Unit 21: Aircraft Dispatch

Unit code: K/602/5679

QCF Level 3: BTEC National

Credit value: 6

Guided learning hours: 49

Aim and purpose

The aim of this unit is for learners to gain knowledge and understanding of the role of an aircraft dispatcher/ turnround coordinator including the legal, airline and airport requirements.

Unit introduction

The aircraft dispatcher, also known in the aviation industry as a 'Red Cap', has the huge responsibility of coordinating all the service requirements needed for a successful aircraft turnround.

They are responsible for all the health and safety procedures that must be followed to ensure the safety of ground personnel and passengers. The dispatcher will need to work within strict time constraints imposed on them in order to ensure safe on time departures.

Dispatching an aircraft follows a chain of events from preparation of documents, which need to be transferred to the correct people to give them vital information, to ensuring all the passengers and their bags are on board.

Aircraft turnrounds do not always go as planned, which means the dispatcher must have remedial plans in place to deal with unforeseen events. No aircraft turnround will be the same, and new technology and larger aircraft bring greater demands.

In this unit learners will be introduced to the types of documents used by many airlines and ground handling agents (GHAs). Learners will also learn about the many outside services that make up the aircraft turnround, and the data that is recorded and why this is a legal requirement.

International standards are used throughout the aviation industry, the recording and reporting of delays is a frequently used example. Learners will look at the categories of delay and why established reporting formats must be followed.

Learning outcomes

On completion of this unit a learner should:

1 Understand how to ensure health and safety requirements are met during aircraft turnround

2 Understand how to ensure security requirements are met during an aircraft turnround

3 Understand the service requirements to turnround aircraft

4 Understand the requirements for collating flight related information

5 Understand the Critical Time Path of aircraft turnround for different services.

Unit content

1 Understand how to ensure health and safety requirements are met during aircraft turnround

Health and safety practices and procedures (embarkation and disembarkation of aircraft):

- stand checks (stand availability, correct stand for aircraft type, obstructions, FOD (foreign object debris))
- positioning of required equipment (aircraft steps, air-bridge, ambulift, buses)
- passenger safety (passenger service agents (PSAs), marshallers, passenger routes, passenger walkways (domestic, international), transit passengers)
- security procedures, e.g. security personnel to meet aircraft, UK Border Force, security checks (cabin)

Equipment servicing aircraft:

- hazards, e.g. fuel spillage, oil spillage, heavy equipment, aircraft steps, air-bridge, cables, baggage carts, dollies, main deck loaders, FOD, fuel hydrant points, baggage belts, vehicles, trucks, ground power units (GPUs), air start units (ASUs)
- minimising hazards, e.g. equipment parking bays, correct parking of vehicles, hazard lights on vehicle, 'no go' areas, jet blast screens, aircraft wing walkers (for open stands)

Health and safety 'hot spots' around an aircraft:

- vicinity of engines (intake, blast, ingestion, propeller, noise)
- refuelling area (fuelling trucks, fuel hydrant points, trailing pipes)
- aircraft doors
- hold doors and baggage belts
- pedestrian crossings
- walkways and roadways
- aircraft live taxiways

Dispatcher/turnround coordinator health and safety enforcement duties:

- ensuring staff are using personal protective equipment (PPE), e.g. hard hat, ear protectors, hi-visibility clothing
- ensuring cones, wing chains and wing walkers are in place
- checking ID and requirement that loading staff work in pairs
- checking aircraft anti-collision lights
- restricting access to 'no go' zones

2 Understand how to ensure security requirements are met during an aircraft turnround

Passenger security practices and procedures (embarkation and disembarkation of aircraft):

- boarding gate checks (tickets, passports, boarding cards, hand luggage)
- restricted passenger access to aircraft/terminal (passenger walkways, marked routes, arrival escorts, 'no go' zones/areas)

Security roles of a dispatcher (Department for Transport (DfT) requirements):

- AAA (authorisation and accountability) of hold baggage
- vehicle and staff checks (licences, ID checks, for restricted areas)
- restricting access to aircraft (aircraft doors, air-bridge doors)

3 Understand the service requirements to turnround aircraft

Service provider roles (aircraft turnround):

- service providers, e.g. marshallers, fuellers, catering, ambulift, engineers, passenger service agents (PSAs), aircraft cleaners, security personnel
- roles, e.g. to provide (or remove) products and services to/from the aircraft, to ensure safe embarkation and disembarkation of passengers, to check and maintain the aircraft, to refuel the aircraft, to clean the aircraft, to de-ice the aircraft, to load and unload cargo and baggage, to ensure security of passengers, baggage and cargo, to coordinate the turnround

Equipment types to service aircraft:

- air-bridge and steps
- aircraft cleaning units
- fuel trucks
- catering trucks
- water service vehicle
- ground power units (GPUs)
- engineer's equipment
- baggage carts
- dollies
- belts
- container loaders
- pushback tug

Management of aircraft, vehicles and pedestrians:

- aircraft, e.g. marshalling, stand markings, anti-collision beacons on aircraft, ATC clearance
- vehicles, e.g. road markings and routes, signage, restricted areas including taxiways, designated equipment/vehicle parking areas, use of a banksman when reversing, hazard beacons on vehicles, reversing klaxons
- pedestrians, e.g. escorting passengers, passenger walkways and crossings

4 Understand the requirements for collating flight related information

Accounting and Authorisation of Hold Baggage for Carriage by Air (AAA) background and origins:

- definition of AAA (requirement to reconcile hold baggage with passenger flying, airline responsibility, automated systems since 1998
- origins (first introduced by UK Government following the Lockerbie Pan Am tragedy, 1988)

AAA practices and procedures:

- full baggage screening
- tag-track system
- baggage barcoded
- sequence-numbered
- baggage reconciliation
- hold positions
- compartment identification
- hold baggage declaration manifest
- load instruction report
- process for accompanied bags (passengers check in hold bags, details automatically relayed to departure gate, further reconciliation at final boarding)
- unaccompanied baggage subject to special screening procedures (rush bags, transfer bags, transit loads)

Dispatcher actions if AAA does not balance:

- aircraft cannot leave its stand (depart)
- baggage ID documentation checked (rush bags, transfer bags, check-in errors, misuse of tag track, incorrect entries)
- unaccounted for bags removed from aircraft

Dispatcher authority to enforce AAA compliance:

- full authority in AAA procedures (sign-off of hold baggage declaration manifest, load instruction report (LIR), aircraft baggage ID) flight deck must comply
- current AAA UK legislation/regulation

Importance of the load instruction report (LIR):

- aircraft safety
- aircraft loaded correctly
- weight and balance
- aircraft hold layout
- provides guidance for loading, e.g. location of load (bulk, compartments, ULD (unit load device) positions), e.g. type of load (bags, cargo, mail, dangerous goods, special loads including live animals (AVI) and human remains (HUM))
- provides record of loading

Dispatcher checks before passing a loadsheet to flight crew:

- correct version of loadsheet (manual, computerised) for aircraft type/series, e.g. Boeing 737 series 300
- correct details (flight number, date, aircraft registration, crew compliment, configuration, dry operating weight, dry operating index, fuel figures)
- adjustments to maximum weights (regulated, take-off, zero fuel, landing, ramp)
- passenger breakdown
- cargo
- mail
- passenger split (first, business, economy)
- aircraft trim (data, dropline, tail plane setting)
- total passengers on board
- underload available within flight envelope

Paperwork requirements:

- non-dangerous goods (cargo documents, manifests, customs manifests, load instruction report)
- Dangerous Goods Regulations (DGR) (cargo documents, manifests, Notification to Captain (NOTOC), load instruction report, dangerous goods checklist, compatibilities, governmental acceptance, different countries, radioactives, explosive materials, airline approval)

Dispatchers flight report:

- record information
- aircraft turnround times
- start/finish times (fuellers, catering, aircraft cleaners, loading staff)
- boarding times
- fuel figures
- crew details
- scheduled departure/arrival times
- slots (airborne take-off times)
- configurations
- specials (wheelchairs, pre-boards)
- record any problems, delays, codes
- importance, e.g. record of what happened during turnround for legal purposes, for responsibility issues relating to service provision, for future improvement

5 Understand the Critical Time Path of aircraft turnround for different services

Schedule service:

- runs to a set timetable all year or seasonal
- service may be co-shared
- full service, e.g. meals, drinks, newspapers, entertainment, baggage

- type of passenger (business, executive)
- type of flight (domestic, internal, short haul)
- different classes (first, business, economy)
- has connecting flights
- high number of rotations in a day
- low-load factor

Charter service:

- high-load factor
- seasonal (summer, winter programmes)
- usually chartered by a holiday company in conjunction with a package or cruise
- hot spot destinations
- one class (economy or premium economy)
- rotations per aircraft up to three times a day (often with early morning and late night flights)

Low-cost service:

- budget airlines
- quick turnround (as little as 25 minutes)
- no frills, e.g. no meals, limited entertainment, pay extra for airport check-in and baggage, some free seating
- high passenger loads
- business travellers and holidaymakers
- online booking
- simplicity

Critical Time Path requirements:

- aircraft turnround times
- meet scheduled times of departures (STDs)
- slot restrictions imposed
- aircraft rotations
- crew operating hours
- passenger demand
- cost
- connecting flights

Critical Time Path development in relation to the services required and the size of aircraft:

- aircraft stand allocation
- aircraft allocated turnround times
- reduced services for quick aircraft turnround, e.g. using aircraft steps, limited cleaning of aircraft cabin, limited catering, no fuel

- on-time services at aircraft (fuellers, catering, loading staff, passenger service agents)
- type of aircraft, e.g. wide bodied, narrow bodied, twin decks

Effects of service providers not complying with the Critical Time Path, for example:

- aircraft delays
- passenger inconvenience
- missed connections
- aircraft rotations delayed
- crew out-of-hours
- stand allocations overrun
- slot restrictions imposed
- added costs to airlines/ground handling agents

Dispatcher/turnround coordinator role in the coordination of the Critical Time Path:

- preparation for aircraft arrival (stand checks, arrival escorts, services on stand, fuellers – if required, catering, loading staff, gate staff)
- documentation produced and checked
- provision of passenger services, e.g. air-bridge, aircraft steps, specials, pre-boards, wheelchairs, ambulift

Effects on airline of a breakdown in the Critical Time Path:

- immediate effects, e.g. aircraft delays, rotations delayed, missed slots, passenger inconvenience
- future effects, e.g. loss of revenue, loss of passenger confidence in airline, loss of repeat business, airline's reputation damaged, consequences for ground handling agents, e.g. penalties, loss of contracts, staff redundancies

Assessment and grading criteria

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

Assessment and grading criteria					
To achieve a pass grade the evidence must show that the learner is able to:		**To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:**		**To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:**	
P1	Explain health and safety practices and procedures involved in embarkation and disembarkation of aircraft	**M1**	Analyse the implications of non-compliance of health, safety, security and service requirements during an aircraft turnround	**D1**	Evaluate practices and procedures of aircraft turnround, making recommendations for improvement
P2	Identify hazards associated with equipment servicing aircraft [IE]				
P3	Explain how to minimize hazards associated with equipment servicing aircraft [IE]				
P4	Identify health and safety hot spots around an aircraft				
P5	Outline the duties of a Dispatcher/Turnround Coordinator in enforcing health and safety around the aircraft				
P6	Explain security practices and procedures that apply to passengers during embarkation and disembarkation of aircraft				
P7	Identify security roles of a Dispatcher in enforcing Department for Transport (DfT) requirements				
P8	Identify roles of service providers involved in the turnround of aircraft				
P9	Describe the different types of equipment required to service aircraft				

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	**To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:**	**To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:**
P10 Explain how aircraft, vehicle and pedestrian movement are managed during aircraft turnround		
P11 Explain the background and origins of the Accounting and Authorisation of Hold Baggage for Carriage by Air (AAA)	**M2** Evaluate the importance of AAA in preventing incidents	
P12 Describe the practices and procedures of AAA		
P13 Describe the actions a Dispatcher should take if AAA does not balance [CT]		
P14 Explain what authority Dispatchers have to enforce compliance		
P15 Explain the importance of the Load Instruction Report (LIR) [IE]		
P16 Describe the checks that Dispatchers should undertake before passing a Loadsheet to the flight crew		
P17 Describe the paperwork requirements for non Dangerous Goods cargo		
P18 Describe the paperwork requirements for Dangerous Goods (DGR)		
P19 Explain the importance of a Dispatcher's Flight Report		
P20 Explain the difference between a schedule, charter and low cost service	**M3** Compare the Critical Time Path for a short haul low-cost flight and a long haul scheduled flight	

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	**To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:**	**To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:**
P21 Identify the requirements of a Critical Time Path for a schedule, charter and low cost service		
P22 Explain the development of a Critical Time Path in relation to the services required and the size of aircraft		
P23 Explain the effect of service providers not complying with the Critical Time Path		
P24 State role of a Dispatcher/ Turnround Coordinator in the co-ordination of the Critical Time Path		
P25 Explain the effect of a breakdown in the Critical Time Path in relation to an airline		

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

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

Essential guidance for tutors

Delivery

This unit should be delivered with the focus on the role of the aircraft dispatcher. Anyone given the chance to shadow an aircraft dispatcher for a couple of days, will not only see how vital the role is in achieving safe aircraft departures, but will also experience the variety of activities within the role. To gain the best insight into the role, the unit lends itself to substantial input by someone with industry knowledge. This may be the tutor, or an airline or ground handling agent (GHA) dispatcher who would be willing to share their knowledge.

There could be an opportunity for a former learner, who has progressed from an aviation course to working in the industry as a dispatcher, to return and share their experiences and knowledge with learners. It can be difficult to arrange airside visits to observe the aircraft dispatcher role first hand, so through cooperation with airline and ground handling staff, it can be possible for learners to practise simulations using classroom mock-ups and this will make the learning process more practical and realistic. It is important that classroom activities such as role play simulate a real-life environment.

Learning outcome 1 develops learner knowledge and understanding of the importance of health and safety during an aircraft turnround. Tutors should introduce learners to the health and safety issues related to the embarkation and disembarkation of passengers, the loading and offloading of baggage and cargo and the servicing of the aircraft, with a focus on the role of the aircraft dispatcher. Learners must be able to fully appreciate how communication and coordination are essential for a dispatcher to complete an aircraft turnround successfully. Learners need to explore who needs information from the dispatcher and with whom it is shared. Of course, things do not always go as planned; this is where the skills of the dispatcher in problem solving and diplomacy will come into effect. Frequently, the issues that must be resolved involve employees or facilities provided by third parties with the legal obligations, terms and conditions that apply.

Apart from the completion of paperwork needed by the dispatcher, for example the flight information sheet, learners will need to be made aware of the physical checks that must be made before an aircraft arrives, such as stand readiness, manpower, equipment and airport facilities.

Learners should be encouraged to suggest the full range of resources that are required for the turnround; this will illustrate the extent of the dispatcher's remit. Learners must also look at why aircraft turnround may not go smoothly and suggest solutions to remedy such events.

The airside environment can be a hazardous place in which to work, so tutors must ensure that learners fully understand and appreciate the different rules and regulations that are set to ensure the safety and wellbeing of those involved.

Aviation legislation and regulations dictate the procedures that must be followed and the data that must be recorded by the dispatcher. Legal requirements are an essential part of aircraft turnround. An example is the completion of baggage manifest declarations, which is part of the AAA process also covered in *Unit 26: Flight Operations*, *Unit 32: Plan the Loading of Aircraft* and *Unit 19: Handling Air Passengers*. Learners need to understand how this important documentation must be completed before any aircraft departure and how any discrepancies must be noted and dealt with as a matter of priority.

Minimising delays is a major part of an aircraft dispatcher's role, and tutors must ensure that learners understand the significance of delays and the actions that an aircraft dispatcher must take. Tutors should cover the following aspects by introducing case studies or setting up desktop simulations.

Delays can inconvenience everyone, but on occasions they may be inevitable and must be investigated. Conclusions must be drawn as to what the actual reasons were and, once confirmed, the necessary recording and reports must be completed and transferred. An effective aircraft dispatcher will record all start and finish times for service providers, for example when did the caterers start and finish?

By keeping an accurate record of the turnround process and any delays, allocation can be simplified. There is a list of comprehensive delay reasons, all coded, which must be used to keep every department up to date.

Once an aircraft departs its stand, dispatchers must relay the information so that a signal can be sent to inform the various stations that the aircraft has departed. The information will include actual time of departure, total amount of passengers on board, total amount of bags on board, cargo, mail, and any specials, for example wheelchair assistance required at destination.

A sample departure message with a completed flight report sheet of an actual flight could be used to illustrate the point. Learners should have the opportunity to practise set role play activities of different scenarios where they can deal with the many issues that can arise.

This will provide opportunities for creating realistic classroom mock-ups and put learners into situations where they can practise communication methods. This will help to introduce learners to the world of aviation terminology.

Outline learning plan

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

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

Topic and suggested assignments/activities and/assessment
Introduction to aircraft dispatch including an explanation of the unit content. Introduction to the indicative reading material, including books, internet, journals etc.
Introduction to Assignment 1. Discussion – the importance of health and safety during an aircraft turnround. Table-top exercise to identify the hazards associated with equipment servicing aircraft. Individual activity to identify how hazards can be minimised. Role play to demonstrate the essential communication and coordination needed for an aircraft turnround to be successful. Role play to show the physical checks that are required before an aircraft arrives – stand readiness, manpower, equipment and airport facilities. Small-group activities to identify security roles of a dispatcher in enforcing DfT requirements. YouTube clips to show the different service providers involved in an aircraft turnround. Tutor presentation – what resources are required for a turnround? Discussion to identify the reasons why an aircraft turnround would not go smoothly. Floor-plan exercise to show how aircraft, vehicle and pedestrian movement are managed during aircraft turnround. Guest speaker to fully explain health, safety, security and service requirements during an aircraft turnround Q&A to fully understand the different rules and regulations that are set to ensure safety and wellbeing during a turnround. Research one particular airport and its turnround procedures.
Preparation for assignment **Assignment 1: Health, Safety, Security and Service Requirements During an Aircraft Turnround** (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, M1) **Feedback on assignment**

Topic and suggested assignments/activities and/assessment
Introduction to Assignment 2. Flowchart activity to show the stages of AAA. Tutor presentation to explain the background to and origin of the AAA process. Guest speaker to explain the practices and procedures of AAA. Debate – what actions should be taken if AAA does not balance? Tutor presentation on the legislation and regulations that dictate the procedures that must be followed and the data that must be recorded by the dispatcher. Paper-based exercise to complete paperwork used by the dispatcher and demonstrate the importance of correct information being used within these documents (tutors could create a simplified version of the paperwork used by the dispatcher). Proofreading exercise to determine discrepancies made within pre-written documentation. Discussion to compare the paperwork requirements for non-dangerous goods cargo and dangerous goods.
Preparation for assignment **Assignment 2: The Requirements for Collating Flight-related Information** (P11, P12, P13, P14, P15, P16, P17, P18, P19, M2) **Feedback on assignment**
Introduction to Assignment 3. Guest speaker to focus on the role of the dispatcher in terms of the Critical Time Path. Small-group discussions – significance of delays and the actions that must be taken. Case study on an actual airport to show delay problems. The case study should emphasise the reasons for the delays, the recording and reports that must be completed and transferred. Debate following the case study – was the dispatcher effective? Desktop exercise to identify delay reasons (coded) that are used to keep every department up to date. Role play to demonstrate the information that must be passed on. This should include actual time of departure, total amount of passengers on board, total amount of bags on board, cargo, mail and any specials such as wheelchair assistance needed. Role play to demonstrate the effects of breakdowns in the Critical Time Path. Case study of a particular airline, identifying the requirements of the chosen airline. Comparison exercise to compare the Critical Time Path for two different airline types.
Preparation for assignment **Assignment 3: The Critical Time Path** (P20, P21, P22, P23, P24, P25, M3) **Feedback on assignment**
Introduction to Assignment 4. Small-group debates – using one particular airline debate the practices and procedures of aircraft turnround and recommend how these could be improved.
Preparation for assignment **Assignment 4: How can Practices and Procedures of Aircraft Turnround be Improved?** (D1) **Feedback on assignment**

Assessment

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

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

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

P1 – P2 – P3 – P4 – P5 – P6 – P7 – P8 – P9 – P10 – M1

To achieve P1, learners must explain the health and safety practices and procedures that are involved in the embarkation and disembarkation of aircraft. Learners should cover all the items listed in the unit content but focus on the role of the aircraft dispatcher. Evidence can be in written or verbal form and examples should be included to support evidence.

To achieve P2, learners must identify at least five hazards associated with equipment servicing aircraft. Learners do not need to provide a full description of the hazards, only an identification. They can support their evidence with photographs or illustrations.

To achieve P3, learners must explain how to minimise at least three hazards associated with equipment servicing aircraft. Evidence can be verbal or written and should be supported with examples and photographs or illustrations.

To achieve P4, learners must identify health and safety hot spots around an aircraft. Learners could provide an illustration or photograph on which they identify the hot spots.

To achieve P5, learners must provide an outline of the duties of an aircraft dispatcher in relation to enforcing health and safety around an aircraft. Learners should cover the range identified in the unit content. Evidence could be in the form of a training manual or guide to the role of the aircraft dispatcher.

To achieve P6, learners must explain the security practices and procedures that apply to passengers during embarkation and disembarkation of aircraft. Evidence can be in verbal or written form and must cover all the items in the unit content. Evidence can be linked to P7.

To achieve P7, learners must identify the security roles of a dispatcher in enforcing Department for Transport (DfT) requirements. Evidence can be linked to P6.

To achieve P8, learners must identify the various roles of service providers involved in the aircraft turnround. Learners should support their evidence, either written or verbal, with examples, and can include photographs or illustrations.

To achieve P9, learners must describe the different types of equipment required to service aircraft. Learners can support their evidence with photographs and illustrations.

To achieve P10, learners must explain how aircraft, vehicle and pedestrian movement is managed during an aircraft turnround. Learners should cover the range identified in the unit content within their explanations and can support their evidence with annotated diagrams and maps.

To achieve M1, learners must analyse the implications of non-compliance with health, safety, security and service requirements during an aircraft turnround. Learners should be able to analyse what could go wrong if health, safety and security requirements were not followed and complied with. For example, learners could look at the implications of pedestrian crossings not being monitored correctly by the dispatcher.

Learners should analyse a minimum of six health and safety requirements, using a minimum of one from each of the following areas – health and safety practices and procedures, equipment servicing aircraft, health and safety hot spots around an aircraft, dispatcher/turnround coordinator health and safety enforcement duties.

P11 – P12 – P13 – P14 – P15 – P16 – P17 – P18 – P19 – M2

To achieve P11, learners must explain the background to and origins of the Accounting and Authorisation of Hold Baggage for Carriage by Air (AAA) covering all the unit content in their explanations which could be verbal or written.

Learners can provide evidence for P12, P13 and P14 by firstly describing the practices and procedures of AAA to achieve P12, then describing the actions a dispatcher should take if AAA does not balance to achieve P13, and thirdly explaining what authority dispatchers have to enforce AAA compliance to achieve P14. Learners should cover the unit content and provide examples to support their evidence.

To achieve P15, learners must explain the importance of the load instruction report (LIR) covering all listed items within the explanation and supporting their evidence with a completed example of an LIR.

To achieve P16, learners must describe the checks that dispatchers should undertake before passing a loadsheet to flight crew ensuring full coverage of the items listed in the unit content.

To achieve P17 and P18, learners must describe the paperwork required for non-dangerous goods cargo (P17) and the paperwork requirements for dangerous goods (DG) (P18). Examples of paperwork would support learner evidence.

To achieve P19, learners must explain the importance of a dispatcher's flight report. Learners should cover all the items listed in the unit content in their explanation and give reasons for the importance of these items. Learners should include an example of a flight report to support their evidence.

To achieve M2, learners must evaluate the importance of AAA in preventing incidents. Learners can extend their research of P11 to P19 and focus on how the introduction of AAA has been able to prevent accidents. For example, learners could look closely at the dispatcher's actions if the loadsheet does not balance, and how their actions will prevent further incidents.

P20 – P21 – P22 – P23 – P24 – P25 – M3

To achieve P20 and P21, learners should provide a simple explanation of the differences between a schedule, charter and low-cost service carrier (P20) and then identify the requirements of a Critical Time Path for a schedule, charter and low-cost carrier (P21). Learners should support their explanation with examples as well as illustrations and photographs.

Learners can integrate their evidence for P22, P23, P24 and P25, supporting their evidence with examples. Evidence can be in written or verbal form. To achieve P22, learners must explain the development of a Critical Time Path in relation to the services required and the size of the aircraft, covering all items in the unit content. To achieve P23, learners must explain at least three effects of service providers not complying with the Critical Time Path. To achieve P24, learners must state the role of an aircraft dispatcher in the coordination of the Critical Time Path. To achieve P25, learners must explain the effect of a breakdown in the Critical Time Path in relation to an airline, covering all items in the unit content.

To achieve M3, learners must compare the Critical Time Path for a short haul low-cost flight and a long haul scheduled flight, for example a scheduled airline in comparison to a low-cost airline. Learners should compare the Critical Time Path requirements, the effects of service providers not complying with the Critical Time Path, the coordinator's role in the coordination of the Critical Time Path and the effects on an airline of a breakdown in the Critical Time Path.

D1

To achieve D1, learners must evaluate practices and procedures of aircraft turnround making recommendations for improvement. It is important that learners look at all the learning outcomes when evaluating these practices and procedures and making recommendations on how they can be improved. This distinction criterion should explore these areas in depth. Learners should provide a justification as to why the recommendations have been suggested.

Programme of suggested assignments

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

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, M1	Assignment 1: Health, Safety, Security and Service Requirements During an Aircraft Turnround	You work for a well-known airline as a senior dispatcher and have been asked to provide information and guidance to new members of staff. Your first task is to deliver a presentation which explains the requirements for health, safety, security and service during an aircraft turnround.	Presentation
P11, P12, P13, P14, P15, P16, P17, P18, P19, M2	Assignment 2: The Requirements for Collating Flight-related Information	Your work for a well-known airline as a senior dispatcher. You have been asked to attend an annual conference on the requirements for collating flight-related information. Due to your in-depth knowledge of the dispatcher's role you have been asked to guest speak on this subject.	Presentation
P20, P21, P22, P23, P24, P25, M3	Assignment 3: The Critical Time Path	You work for a well-known airline as a senior dispatcher. You have been asked to provide a leaflet that explains the Critical Time Path for different services.	Leaflet

Criteria covered	Assignment title	Scenario	Assessment method
D1	Assignment 4: How can Practices and Procedures of Aircraft Turnround be Improved?	You work for a well-known airline as a senior dispatcher. The directors of the airline have asked you write an evaluation on the practices and procedures of aircraft turnround, making recommendations for improvement.	Evaluative report

Links to other BTEC units

This unit forms part of the BTEC aviation sector suite. This unit has particular links with the following unit titles in the aviation suite.

Level 2	Level 3	Level 4
Unit 31: Airport Baggage Processing	Unit 4: Inter-relationships Within the UK Aviation Industry Unit 7: Customer Service in the Aviation Industry Unit 15: Passenger Terminal Management Within the Aviation Industry Unit 19: Handling Air Passengers Unit 20: Ramp Handling Unit 26: Flight Operations Unit 27: Airfield Operations Unit 32: Plan the Loading of Aircraft	n/a

Essential resources

Learners must have access to library and research facilities, and current trade publications.

Learners should have access to examples of flight report information sheets, baggage manifest declarations, load instruction reports (LIR) and loadsheets (weight and balance charts). Learners also require access to the IATA Airport Handling Manual (AHM), IATA delay code list, Dangerous Goods Regulations and NOTOCs (Notification to Captain).

Employer engagement and vocational contexts

Industry-related guest speakers/tutors should be used to help learners develop an in-depth knowledge. Where possible, airport visits would be beneficial. Learners should have access to accurate and up-to-date industry case studies.

Delivery of personal, learning and thinking skills

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

Skill	When learners are ...
Independent enquirers	identifying hazards associated with equipment servicing aircraft and explaining the importance of the load instruction report
Creative thinkers	describing actions a dispatcher should take if AAA does not balance.

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

Skill	When learners are ...
Team workers	participating in group activities
Effective participators	participating in group discussions.

Functional Skills — Level 2

Skill	When learners are …
ICT — Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	planning a presentation on health, safety, security and service requirements during an aircraft turnround
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	
Manage information storage to enable efficient retrieval	writing assignments – ongoing
Follow and understand the need for safety and security practices	using the internet
Troubleshoot	ongoing.
ICT — Find and select information	
Select and use a variety of sources of information independently for a complex task	planning a presentation on health, safety, security and service requirements during an aircraft turnround.
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	
ICT — Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: • text and tables • images • numbers • records	planning a presentation on health, safety, security and service requirements during an aircraft turnround.
Bring together information to suit content and purpose	
Present information in ways that are fit for purpose and audience	
Evaluate the selection and use of ICT tools and facilities used to present information	
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	delivering a presentation on the requirements for collating flight-related information
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	reading and understanding the paperwork used by the dispatcher
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	writing a report on how practices and procedures for aircraft turnround can be improved.

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