

## Air Fares \& Ticketing 1

Unit 24

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## Learning Outcomes

On completion of this module a learner should be able to complete the following outcomes. Where activities match the Edexcel (or should it be BTEC )assessment and grading criteria, they are indicated for each section.

1. Understand IATA terms and definitions (P5)
2. Know IATA codes (P1, P2)
3. Know IATA areas (P3, P4)
4. Understand fare types (P6, P7, P11)
5. Be able to construct the most appropriate fares (P10, P12, P13, P14, P15, P16)
6. Be able to construct basic fares using the mileage system (P17, P18)
7. Know baggage allowances, taxes, fees and charges.(P23, P24, P25, P26, M4)
8. Be able to interpret air travel documentation (P19, P20, P21, P22)


## Contents

Section 1: IATA Terms and definitions ..... 9
Travel trade organisations ..... 10
IATA ..... 11
CAA ..... 12
ATOL ..... 13
Terms and definitions ..... 14
Abbreviations ..... 20
Section 2: IATA Codes ..... 27
Introduction ..... 28
Airlines ..... 29
Timetables for scheduled flights ..... 34
Flight routings ..... 37
Introduction to codes ..... 41
City codes ..... 42
Other codes ..... 43
Airport codes ..... 44
Section 3: IATA areas ..... 55
The world ..... 56
IATA Traffic Conference Areas ..... 60
IATA sub areas ..... 63
Section 4: Fare types ..... 77
Introduction ..... 78
The Passenger Air Tariff ..... 79
Western Hemisphere fares ..... 80
Eastern Hemisphere fares ..... 81
Overview of fare types ..... 84
Fare basis codes ..... 93
Normal fares ..... 103
Second level fares ..... 104
Fare selection ..... 106
Global indicators ..... 114
Section 5: Constructing the most appropriate fares ..... 129
Introduction ..... 130
Choosing the correct special fare ..... 131
Using specific rules and standard conditions ..... 140
Minimum and maximum stays ..... 143
Standard conditions ..... 146
Pricing units ..... 148
Deadlines ..... 149
Governing rules ..... 152
Selecting the right fare ..... 158
Restricted normal fares: Eurobudget ..... 161
Youth and student fares ..... 162
Midweek and weekend fares ..... 167
Carrier specific fares ..... 172
Second level normal fares ..... 173
Child and infant discounts ..... 186
Stopovers and transfers ..... 193
Open jaw ..... 196
Section 5: Construct basic fares using the mileage system ..... 213
Introduction ..... 214
The neutral unit of construction ..... 215
Currency conversion rates ..... 216
Child and infant fares using NUCs ..... 229
The mileage system ..... 231
Ticketed point mileages (TPMs) ..... 232
Maximum permitted mileages (MPMs) ..... 236
Mileage calculations for return journeys ..... 246
Extra mileage allowances ..... 254
Linear fare calculation entries ..... 260
Section 6: Baggage allowances, taxes, fees and charges ..... 295
Introduction ..... 296
Baggage allowance ..... 297
Piece system ..... 298
Weight system ..... 299
Excess baggage charges for the weight system ..... 301
Billing and settlement plan ..... 303
Forms of payment ..... 305
Universal credit card charge form (UCCCF) ..... 306
Taxes, fees and charges (TFCs) ..... 307
Section 8: Air travel documentation ..... 313
Ticketing ..... 314
E-tickets ..... 315
Passenger name ..... 318
Date of time ..... 320
Status ..... 320
Passenger name reference (PNR) ..... 320
Validity boxes ..... 321
Form of payment ..... 323
ATB tickets ..... 336
Multiple purpose documents (MPDs \& MCOs) ..... 339
Mock questions papers ..... 361
Appendix provided separately

## Terms \& Definitions

Below is a list of the main air travel terms and jargon that you are likely to encounter in air fares and ticketing.

2-Letter Code: To simplify communication in the airline world, IATA (International Air Transport Association) has designated all scheduled airlines with two letter codes. These are used in reservations, tickets, timetables and fare tables. In many cases the airline code is very similar to its name, but occasionally a number and letter are allocated. 9W is Jet Airways in India.

Accompanied/Unaccompanied Baggage: Accompanied baggage is carried in the same vehicle as the passenger (and may be checked or unchecked). Unaccompanied baggage is carried separately as cargo.

Airline Code: Specifically, the unique two or three digit indicators that identify specific airlines in CRS systems.

Alliance: A term for airlines that have grouped together - formed an alliance - to give them a stronger identity and larger market share.

Apex: A travel ticket which has an advance purchase requirement.
APD: Air Passenger Duty (charge payable on tickets for flights leaving from the UK).

Arrival Times: All timetables give the time that the flight will arrive in local time.
ATB: Automated Ticket and Boarding Pass.
Billing Settlement Plan (BSP): BSP is a standardised system for airlines and agents, providing them with a simplified approach to the selling, reporting and administration of passenger air transportation.

Budget Airlines: Also called 'No Frills' or 'Low Cost' airlines (see previously). They operate schedules (regular timetables) like the larger airlines, but often with lower fares. They fly on short-haul routes and sometimes in and out of less popular airports.

BST: British Summer Time (see DST below).

## Timetables for Scheduled Flights

The main manual source of scheduled airline information within the travel industry is the OAG Flight Guide ${ }^{\text {TM }}$ Worldwide. It lists all the scheduled services around the world, including direct and connecting flights. There are extracts from the OAG at the back of your folder, and you will be using them in great depth throughout this section.

Study the OAG extract below detailing flights from Birmingham to Aberdeen. The OAG shows all airlines operating between Birmingham and Aberdeen. It will list the direct flights first, followed by any transfer connections. A transfer connection is when there is a change of flight number and aircraft.

The city where the change takes place is known as a transit city/point. Flights are ordered by departure time starting with the earliest and direct flights first.

| Destination city | Airport codes will always be shown whenever the city <br> has more than one airport, or if there is more than one <br> city with the same name |
| :--- | :--- |

## Exercise 2.2

From the KQ flight routings on page 190. Give the via point(s) in codes and city names.

1. Write down at which two points the KQ115 stops between London and Nairobi.
2. Which airport does flight KQ165 from London Heathrow to Nairobi go via?
3. Which airport does flight KQ302 from Nairobi to Jeddah go via?
4. What days of the week does flight KS12 go via UGB?

## Introduction to Codes

It is obviously impractical to name every city, airport, country and state in full when referring to them in connection with airline fares or itineraries. Equally it is essential to ensure there is no confusion. For this reason there are codes for the following:

- Cities
- Airports
- Countries
- States
- Airlines
- Aircraft types
- Currencies



## Airport Codes

There are two different ways that airports can be shown when a city has more than one airport.
ii) Cities and airports each have different codes.

## Example: London

- LON is the City code
- LHR is the Airport Code for Heathrow Airport
- LGW is the Airport Code for Gatwick Airport
- LCY is the Airport Code for London City Airport
ii) Cities and main airports have the same code; other airport(s) are coded separately. E.g. Belfast.
- BFS is City code and Belfast International Airport Code
- BHD is the Airport Code for Belfast City Airport


## Appendix Information

The full lists of three-letter city and airport codes are included in the Appendix in two formats.

- CODING which gives the code to use for any given city or airport
- DECODING which lists the three-letter codes, and shows which city or airport they represent.


## IATA Traffic Conference Areas

Traffic Conference (TC) areas are...
"divisions of the world used for the purposes of fare construction"
There are many rules and regulations apply to specified geographical areas. All these areas are clearly defined by IATA. Look at the map opposite, you will see that IATA divides the world into three areas known as Traffic Conference (TC) areas.

There are three traffic conference areas (TCs):

## TC1 which comprises of:

- North and South American continents and adjacent islands
- Central America
- Greenland
- Bermuda
- West Indies and other Caribbean Islands
- Hawaiian Islands including Midway and Palmyra

TC2 which comprises of:

- Europe and adjacent islands (includes Russia, west of the Ural Mountains)
- Iceland
- Azores
- Middle East
- Africa and adjacent Islands

TC3 which comprises of:

- Asia and adjacent islands
- Australia, New Zealand and adjacent islands
- Pacific Ocean islands except those in TC1


## Additionally:

- Western Hemisphere is another term for TC1
- Eastern Hemisphere is the whole area of TC2 and TC3


## IATA Area 1




## Example



This is therefore an Economy, shoulder season, Pex fare, valid for six months.

## To summarise..

- The longer and more complex the fare basis, the cheaper and more restricted it is. E.g. YHAP3M - High season Apex, valid for three months with restrictions
- The shorter the fare basis... the more expensive and unrestricted. E.g. Y - full fare economy ticket, no restrictions


## Different Fares

|  |  |  |  | Globa M - Ma eage |  | ermitted |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FARE TYPE | LOCAL CURRENCY | NUC | CARR CODE | RULE | GI | MPM \& ROUTING |
| LONDON UK (LON) UNITED KINGDOM POUND STERLING (GBP) |  |  |  |  |  |  |
| To MAURITIUS (MRU) |  |  |  |  | EH 7288 |  |
| Y | 1416 | 2292.01 |  |  | EH |  |
| Y | 2575 | 4168.03 |  |  | EH |  |
| C | 2238 | 3622.54 |  |  | EH |  |
| C | 4069 | 6586.30 |  |  | EH |  |
| F | 3420 | 5535.79 |  |  | EH |  |
| F | 6218 | 10064.79 |  |  | EH |  |
| YLPX6M | 1017 | 1646.17 |  | Y042 | EH |  |
| YJPX6M | 1175 | 1901.91 |  | Y042 | EH |  |
| YKPX6M | 1283 | 2076.73 |  | Y042 | EH |  |
| YHPX6M | 1393 | 2254.78 |  | Y042 | EH |  |
| YEE6M | 2074 | 3357.08 |  | Y049 | EH |  |

Look again at the London - Mauritius fares table reproduced above:
There are 11 different fares shown for both single journeys (in light) and return (in bold). However, there are only 5 different fare types as discussed on the next page.

## Global Indicators (GIs)

A Global Indicator is..
"a code that appears next to the fare and tells what route the travel must take"

For certain destinations it is possible for passengers to travel by alternative routes. From the UK to New Zealand, for example, they may either travel in an Easterly direction, perhaps stopping at points in Asia and Australia; alternatively there is a service which crosses the Atlantic, stopping at a point in the USA, and then across the Pacific to the destination.

In these situations the fares tables give Global Indicators (GI) as we have already seen.

## There are a number of Global Indicators:

- Eastern Hemisphere
- Far East
- Trans Siberian
- Atlantic Pacific
- Atlantic
. Pacific
- North Pacific
- Russian Route

These routes are explained in more detail on the next two pages.

## Exercise 1.5

Using the appendix, identify the correct Fare Basis and fare for the following scenarios:

1. A customer travelling between London and Nassau on an Apex ticket in April. Fare Basis:

Fare: GBP:
2. A customer travelling between Sydney and Larnaca on an Excursion ticket in December.

## Fare Basis:

## Fare: AUD:

3. A customer travelling between Oslo and Vancouver on a Super-Apex ticket in November.

Fare Basis:

Fare: NOK:
4. A customer travelling between Johannesburg and Milan on a Super Pex ticket in August.

Fare Basis:

Fare: ZAR:

## Example



## Midweek and Weekend Fares

Some fares have different levels for midweek travel.

## Example

London - Milan fares table is shown below.

| FARE | LOC | NUC | CARR | RULE | Gl |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | CUR |  | CODE |  |  | ROUTING |
| LONDON UK (LON) |  |  |  |  |  |  |
| UNITED KINGDOM |  |  |  | POUND STERLING (GBP) |  |  |
| To MILAN (MIL) |  |  |  |  |  | EH 714 |
| Y | 256 | 414.37 |  |  | EH |  |
| YBB | 476 | 770.47 |  | Z029 | EH |  |
| YLXSX1M | 259 | 419.23 |  | ZX03 | EH |  |
| YLWSX1M | 278 | 449.98 |  | ZX03 | EH |  |
| YKSX1M | 319 | 516.35 |  | ZX03 | EH |  |
| YHXSX1M | 302 | 488.83 |  | ZX03 | EH |  |
| YHWSX1M | 319 | 516.35 |  | ZX03 | EH |  |
| YLXPX3M | 321 | 519.58 |  | ZP10 | EH |  |
| YLWPX3M | 339 | 548.72 |  | ZP10 | EH |  |
| YKPX3M | 385 | 623.18 |  | ZP10 | EH |  |
| YHXPX3M | 367 | 594.04 |  | ZP10 | EH |  |
| YHWPX3M | 385 | 623.18 |  | ZP10 | EH |  |

## Child and Infant Discounts

Discounted fares apply for children and infants on most air fares.
The exact amount of the discount depends upon the route and fare type.
The following are the USUAL conditions (but these might be modified by a specific rule entry).

- A CHILD is defined as a passenger who has reached their second birthday, but not reached their twelfth birthday.
- AN INFANT is defined as a passenger who has not yet reached their second birthday.

These ages are those that the passenger has reached on the DATE THE JOURNEY STARTS. An infant having their second birthday, or a child having their twelfth birthday, between the start of the journey and the return flight are entitled to the discount. (NB: This is different from the policy adopted by many charter airlines operating package holidays, where the effective age is that applying on the date of return). This can, however, depend on the airline.

The rule is, if in doubt, always check!
The STANDARD discount for children and infants is given in:

- Standard Condition SC101 for NORMAL fares
- Standard Condition SC100 for SPECIAL fares

The two extracts are reproduced opposite.

## Stopovers and Transfers

There is a specific difference between a stopover and a transfer.

- A Stopover is a break in the journey of more than 24 hours
- A Transfer is a break of journey where the passenger has a flight reserved to depart within 24 hours of the previous flight's arrival

Paragraphs 8 and 9 of rules are concerned with Stopovers and Transfers.
Passengers may have a break in their journey, between the Origin and the Destination (for OW journeys); or between the Origin and the Point of Turnaround (on a RT journey).

As you can see from the definitions, the length of that break of journey will determine whether it is a Stopover or a Transfer. In both cases the times considered are the SCHEDULED times. No account is taken of flights that arrive or depart earlier or later than scheduled.

## Example 1:

| Dep. London (LON) | Fri 2130 | Arr. Johannesburg (JNB) | Sat 0920 |
| :--- | :--- | :--- | :--- |
| Dep. Johannesburg (JNB) | Sun 0915 | Arr. Mauritius (MRU) | Sun 1510 |

Johannesburg is regarded as a TRANSFER point as it's less than $\mathbf{2 4}$ hours

## Example 2:

| Dep. London (LON) | Fri 2130 | Arr. Johannesburg (JNB) | Sat 0920 |
| :--- | :---: | :--- | :--- |
| Dep. Johannesburg (JNB) | Sun 0930 | Arr. Mauritius (MRU) | Sun 2125 |

## Johannesburg would be regarded as a STOPOVER as it's more than $\mathbf{2 4}$ hours

On a separate note, when shown as a routing or on a ticket, an ' $x$ ' is shown beside any transfer city to indicate this. e.g. LON - X/ROM - HKG

IMPORTANT! Sometimes a fare rule may give a more specific definition of a transfer/stopover. This will supersede the general rule above.

## Review

This completes this section. Complete the review to check your understanding.

This Review provides evidence for assessment and grading criteria P1 \& P2

## The Neutral Unit of Construction (NUC)

A neutral unit of construction is...
"a common denominator used to calculate a total when adding fares in
different currencies."
So far we have calculated fares entirely in local currency - for journeys from the UK this was the GBP, for journeys from France the EUR and so on.

When it was necessary to compare fares for journeys from the same country this was no problem. If we had needed to compare fares of GBP210.00, GBP199.00 and GBP254.00 we could very quickly identify which was the lowest fare.

But what if the fares to be compared are in different currencies?
To start with we would need to know the appropriate exchange rates, then we would need a calculator. Altogether more complicated than comparing three fares in the same currency.

Passenger Air Tariff publishes fares for any journey in both the local currency of the country of departure, and in NUCs.

NUCs are of course, a fictitious currency in that the passenger cannot pay a fare in NUCs. Neutral Units of Construction are converted into local currency fares by applying IATA Rates of Exchange which are shown in the appendix.

Just for your information, NUC rates are pegged approximately to the US Dollar.

## The Mileage System

The Mileage System is...

## "An airfare system allowing stopovers up to a specific maximum permitted mileage"

Unless the fares rule prohibits stopovers or transfers passengers do not have to travel directly to their destination or turnaround point.

They may travel by any number of intermediate points, at the published fare for their 'end to end' journey, subject to two important conditions.

- They are only permitted to travel a certain number of miles for each route
- They may not travel via any point having a higher fare than that for the 'end to end' journey. This is covered in the Level Two Course
- The maximum miles that a passenger may travel is known as the 'Maximum Permitted Mileage' abbreviated as MPM
- The MPM for any journey is given at the top of each fares table.



## Maximum Permitted Mileage (MPM)

In the event that the mileage is exceeded, a surcharge of between 5-25\% can be assessed for an additional $5-25 \%$ mileage, respectively. Beyond $25 \%$ additional mileage, the through fare must be broken. This scenario is covered in the next level of Airfares and Ticketing. So 'mileage surcharges' apply in the following stages:
For a mileage increase of: the fare is increased by:
Not more than 5\%: ..... 5\%
More than $5 \%$; but not more than $10 \%$ : ..... 10\%
More than $10 \%$; but not more than $15 \%$ : ..... 15\%
More than $15 \%$; but not more than $20 \%$ : ..... 20\%
More than $20 \%$; but not more than $25 \%$ : ..... 25\%

You cannot have a mileage percentage increase higher than $25 \%$. This would require a completely different calculation that is covered in a different course.

To calculate the percentage by which a TPM exceeds the MPM there is a simple rule:

## DIVIDE the Ticketed Point Mileage (TPM) by the Maximum Point Mileage (MPM)

## Exercise 11.6

Calculate the Normal ECONOMY Class fare for the following itinerary. List your TPMs, show all your calculations in NUCs, and convert to local currency.

| From | To | Carrier | Date |
| :--- | :--- | :--- | :--- |
| London (LON) | Barcelona (BCN) | IB | 31JAN |
| Barcelona (BCN) | Milan (MIL) | AZ | 11FEB |
| Milan (MIL) | Rome (ROM) | AZ | 14FEB |
| Rome (ROM) | Malta (MLA) | KM | 18FEB |
| Malta (MLA) | Cairo (CAI) | MS | 28FEB |


| Fare <br> Component(s) |  |
| :---: | :--- |
| NUC |  |
| Rule |  |
| MPM |  |
| TPM |  |
| Extra Mileage <br> Surcharge <br> (EMS) |  |
| Air Fare |  |
| Sub-total |  |
| International <br> Rate of <br> Exchange <br> (IROE) |  |
| Local Currency |  |
| Fare (LCF) |  |$\quad$| TY |
| :--- |

## Mileage Calculations for Return Journeys

Calculating the mileage surcharge on a return journey is the same principle as a one way. However, you need to identify the turnaround point and show two separate constructions - an outward and return.

There are six stages of calculating the fare which is shown below.

## Example

London - Nice - Barcelona - Malaga -Tangiers - Madrid - Marseilles - London

## Stage 1: Identify the Turnaround Point: This is the point furthest from the origin.

 Sometimes this will be easy to identify from its geographical position, in other cases it may be harder. There is a very simple way to find the turnaround point:
## The turnaround point is the city with the greatest MPM from origin

In this example the turnaround city is Tangier: The MPM is 1358

Stage 2: Check the TPM's for each sector, and calculate the total for each direction.

Outward

| Sector | TPM MPM | Sector | TPM MPM |
| :--- | :--- | :--- | :--- |
| LON-NCE | 645 |  |  |
| NCE-BCN | 309 | TNG - MAD | 352 |
| BCN - AGP | 476 | MAD - MRS | 495 |
| MRS - LON | 615 |  |  |

IN: 1462

## Exercise 16.6

Calculate the Normal BUSINESS Class fare for the following itinerary. List your TPMs, show all your calculations in NUCs, and convert to local currency.

| From | To | Carrier | Date | TPM |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| London (LON) | Cairo (CAI) | BA | 18 APR |  |
| Cairo (CAI) | Muscat (MCT) | MS | 21 APR |  |
| Muscat (MCT) | Dubai (DXB) | GF | 25 APR |  |
| Dubai (DXB) | Kuwait (KWI) | KU | 11 MAY |  |
| Kuwait (KWI) | Malaga (AGP) | KU | $16 M A Y$ |  |
| Malaga (AGP) | London (LON) | BA | $22 M A Y$ |  |


| Fare <br> Component(s) <br> (FCP) |  |  |
| :--- | :--- | :--- |
| NUC |  |  |
| Rule |  |  |
| MPM |  |  |
| TPM |  |  |
| Extra Mileage Surcharge <br> (EMS) |  |  |
| Sub Total |  |  |
| Total |  |  |
| International Rate of <br> Exchange (IROE) |  |  |
| Local Currency Fare (LCF) |  |  |

## Linear Fare Calculation Entries

Linear format is the fare calculation on e-tickets.


LON LO WAW532.53NUC532.53END ROE0.617797

Second Entry: 'LO'- the carrier operating the first flight.

Fourth Entry: In this case, the next part of the entry 532.53NUC532.53END is comprised of a number of elements that are printed without any spacing between them.

These are:

- 532.53 the fare, in NUC, for that 'fare component'.
- NUC532.53 the total fare, in NUC for the entire itinerary.
- END to indicate that the fare construction is finished.


## Weight System

The weight allowance depends upon the class of travel, as follows:

## Class:

## Economy

## Business Class

First Class
*IMPORTANT EXCEPTION: British Airways (BA) 23 kgs .

## Key Points

- CHILDREN receive the full allowance, but INFANTS (paying 10\% of the adult fare) are only entitled to a reduced allowance of 10 kg .
- Passengers are permitted to 'pool' luggage. Three passengers travelling together in Business Class would be able to carry a total of 90 kg between them.
- If passengers wish to travel with luggage of an unusual size or shape they should check with the airlines in advance. Particular regulations might apply.
- Remember - some airlines apply different baggage allowances. Always check for details in the Passenger Air Tariff.



## Forms of Payment

Travellers can pay for their travel arrangements via a number of methods. The most popular are mentioned below along with the entries shown on their e-ticket:
Payment type: Entry: Notes:

Cash
or

## CASH

Traveller's Cheques

Cheque

Invoice or
Company Credit NONREF
This indicates that the Account passenger may not yet have paid the agent for the ticket, so they will only be able to obtain a refund with the authority of the original issuing agent.
(NB: The code NONREF does NOT mean Not Refundable). Also note the code NONREF/AGT has a specialised meaning, and is not used during the Level One course.

## Credit card Card Type:

Code
Enter the Two Letter code for the type of credit card, followed by the serial number of the card.

MasterCard CA The full list of credit card
American Express $\mathbf{A X}$ codes is given in the Passenger Air Tariff.

## Diners Club DC

Visa VI

## Ticketing

There are a number of different ticket types:

- Electronic tickets (E tickets)
- Automated Ticket and Boarding Pass (ATB tickets)
- Multiple Purpose Documents (MPDs and MCOs)

There are also the following types of tickets which are rarely used in aviation so are not covered further in this manual:

- OPTAT: Off premise transitional automated ticket
- Two coupon/Four coupon paper tickets: Paper tickets came in batches of two or four coupons, for two or four flights respectively.



## Exercise 4.8

Answer the following questions concerning the electronic ticket below.


1. According to the reservation status on the ticket, space is:
a) Subject to availability
b) Not confirmed
c) Confirmed
2. The form of payment (FOP) is made by:
a) Cheque
b) Cash
c) American Express
d) Diners Club Credit Card
3. What is the country of origin?
4. The code starting 118 indicates:
a) The reservation status code
b) The origin and destination city codes
c) The PNR booking reference code
d) The ticket number
