

INTRODUCTION TO AVIATION INDUSTRY



Unit 5

Airline management and organization

Vocabulary: Airplane



overhead bin (overhead compartment)



History of the 'Airline'

DELAG was the world's first airline founded in 1909, November 16

Four Oldest Airlines that still operating

- Netherland's KLM first flew in May 1920
 - Colombia's Avianca
 - Australia's QANTAS was founded in late 1920
 - The Czech Republic's Czech Airlines founded in 1923 as Czechoslovak State Airlines and completed its first transport from Prague to Bratislava on October 29
-

First Airline in ASIA

- **Philippine Airlines (PAL)** founded in 1941, is the first and oldest commercial airline in [Asia](#) operating under its original name




Regulatory Considerations

1. Government regulation

Many countries have national airlines which government owns and operates . The government prevent labor actions to protect the free flow of people, communications, and goods between different regions without compromising safety.

Deregulation make the airlines to be free to negotiate their own operating arrangements with different airports, enter and exit routes easily, and charge airfares and supply flights according to market demand.



2. International regulations

Groups such as the ICAO established worldwide standards for safety and other concerns. Most international air traffic is regulated by bilateral agreements between countries, which designate specific carriers to operate on specific routes.


The model of such an agreement was the **Bermuda Agreement** between the U.S. and UK, which designated airports to be used for transatlantic flights and gave each government the authority to nominate carriers to operate routes.

- In the 1990s, "open skies" agreements became more common. These agreements take many of these regulatory powers from state governments and open up international routes to further competition.




Economic Considerations

Government intervention in the airline industry as part of a political consensus on strategic forms of transport which receive public funding in most parts of the world. Profitability is likely to improve in the future as privatization continues and more competitive low-cost carriers proliferate.



Economic Considerations

Although many countries continue to operate state-owned (or partially state-owned) airlines, many large airlines today are privately owned and are governed by microeconomic principles to maximize shareholder profit



Economic Considerations

1. Ticket revenue

Most airlines use differentiated pricing to sell ticket at different prices . Factors influencing the price include the days remaining until departure, the current booked load factor, the forecast of total demand by price, competitive pricing in force, and variations by day of week of departure and by time of day.

- The intense nature of airfare pricing has led to the term "fare war" to describe airlines effort to undercut other airlines on competitive routes.
 - Through computers, new airfares can be published quickly and efficiently to the airlines' sales channels.
 - For this purpose, the airlines use the **Airline Tariff Publishing Company (ATPCO)**, which distributes latest fares for more than five hundred airlines to computer reservation systems across the world.
-

Economic Considerations

2. Operating cost

- **Full-service airlines have a high level of fixed and operating costs in order to establish and maintain air services: labor , fuel , airplanes , engines, spare parts, IT services and networks, airport equipment, airport handling services, sales distribution, catering, training, aviation insurance, and other costs.**
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Economic Considerations

3. Assets and financing

- they purchase (or lease) new airliners and engines regularly, they must make major long-term fleet decisions with the goal of meeting the demands of their markets
 - A second financial issue is that of hedging oil and fuel purchases
-

Economic Considerations

4. Code sharing

- Code sharing is the most common type of airline partnership; it involves one airline selling tickets for another airline's flights under its own airline code.
 - The airline alliance(1990s). These alliances is a mergers to get around government restrictions. Groups of airlines such as the Star Alliance, One world, and Sky Team
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Break 10 minutes

What is 'Airlines'?

Airlines are service organizations.

Airline's basic function is to provide the service of transporting passengers, their luggage and sometimes live animals and other cargo.

The airlines have a specific organizational structure to accommodate the particular needs of their industry to provide these services.



Basic Organizational Structure

- The term used to define how employees work to support their mission



Types of Airline Personnel

1. Flight Operations Personnel

1.1 Flight Crew – safety and operation of aircraft

1.2 Cabin Crew – safety in the cabin

1.3 Operation Control Center – movement control, load planning, briefing

1.4 Air Crew Training

1.5 Other Personnel – Crew planning

Types of Airline Personnel

2. Ground Operations Personnel

2.1 Reservation Agent – booking, issue ticket

2.2 Airport check-in staff – work at airport

2.3 Gate Personnel – departure gate

2.4 Aircraft Maintenance

2.5 Ramp Personnel – guide the plane in/out gate, loading, catering, de-icing, fueling

Types of Airline Personnel


3. Other Personnel

3.1 Sales and Marketing – setting price, advertising, sales, promotion, rsvn, etc.

3.2 Specialist to perform particular duties. – lawyers, accountants, HR, etc.



Line Personnel and Back Office Staff

- Airlines are represented by the employees who have to contact with travelers, such as the cabin crew on board the airplanes and the ground service personnel at the airports.
 - There employees are either front line personnel or back office staff.
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Outsourcing

One way to assure cost reduction is by outsourcing certain service.

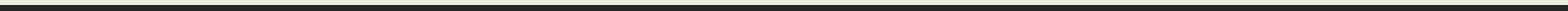
These services could include cleaning, fueling , de-icing, security, catering, maintenance or even crew training.



Organizational Culture of an airline

- Norms and Values “ organizational culture ” refers to the personality of a company (mission and vision)
 - “Norms” ; how things get done in an organization.
 - “Values” ; what is important to a company, which tasks should have the highest priority, and which aspects of an employee’s performance are most important.
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Q & A



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MINUTES

ABI1201 Introduction to Aviation Industry



Unit 6 All about airport

What is airport?

Airport is the “ground-based” infrastructure necessary for airlines to operate.

The airlines are the airports’ most important customers.

Airports provide the services that the airlines require to operate safely and securely.

There are approximately 4,000 airports worldwide, including over 1,000 international airports.



All about airport

Landing fields, airstrips, are all different names for an airport.

The first “air ports” or “airfields” catered to the small airplanes .

Some early airfields were named ‘aerodromes’ (From the Latin and Greek words for “races”). These aerodromes consisted of a grassy field, with an aircraft hangar for storage and servicing of aircraft, plus observation stands for visitors.

One of the world’s first aerodromes was Taliedo Airport in Milan, Italy, which was opened as early as 1910.

In the mid 1920s, it was transformed into an airport and opened to commercial traffic

The term 'airport' means an aerodrome that has been specifically licensed, for commercial aviation operations, by a responsible national government organization, such as a Department of Transport (DOT), Ministry of Transport (MOT), or Federal Aviation Administration (FAA).

Primary functions of a commercial airport are to provide and aircraft with space for parking, refueling, maintenance (repairing), as well as facilities for the processing of passengers and freight (cargo).

Airport is designated location where the aircraft take off and landing

Classified in 2 categories

- **Domestic** : handle flights within the country
- **International** : handle international arrival and departure flight. Also equipped with infrastructure for larger aircraft

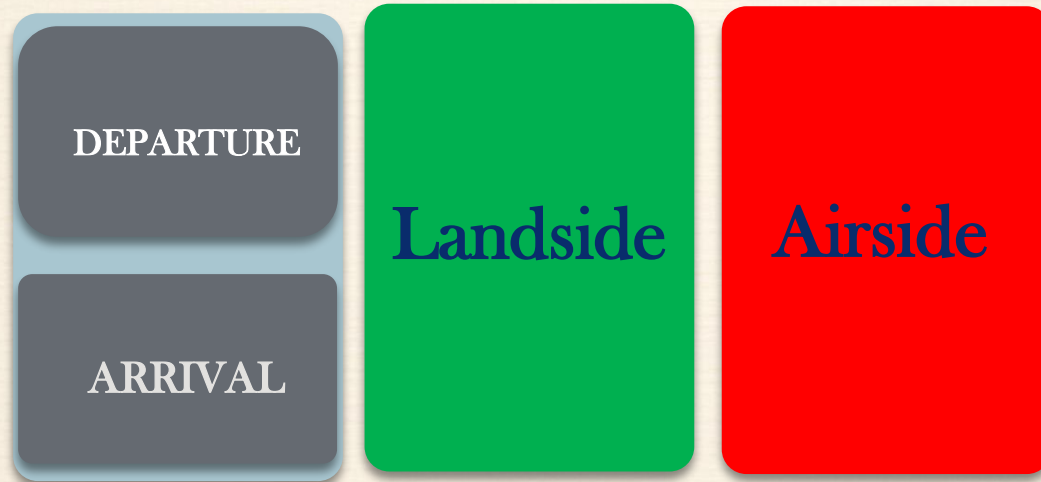
❖ Layout of Airport

- ❖ Every Airport has 'Landside', 'Airside', 'Terminal' structure



AIRPORT provides facilities to assist passengers to board and disembark from the aircraft.

The airport terminal may be divided vertically and horizontally in to 4 areas.



❖ **Landside** : starts from the entrance of the airport and ends at security and immigration some airport connect to ground transport.

❖ **Airside** : starts from security and immigration to the aircraft door – RESTRICTED AREA

- ❖ **Terminal divided into 2 parts: Arrival and Departures**
- ❖ **Terminal included;**
 - 1. Arrival area: Custom/Immigration/baggage carousel**
 - 2. Departure area: Check-in by agent or self/Security Zone/Passport control**
 - 3. Gate/Waiting area: secure zone**
 - 4. Concourse: secure zone; Restaurant...**

Airport Ownership

Most of the world's airports are owned by local, regional, or federal government, who lease the airport to private companies.

These companies oversee the airport's entire operation or part of the operation.

This is referred to as a government-owned/commercially operated (GOCO) arrange

Some airport operates are large public corporations, such as the British firm, BAA PLC, which operates most of the commercial airports in the UK.

Airport in Thailand

Thailand's air transport has grown rapidly since the World War II.

The first Thai airport was **Don Mueang International Airport** (DMK) which started providing service since in 1914 and was closed in 2006 when Suvarnabhumi International Airport was officially opened.

However, Don Mueang Airport was reopened again in 2007 for domestic



CHIANG MAI INTERNATIONAL AIRPORT (CNX)

Chiang Mai International Airport is the gateway to Northern Thailand, serving over 10 airlines which deliver more than 2 million passengers a year.



MAE FAH LUANG CHIANG RAI INTERNATIONAL AIRPORT(CEI)

Chiang Rai International Airport (IATA: CEI, ICAO: VTCT) is located about 10km from the city centre. The airport handles over 500,000 passengers, 3,900 flights and 2,700 tons of cargo every year. It consists of a single passenger terminal both the international and domestic arrivals and departures on handled on the same floor but in separate areas.



HAT YAI INTERNATIONAL AIRPORT (HDY)

Hat Yai is a welcoming gateway for all visitors who want to visit the south of Thailand for business or leisure. It is also an important exit point for Muslims on their annual pilgrimage to Mecca. Today, 3 airlines service more than 800,000 passengers, 9,500 flights and 12,000 tons of cargo each year. The airport is 9 km from downtown Hat Yai.



PHUKET INTERNATIONAL AIRPORT (HKT)

Situated on the northern end of Phuket Island, Phuket International Airport (HKT) is the second busiest airport in Thailand owing both to the popularity of Phuket and the many attractions in nearby Krabi and Phang Nga provinces.

Phuket International Airport features two terminals: #1 for international flights and #2 for domestic flights.



U-TAPAO INTERNATIONAL AIRPORT (UTP)

Located in Rayong a beach town 90km (140m) southeast of Bangkok, U-Tapao (UTP) primarily functions as the base for the Royal Thai Navy First Air Wing.

While charter flights occasionally land at U-Tapao as a result of its location just 45 minutes from Pattaya beach, U-Tapao is generally unused by commercial aircraft.



- ❖ **Airports of Bangkok Airways**
- ❖ **1st airport Samui (USM)**
- ❖ **2nd airport at Sukhothai (THS)**
- ❖ **3rd airport at Trat (TDX)**

All of them same concept: Surrounding environment with the Open-air passenger terminals

Break 10 minutes

Airport Location Identifier Code

- ❖ **The International Airlines use the three-letter codes in their own network for airline purposes. These codes serve to simplify airline operations where it is necessary to indicate airport points of origin and destination. There are 2 types of code**

ICAO (International Civil Aviation Organization) is a UN-body which focusses on international harmonization of civil aviation regulations.

ICAO codes are used for "official" purposes such as Air Traffic Control; E.g. flight plans use ICAO codes for airports and airline flight identification.

IATA (International Air Transport Association) is a trade association that focusses on making air traffic businesses safe, secure, reliable and efficient.

IATA codes are mainly used for ticketing. E.g. travel itineraries use IATA codes for airports and IATA flight numbers

- ❖ **Airport codes once assigned are considered permanent and cannot be changed without strong justification.**
- ❖ **Thus, airports have to retain their IATA code even when the airport's name is changed**

- ❖ **Airport code named by...**
- ❖ **By Assigned name : CDG = Charles De Gaulle Airport in Paris, France**
- ❖ **By Location : ISB = Islamabad International Airport in Pakistan**
- ❖ **By National Celebrity : JFK = John F Kennedy International Airport in USA**

- ❖ **By a famous person such as King Abdulaziz International Airport (JED) in Jeddah, Saudi Arabia.**
- ❖ **By Prominent figures in aviation history ;Kingsford Smith International Airport (SYD) Sydney, Australia is named after the pioneering Australian aviator Charles Kingsford Smith.**

International Airport Code (IATA)

Australia : Brisbane (BNE), Melbourne(MEL), Perth(PER), Sydney(SYD)

Bangladesh : Dhaka(DAC)

**China : Beijing(PEK), Kunming(KMG), Guangzhou(CAN),Xiamen(XMN)
Shanghai(SHA) , Cheng-Du(CTU), Hong Kong(HKG),Chongqing (CKG)**

Cambodia : Phnom Penh(PNH)

**India : Bangalore(BLR), Chennai(MAA), Delhi(DEL) Hyderabad(HYD) ,
Kolkata(CCU), Varanasi(VNS)**

Indonesia : Denpasar(DPS) , Jakarta(CGK)

**Japan : Fukuoka(FUK), Nagoya(NGO), Osaka(OSK), Sapporo CHITOSE
(CTS), Tokyo(HND),(TYO), NARITA(NRT)**

Korea : Busan(PUS) , Seoul(SEL)

Laos : Vientiane(VTE)

Middle east

Iran: Tehran(THR)

Oman : Muscat(MCT)

United Arab Emirates: Dubai(DXB)

Malaysia : Kuala Lumpur(KUL), Penang(PEN)

Myanmar : Yangon(YNG)

Nepal : Kathmandu(KTM)

New Zealand : Auckland(AKL)

Pakistan : Islamabad(ISB), Karachi(KHI), Lahore(LHE)

Philippines : Manila(MNL)

Singapore : Singapore(SIN)

Sri Lanka : Colombo(CMB)

Taiwan : Taipei(TPE)

Vietnam : Hanoi(HAN), Ho Chi Minh (SGN)

Belgium : Brussels(BRU)

Denmark : Copenhagen(CPH)

England : London (Heathrow)(LHR)

France : Paris(CDG)

Germany : Frankfurt(FRA), Munich(MUC)

Italy : Rome(FCO), Milan(MIL) MULPENSA AIRPORT(MXP)

Russia: Moscow(DME)

Sweden : Stockholm(ARN)

Switzerland : Zurich(ZRH)

Norway : Oslo(OSL)

Domestic

North: Chiang Mai (CNX)
Chiang Rai(CEI)

Northeast: Khon Kaen (KKC),
Ubon Ratchathani (UBP)
Udon Thani(UTH)

South: Hat Yai(HDY),
Phuket(HKT),
Surat Thani(URT) ,
Samui(USM),
Krabi(KBV)

Airline Alliance

An airline alliance is an aviation industry arrangement between two or more [airlines](#) agreeing to cooperate on a substantial level. Alliances may provide marketing branding to facilitate travelers making inter-airline [codeshare](#) connections within countries. This branding may involve unified [aircraft liveries](#) of member aircraft

There are 3 airline alliances

1. Star Alliance
2. One world
3. Sky team

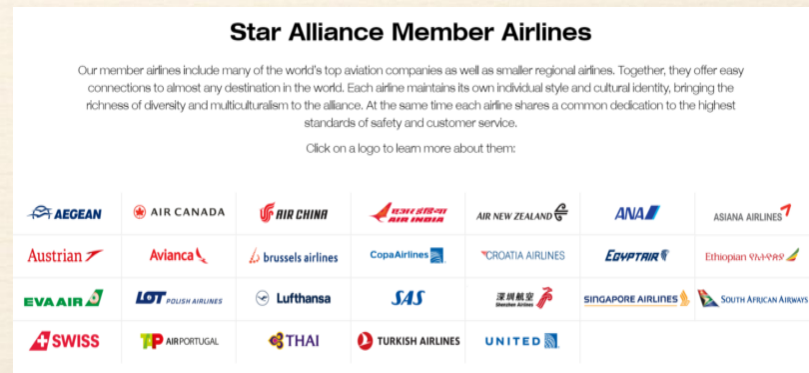
Star alliance

Five airlines(Thai, United Airlines, SAS, Lufthansa, Air Canada) created Star Alliance as the first global aviation alliance in 1997.

Today, Star Alliance has 26 member airlines, each with its own distinctive culture and style of service.

Alliance members come together to offer smooth connections across a vast global network. A project company based in Frankfurt, Germany, coordinates Star Alliance activities.

These include co-locations at airports, infrastructure, communication initiatives and other services to improve your travel experience.



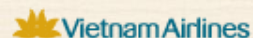
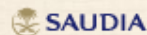
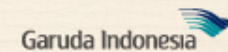
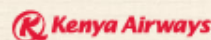
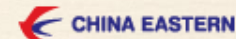
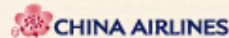
SKY TEAM

SkyTeam is a major global network of airlines cooperating to bring more comfort and a better travel experience. SkyTeam stands for more flexibility, consistent convenience and seamless connections. Its member airlines are eager to meet you and dedicated to help make your journey smoother and simpler

Total of 19 members



Caring more about you™



Oneworld

oneworld brings together 13 world-class airlines – Alaska Airlines, American Airlines, British Airways, Cathay Pacific Airways, Finnair, Iberia, Japan Airlines, Malaysia Airlines, Qantas, Qatar Airways, Royal Air Maroc, Royal Jordanian and SriLankan Airlines, and more than 20 of their affiliates. Fiji Airways is a oneworld connect partner. Oman Air is set to join the alliance as the 14th member airline in 2024.



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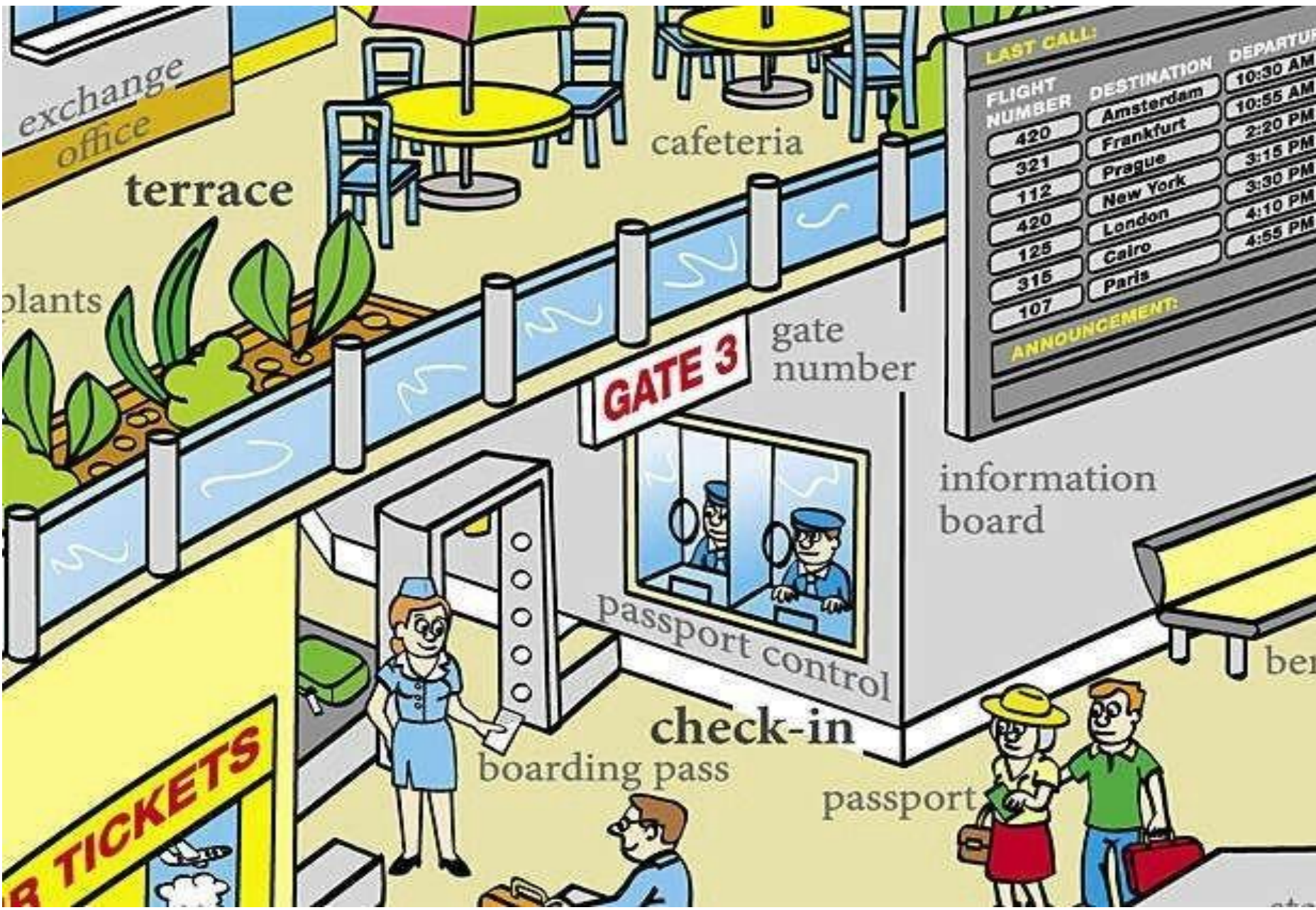
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Break 10 minutes

ABI 1201 Introduction to Aviation Industry

Unit 7 Within the Airlines

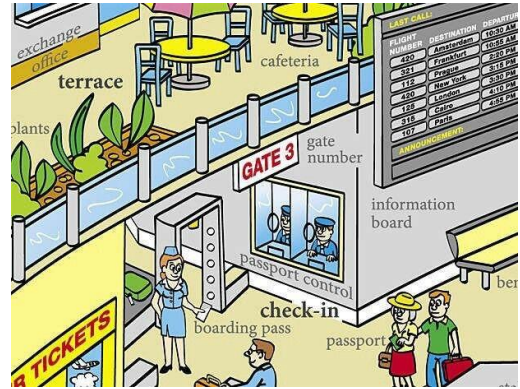




- **1. Airfare**

Meaning - cost of a plane ticket

Your meal is not included in airfare.



2. Aisle

Meaning - the long empty space that you walk down between the seats in the plane

Please don't keep your belongings in aisle so that they don't block the way.

3. Boarding pass

Meaning - part of the ticket that you give to the crew as you step onto the plane. The pass gives you the details of your flight.

Did you get your boarding pass?

Air Services

Airline personnel consists with 2 main groups of operation

1. Flight operation or Air Crew ;

- Flight deck crew**
- Flight attendant**

**2. Ground operation or ground crew;
Baggage, Ramp, Weight & Balance, Pax
service agents, etc.**

Flight operation

1. Flight-Deck Crews

Responsible for the safely operate the aircraft and fly passengers to the destination

- Captain or Pilot In Command (PIC)
- First Officer or Co-pilot
- Flight Engineer



Captain

- Making command decisions, managing the flight and emergencies
- Sits on left side of cockpit
- The minimum requirements are two pilots, flights over 10 hours 3 pilots.
- Flight more than 14 hours, two sets of flight-deck crew



First Officer or Co-Pilot

- Sits on the right side of cockpit
- If something happens to the captain, he can help. Additionally, the first officer provides a second opinion on piloting decisions. This helps keep pilot error to a minimum.



Flight Engineer or Second Officer

- Before 1980, flight engineer monitored instrument and calculate takeoff/landing speed, fuel management
- Fully trained but not fly
- New aircraft technology now provides computerized systems which eliminating the need for the flight engineer.



Prior to Takeoff

- At least one hour before flight, pilots need to know information about flight
- Flight details, Weather, Flight planning, Total fuel needed, Cargo, Pax manifest, Crew on board
- F/O will walk around check the aircraft

Prior to Takeoff

- Enter the flight plan into computer system
- Pilots need to keep monitoring the automatic systems
- Keep communicating and responding to ATC
- If any emergency occur, pilots will respond immediately
 - [VDO-Ground](#)



Break 10 minutes

2. Flight Attendants or Cabin Crews, Flight Stewards (Stewardess)

- Purser or Cabin Service Manager
- Cabin crew

Responsible for the safety and comfort of the passengers and crew member spends more time with passengers than any other airlines staff



Purser or Cabin Service Manager

- Deal with complaint, require special assistance from passengers
- Deal with flight-deck crew
- Complete all necessary paperwork needed for airlines and governmental authorities



Flight attendants / Cabin crew

- **Ensure that safety regulations are followed and make passengers to be comfort**



Prior to Takeoff – Before on board

At least one hour before flight was briefed by the purser about;

- **Emergency Procedure**
- **Coordinate with the crews**
- **Flight time**
- **Weather conditions**
- **Special issues to do with pax**

- **Once onboard the a/c, crew will perform emergency and security check to confirm it is functional**
- **Catering supplies**
- **Cabin defects such as seats, toilets**
- **Be at their positions to greet and assist pax**

Prior to Takeoff – Pax Boarded

- **Crew check pax seatbelt, seat upright, carry-on items stored correctly**
- **Safety video will be screened**

Takeoff and Flight

- Crew distributes necessary items for comfortable in flight
- May administer first-aid if pax ill
- Generally serve beverage and refreshment, on International flight, heat and distribute pre-cooked meals or snacks

Prior to Landing

- **Crew secure the cabin, same as prior takeoff**
 - **After Landing, be at their positions, be alert, and farewell to pax**
- VDO-Crew life

Ground Operation

2. Ground Operations Personnel

2.1 Reservation Agent – booking, issue ticket

2.2 Airport check-in staff – work at airport

2.3 Gate Personnel – departure gate

2.4 Aircraft Maintenance

2.5 Ramp Personnel – guide the plane in/out gate, loading, catering, de-icing, fueling



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