been identified and removed from the aircraft • Where unaccompanied baggage is carried, it has been clearly identified as such on the Manifest • Each item of unaccompanied baggage has been subjected to the appropriate security procedures. Evidence of this has been seen and recorded on the Manifest 	
Signature:	Printed:
Position:	Time:
Supplementary Information:	

Sample data

This can be used to complete Flight Report Information Sheet and Baggage Manifest Declaration

Inbound Flight

Flight number	XZ523
Aircraft type	B737/800
Origin	CDG
Scheduled arrival time	1630Z
Estimated arrival time	1645Z
Passengers	123
Bags	200kg/50 pcs
Cargo	150kg
Mail	200kg
Parking stand	24
Supplementary information	2 WCHS

Arrival Information

Actual arrival time	1642Z
Chocks in	1645Z
Steps on	1648Z
Cleaners on	1700Z
Caterers on	1649Z
Baggage unload starts	1650Z
Refuellers start	1653Z
Pax disembark start/complete	1650/1700Z

Outbound Flight

Flight number	XZ542
Destination	FRA
Scheduled departure time	1715Z
Slot time	1730Z
Booked passengers	156
Booked cargo	200kg (20 pcs)
Final passengers	158
Final hold baggage	350kg (32 pcs)
Gate bags	4 pcs
Rush bags	nil
Cleaners off	1715Z
Caterers off	1717Z
Pax start boarding	1718Z
Pax complete boarding	1725Z
Supplementary info	2 x UMs
Doors closed	1730Z
Aircraft push	1732Z
Block fuel	9500kg
Trip fuel	6000kg
Flight time	1hr 25min
Delay reasons	Late inbound a/c, departure slot

Unit ERR1: Employment Rights and Responsibilities in the Passenger Transport Sector

Unit reference number: L/602/5934

Level: 2

Credit value: 3

Guided learning hours: 18

Unit aim and purpose

The purpose of this unit is for learners to demonstrate understanding of employer and employee statutory rights and responsibilities within own organisation and industry under Employment Law.

Unit introduction

This is a three credit unit which can be taken in addition to the Aviation Operations on the Ground units.

Learners should be aware of, and conversant with, the rules, principles and regulations governing employment rights and responsibilities to ensure they understand the conditions under which they work. This understanding protects both the employee and the employer, ensuring that work practice is undertaken in a mutually respectful and safe environment.

This unit is for learners who are taking this qualification as part of the Aviation Operations on the Ground Apprenticeship framework. It has been developed by GoSkills to cover the requirements of Employment Rights and Responsibilities within the Specification of Apprenticeship Standards for qualifications within the passenger transport sector. The unit has been designed to be applied to a work context. It should be contextualised to be relevant to learners' places of work in the passenger transport sector, in this case employment within aviation operations on the ground.

Learning outcomes and assessment 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 determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
<p>1 Know employment rights and responsibilities of the employee and employer</p>	<p>1.1 Identify the main points of legislation affecting employers and employees and their purpose relevant to own role, organisation and within own industry</p> <p>1.2 Identify where to find information and advice on employment rights and responsibilities both internally in own organisation and externally</p> <p>1.3 Identify sources of information and advice on own industry, occupation, training and own career pathway</p> <p>1.4 Identify sources of information on the different types of representative bodies related to own industry and their main roles and responsibilities</p> <p>1.5 Identify any issues of public concern that may affect own organisation and own industry</p>
<p>2 Understand employment rights and responsibilities and how these affect organisations</p>	<p>2.1 Describe organisational procedures, policies and codes of practice used by own organisation on employment rights and responsibilities</p> <p>2.2 Explain the purpose of following health, safety and other procedures and the effect on own organisation if they are not followed</p> <p>2.3 Describe employer and employee responsibilities for equality and diversity within own organisation</p> <p>2.4 Explain the benefits of making sure equality and diversity procedures are followed</p> <p>2.5 Describe the career pathways available within own organisation and own industry</p>

Unit content

1 Know employment rights and responsibilities of the employee and employer

Employee rights and responsibilities: difference between rights and responsibilities; current employment legislation; current anti-discrimination legislation eg gender, race, religion, disability, age; working hours and holiday entitlement; data protection; other relevant examples

Employer rights and responsibilities: duty of care to employees eg safe and healthy workplace, public liability insurance; appropriate training and development; adhere to terms of contract

Sources and types of information on employment issues: HR department; line manager; trade union representative; professional body; Citizens Advice Bureau; Community Legal Advice; internet; trade magazines and journals

Sources of information: line manager, Sector Skills Councils, Jobcentre, relevant websites

Main roles and responsibilities of representative bodies: trade unions, professional bodies, Health and Safety Executive

Issue of public concern: the effect of recent high-profile events on the industry eg Concorde 2000 disaster – caused by FOD on runway, Hudson river ditching 2009 – bird-strike incident

Effects of public concern: legislation and good practice eg Criminal Record Bureau checks, risk assessment; health and safety legislation, disabilities and effects on access to transport

2 Understand employment rights and responsibilities and how these affect organisations

Contract of employment: terms and conditions; hours; pay rate; holiday entitlement; format of contract

Interpret information on payslip: gross wages; deductions; net pay; personal information eg National Insurance number, employee number

Grievance procedure: grounds for grievance; informal approach; formal procedure within own workplace

Types of information held on personnel records: personal data eg name, address, telephone number(s), qualifications, National Insurance number, tax code, bank details, disabilities, employment history, absence details, training

Updating information held on personnel records: personal responsibility; data protection considerations

Ways of working with employer: workplace procedures for leave entitlement eg holiday, maternity, paternity, compassionate; procedures to deal with bullying or discrimination; procedures for self-certification

Own role in the workplace: own job description, organisation's aim

Role of the sector: aims and objectives of the employment sector

Career pathways: progression routes within own sector; progression routes within related sectors; importance of continuing professional development

Developing own career path: create a development plan; consult related websites

Essential guidance for tutors

Delivery

This unit includes general topics and others that apply specifically to the learner's workplace. Input should be as varied as possible, making good use of internet resources and websites, together with groupwork, individual study and team activities as well as more traditional written tasks. Learners should be encouraged to read around the subject to gain more understanding of the relevant legislation.

Visiting speakers, who work in various parts of the organisation or for associated organisations, would enliven the programme.

All study should be related to the workplace.

Assessment

This unit should be assessed as part of the learner's work towards an Apprenticeship.

The unit should be assessed predominantly in the workplace. Observation, witness testimony, questioning, professional discussion and written and product evidence are all sources of evidence which can be used.

Naturally occurring evidence should be used where possible. It is likely that learners will undertake an induction process for any work role or work placement. Learners could build a portfolio of evidence or a workbook which, as well as showing evidence of achievement, could be used as a point of reference for future work.

Indicative resource materials

Textbooks

Mitchell Sack S – *The Employee Rights Handbook* (Warner Books, 2000)
ISBN 9780446673266

Mitchell Sack S – *The Employee Rights Handbook: Effective Legal Strategies to Protect Your Job from Interview to Pink Slip* (Legal Strategies Inc, 2010)
ISBN 9780963630674

Further information and useful publications

To get in touch with us visit our 'Contact us' pages:

- Edexcel, BTEC and Pearson Work Based Learning contact details: qualifications.pearson.com/en/support/contact-us.html
- books, software and online resources for UK schools and colleges: www.pearsonschoolsandfecolleges.co.uk

Key publications:

- *Adjustments for candidates with disabilities and learning difficulties, Access and Arrangements and Reasonable Adjustments, General and Vocational qualifications* (Joint Council for Qualifications (JCQ))
- *Supplementary guidance for reasonable adjustments and special consideration in vocational internally assessed units* (Pearson)
- *General and Vocational qualifications, Suspected Malpractice in Examination and Assessments: Policies and Procedures* (JCQ)
- *Equality Policy* (Pearson)
- *Recognition of Prior Learning Policy and Process* (Pearson)
- *UK Information Manual* (Pearson)
- *BTEC UK Quality Assurance Centre Handbook*

All of these publications are available on our website.

Publications on the quality assurance of BTEC qualifications are also available on our website.

Our publications catalogue lists all the material available to support our qualifications. To access the catalogue and order publications, please visit our website.

Additional resources

If you need further learning and teaching materials to support planning and delivery for your learners, there is a wide range of BTEC resources available.

Any publisher can seek endorsement for their resources and, if they are successful, we will list their BTEC resources on our website.

How to obtain National Occupational Standards

Contact:

GoSkills
Concorde House
Trinity Park
Solihull
West Midlands
B37 7UQ

Telephone: 0121 635 5520

Fax: 0121 635 5521

General email enquiries to: info@goskills.org

Professional development and training

Pearson supports UK and international customers with training related to BTEC qualifications. This support is available through a choice of training options offered on our website.

The support we offer focuses on a range of issues, such as:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing learner-centred learning and teaching approaches
- building in effective and efficient quality assurance systems.

The national programme of training we offer is on our website. You can request centre-based training through the website or you can contact one of our advisers in the Training from Pearson UK team via Customer Services to discuss your training needs.

BTEC training and support for the lifetime of the qualifications

Training and networks: our training programme ranges from free introductory events through sector-specific opportunities to detailed training on all aspects of delivery, assignments and assessment. We also host some regional network events to allow you to share your experiences, ideas and best practice with other BTEC colleagues in your region.

Regional support: our team of Curriculum Development Managers and Curriculum Support Consultants, based around the country, are responsible for providing advice and support in centres. They can help you with planning and curriculum developments.

To get in touch with our dedicated support teams please visit our website.

Your Pearson support team

Whether you want to talk to a sector specialist, browse online or submit your query for an individual response, there's someone in our Pearson support team to help you whenever – and however – you need:

- **Subject Advisors:** find out more about our subject advisor team – immediate, reliable support from a fellow subject expert
- **Ask the Expert:** submit your question online to our Ask the Expert online service and we will make sure your query is handled by a subject specialist.

Please visit our website at qualifications.pearson.com/en/support/contact-us.html

Annexe A

The Pearson qualification framework for the Aviation and Travel and Tourism sector

Level	General qualifications	Diplomas	BTEC vocationally related qualifications	BTEC specialist qualification/professional	NVQ/competence
5			Pearson BTEC Level 5 HND Diploma in Travel and Tourism Management		
4			Pearson BTEC Level 4 HND Diploma in Travel and Tourism Management		
3		Pearson BTEC Level 3 Principal Learning in Travel and Tourism	<p>Pearson BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma in Travel and Tourism</p> <p>Pearson Edexcel Level 3 Nationals in Aviation Operations – extended until December 2012</p>	Pearson BTEC Level 3 Certificate in Aviation Operations on the Ground (Knowledge) – available for teaching 01/01/11	<p>Pearson Edexcel Level 3 Certificate for Senior Cabin Crew</p> <p>Pearson Edexcel Level 3 S/NVQ in Tourism Services</p> <p>Pearson Edexcel Level 3 S/NVQ in Travel Services</p> <p>Pearson Edexcel Level 3 Diploma in Aviation Operations on the Ground</p>

Level	General qualifications		Diplomas	BTEC vocationally related qualifications	BTEC specialist qualification/professional	NVQ/competence
2		Pearson Edexcel GCSE in Leisure and Tourism (Single and Double Award)	Pearson BTEC Level 2 Principal Learning in Travel and Tourism	Pearson BTEC Level 2 Certificate, Extended Certificate and Diploma in Travel and Tourism	Pearson BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) Pearson BTEC Level 2 Certificate in Introduction to Cabin Crew available 01/01/11	Pearson Edexcel Level 2 Certificate for Cabin Crew Pearson Edexcel Level 2 S/NVQ in Tourism Services Pearson Edexcel Level 2 S/NVQ in Travel Services Pearson Edexcel Level 2 Diploma in Aviation Operations on the Ground
1			Pearson BTEC Level 1 Principal Learning in Travel and Tourism	Pearson BTEC Level 1 Certificate, Extended Certificate and Diploma in Travel and Tourism		
Entry				Pearson BTEC Entry Level 3 Award in Travel and Tourism		

Annexe B

Wider curriculum mapping

Pearson BTEC Level 2 qualifications give learners opportunities to develop an understanding of spiritual, moral, ethical, social and cultural issues, as well as an awareness of citizenship, environmental issues, European developments, health and safety considerations and equal opportunities issues.

Spiritual, moral, ethical, social and cultural issues

Throughout the delivery of these qualifications learners will have the opportunity to actively participate in different kinds of decision making. They will have to consider fair and unfair situations and explore how to resolve conflict. Working in small groups they will learn how to respect and value others' beliefs, backgrounds and traditions.

Citizenship

Learners undertaking these qualifications will have the opportunity to develop their understanding of citizenship issues.

Environmental issues

Developing a responsible attitude towards the care of the environment is an integral part of this qualification. Learners are encouraged to minimise waste and discuss controversial issues.

European developments

Much of the content of the qualification applies throughout Europe, even though the delivery is in a UK context.

Health and safety considerations

Health and safety is embedded within many of the units in this qualification. Learners will consider their own health and safety at work, how to identify risks and hazards and how to minimise those risks.

Equal opportunities issues

There will be opportunities throughout this qualification to explore different kinds of rights and how these affect both individuals and communities, for example learners will consider their rights at work and the rights of employers, and how these rights affect the work community.

Annexe C

Mapping with NVQs/Competency qualifications

The grid below maps the knowledge covered in the Pearson BTEC Level 2 Specialist qualifications in Aviation Operations on the Ground (Knowledge) against the underpinning knowledge of the NVQ replacement competency qualification Level 2 Diploma in Aviation Operations on the Ground which has been developed by the SSC, GoSkills, and maps to the National Occupational Standards in Aviation Operations.

KEY

indicates partial coverage of the NVQ unit

a blank space indicates no coverage of the underpinning knowledge

NVQ/Competency qualification units	BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) units												
	1	2	3	4	5	6	7	8	9	10	11	12	13
AOG1 Recognise airside hazards and minimise risks (J/600/9313)	#												
AOG2 Contribute to the maintenance of aviation health, safety and security (R/600/9315)	#	#											
AOG9 Maintain a hazard-free airside environment (M/600/9323)	#												
AOG12 Carry out effective communications and information transfer in an aviation environment (J/600/9327)			#										

NVQ/Competency qualification units	BTEC Level 2 Certificate in Aviation Operations on the Ground (Knowledge) units												
	1	2	3	4	5	6	7	8	9	10	11	12	13
AOG17 Load and unload aircraft (A/600/9342)							#			#			
AOG22 Prepare loads for and receive loads from aircraft (J/600/9425)										#			
AOG23 Check-in aviation passengers and baggage (R/600/9427)				#		#			#				
AOG24 Receive, call and escort passengers to and from aircraft (D/600/9429)					#				#				
AOG25 Handle reports of lost or damaged baggage (Y/600/9431)								#					
AOG31 Dispatch aircraft (D/600/9446)													#
AOG45 Support aviation operations on the ground (L/600/9670)												#	
AOG48 Marshal aircraft (fixed and rotary) (A/600/9678)											#		

Annexe D

Mapping to Level 1 Functional Skills

The following grid identifies potential opportunities for development of Level 1 Functional Skills.

Level 1	Unit number												
English – Speaking and Listening	1	2	3	4	5	6	7	8	9	10	11	12	13
Take full part in formal and informal discussions and exchanges that include unfamiliar subjects	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
English – Reading													
Read and understand a range of straightforward texts	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓
English – Writing													
Write a range of texts to communicate information, ideas and opinions, using formats and styles suitable for their purpose and audience	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓

Level 1	Unit number												
Mathematics – representing:	1	2	3	4	5	6	7	8	9	10	11	12	13
Understand practical problems in familiar and unfamiliar contexts and situations, some of which are non-routine				✓	✓		✓			✓			✓
Identify and obtain necessary information to tackle the problem				✓	✓		✓			✓			
Select mathematics in an organised way to find solutions				✓			✓						
Mathematics - analysing													
Apply mathematics in an organised way to find solutions to straightforward practical problems for different purposes							✓						
Use appropriate checking procedures at each stage													
Mathematics - interpreting													
Interpret and communicate solutions to practical problems, drawing simple conclusions and giving explanations				✓			✓						

Level 1	Unit number												
ICT – using ICT	1	2	3	4	5	6	7	8	9	10	11	12	13
Identify the ICT requirements of a straightforward task	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Interact with and use ICT systems to meet requirements of a straightforward task in a familiar context	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓
Manage information storage	✓	✓		✓				✓					✓
Follow and demonstrate understanding of the need for safety and security practices	✓	✓		✓	✓			✓					
ICT – finding and selecting information													
Use search techniques to locate and select relevant information	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓
Select information from a variety of ICT sources for a straightforward task													

Level 1	Unit number												
ICT – developing, presenting and communicating information	1	2	3	4	5	6	7	8	9	10	11	12	13
Enter, develop and refine information using appropriate software to meet the requirements of straightforward tasks													
Use appropriate software to meet requirements of straightforward data-handling task													
Use communications software to meet requirements of a straightforward task	✓	✓	✓				✓			✓		✓	
Combine information within a publication for a familiar audience and purpose	✓	✓	✓		✓			✓				✓	✓
Evaluate own use of ICT tools													

Annexe E

Glossary of Accreditation Terminology

The following information about this qualification can also be found on the National Database of Accredited Qualifications (NDAQ): www.accreditedqualifications.org.uk

Accreditation start/end date	The first/last dates that Pearson can register learners for a qualification.
Certification end date	The last date on which a certificate may be issued by Pearson.
Credit value	All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can only be awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.
Guided Learning Hours (GLH)	Guided learning hours are defined as all the times when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops. It also includes time spent by staff assessing learners' achievements. It does not include time spent by staff in day-to-day marking of assignments or homework where the learner is not present.
Learning Aims Database	Link to the Learning Aims Database, which features detailed funding information by specific learning aim reference.
Learning Aim Reference	Unique reference number given to the qualification by the funding authorities on accreditation.
Level	The level at which the qualification is positioned on the Regulated Qualifications Framework.
Performance tables	This qualification is listed on the Department for Education (DfE) website School and College Achievement and Attainment Tables (SCAAT) as performance indicators for schools and colleges.
Qualifications Number (QN)	Unique reference number given to the qualification by the regulatory authorities on accreditation.
Register of Regulated Qualifications	Link to the entry on the Register of Regulated Qualifications for a particular qualification. This database features detailed accreditation information for the particular qualification.

Section 96	Section 96 is a section of the Learning and Skills Act 2000. This shows for which age ranges the qualification is publicly funded for under-19 learners.
Title	The accredited title of the qualification.
UCAS points	This/these qualification(s) is/are listed on the Universities and Colleges Admissions Service (UCAS) tariff for those wishing to progress to higher education.

Annexe F

BTEC Specialist and Professional qualifications

BTEC qualifications on the NQF	Level	BTEC Specialist and Professional Qualifications	BTEC qualification suites
BTEC Level 7 Advanced Professional Qualifications BTEC Advanced Professional Award, Certificate and Diploma	7	BTEC Level 7 Professional Qualifications BTEC Level 7 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 6 Professional Qualifications BTEC Professional Award, Certificate and Diploma	6	BTEC Level 6 Professional Qualifications BTEC Level 6 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 5 Professional Qualifications BTEC Professional Award, Certificate and Diploma	5	BTEC Level 5 Professional Qualifications BTEC Level 5 Award, Certificate, Extended Certificate and Diploma	BTEC Level 5 Higher Nationals BTEC Level 5 HND Diploma
BTEC Level 4 Professional Qualifications BTEC Professional Award, Certificate and Diploma	4	BTEC Level 4 Professional Qualifications BTEC Level 4 Award, Certificate, Extended Certificate and Diploma	BTEC Level 4 Higher Nationals BTEC Level 4 HNC Diploma
BTEC Level 3 Qualifications BTEC Award, Certificate, Extended Certificate and Diploma	3	BTEC Level 3 Specialist Qualifications BTEC Level 3 Award, Certificate, Extended Certificate and Diploma	BTEC Level 3 Nationals BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma

BTEC qualifications on the NQF	Level	BTEC Specialist and Professional Qualifications	BTEC qualification suites
BTEC Level 2 Qualifications BTEC Award, Certificate, Extended Certificate and Diploma	2	BTEC Level 2 Specialist Qualifications BTEC Level 2 Award, Certificate, Extended Certificate and Diploma	BTEC Level 2 Firsts BTEC Level 2 Certificate, Extended Certificate and Diploma
BTEC Level 1 Qualifications BTEC Award, Certificate, Extended Certificate and Diploma	1	BTEC Level 1 Specialist Qualifications BTEC Level 1 Award, Certificate, Extended Certificate and Diploma	BTEC Level 1 Qualifications BTEC Level 1 Award, Certificate and Diploma (vocational component of Foundation Learning)
	E	BTEC Entry Level Specialist Qualifications BTEC Entry Level Award, Certificate, Extended Certificate and Diploma	BTEC Entry Level Qualifications (E3) BTEC Entry Level 3 Award, Certificate and Diploma (vocational component of Foundation Learning)

NQF = National Qualifications Framework

For most qualifications on the **NQF**, the accreditation end date is normally 31 August 2010 or 31 December 2010.

Qualification sizes	
Award	1-12 credits
Certificate	13-36 credits
Diploma	37+ credits

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