



NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF BUSINESS AND HUMAN RESOURCE MANAGEMENT

COURSE CODE: TSM 349

COURSE TITLE: INTRODUCTION TO AIRLINE MANAGEMENT

COURSE DEVELOPMENT

TSM 349

INTRODUCTION TO AIRLINE MANAGEMENT

TABLE OF CONTENTS	PAGE
Introduction	1
What you will learn in this Course	1
Course Aims	2
Course Objectives	2
Course Materials	3
Working through this Course	3
Study Units	4
Assignments	4
Tutor Marked Assignments	4
Final Examination and Grading	5
Course Marking Scheme	5
Tutors and Tutorials	5
Summary	6

TSM349 INTRODUCTION TO AIRLINE MANAGEMENT

1.0 INTRODUCTION

The commercial airline service industry is extremely competitive, safety-sensitive with high technology. People, employees and customers, not products and machines, must be the arena of an organisation's core competence. The success of an airline, like any other business organisation, depends, to a large extent, on managerial decisions affecting the organisation's structure, strategy, culture and numerous operational activities. The industry is a knowledge-based service market that requires practitioners or managers to acquire a sound knowledge of management theory and practice. There are some managers who are capable of taking right decisions owing to their practical experience on the job. Others are able to do so because of the knowledge they acquired in the school. All in all, academic knowledge is not a waste as it provides reasons for decisions taken.

TSM349: *Introduction to Airline Management* is a 300-level, two credit course for undergraduate students in Hotel and Catering as well as Tourism Management Programmes. It may be offered by other graduate students in Business & Human Resources Management since it is a core course.

The course will consist of fifteen (15) units i.e. four (4) modules at four (4) units per module. The material has been developed to suit undergraduate students in Business & Human Resources Management at the National Open University of Nigeria (NOUN) by adopting an approach that highlights the key areas of airline management.

A student who successfully completes the course will surely develop a positive attitude to managing an airline firm or organisation. The candidate will be required to avail himself/herself the opportunities that abound in modern libraries such as the Internet, CD-ROM, E-mail and some current collections of textbooks on airline management.

This course guide briefly explains to you what the course is all about, the course materials you will be using, and how you are expected to cover the course. There will be regular tutorial classes that are linked to the course. You are advised to attend the sessions.

2.0 WHAT YOU WILL LEARN IN THIS COURSE

This course will introduce you to the major aspects of airline management. It deals with management issues confronting the aviation and airline industries. It brings out the tools that could be used to enhance managerial decisions. As a highly regulated industry, managers must have at their finger tips current regulatory issues as well as aviation standard and recommended practices. Business flourishes most when managers are capable of taking good decisions. Their ability to take good decisions

can be enhanced by the knowledge they possess of current developments in the local and international aviation markets.

During this course, you will be learning about the peculiar nature of the airline business and the key result areas that require effective and efficient management.

3.0 COURSE AIMS

This course is aimed at:

- giving you an understanding of the civil component of air transportation that drives economic and social progress;
- enabling students to understand the characteristics and attributes of airline transport business;
- understanding the international nature of the air transportation and the regulatory framework;
- making you appreciate the management and solving practical problems facing local and international airline firms.

When all the above aims are considered, we can conclude that the major aim of the course is to expose you to the management characteristics of air transport as an innovative, environmentally-responsible industry that drives economic and social progress of any nation including Nigeria.

4.0 COURSE OBJECTIVES

Below are the overall objectives of the course. By meeting these objectives, you should have achieved the aims of the course as a whole. On successful completion of the course, you should be able to:

- 1) Explain the basic elements of transportation;
- 2) Identify the scope of airline management;
- 3) Define the nature and purpose of management;
- 4) Recognize a typical organizational chart of an airline company;
- 5) Explain what constitutes airport configuration and the functions of key aviation parastatals.
- 6) Describe the historical development of the aviation industry in Nigeria;
- 7) List the requirements for registering an airline business;
- 8) Identify the economic controls which countries exercise to bring about efficient, economic and orderly airline business;
- 9) Explain the factors affecting both demand and supply of airline services.
- 10) Highlight the nature and composition of air traffic;
- 11) Identify the different types of freight and the factors critical to the management of air freight market;
- 12) Discuss the important role of airline agents;
- 13) Discuss marketing mix;

- 14) Identify the places where airlines can search for market;
- 15) Identify the major characteristics of an airline route structure;
- 16) Contribute to management strategic aircraft fleet decisions;
- 17) Appreciate the motive of achieving fuel efficiency;
- 18) Calculate the breakeven load factor of an aircraft on a two city-pair market;
- 19) State the importance of fleet improvement programmes;
- 20) Describe some principal sources of improving airline yield;
- 21) Explain the elements that form the basis of performance analysis;
- 22) Appreciate the importance of safety and security in airline operations;
- 23) Describe the role of ICAO and IATA in setting and monitoring standards in the aviation industry.

5.0 COURSE MATERIALS

Major components of the course are:

1. Course Guide
2. Study Units
3. Textbooks
4. Assignments Guide.

6.0 WORKING THROUGH THIS COURSE

To complete this course, you are required to read the study units, read set books and read other materials provided by the National Open University of Nigeria (NOUN). Each unit contains self-assessment exercises, and at certain points during the course, you will be expected to submit assignments. At the end of the course is a final examination. The course should take you about a total of 21 weeks to complete. Below are the components of the course.

7.0 STUDY UNITS

The study units in this course are as follows:

MODULE 1:

- Unit 1: Overview of Air Transportation
- Unit 2: The Management Functions
- Unit 3: Historical Perspective of Aviation Industry in Nigeria
- Unit 4: Regulation in Air Transport

MODEL 2:

- Unit 5: Economic Characteristics of Airlines
- Unit 6: Air Traffic and the Aviation Market
- Unit 7: Marketing
- Unit 8: Airline Marketing Analysis

MODULE 3:

- Unit 9: Airline Corporate Strategies and Analysis
- Unit 10: Cost Characteristics of Air Transport
- Unit 11: Performance Analysis
- Unit 12: The Airline Yield

:

MODULE 4:

- Unit 13: Socio-Economic Importance of Airlines
- Unit 14: Aviation Safety and Security
- Unit 15: International Bodies and Associations

8.0 ASSIGNMENTS

There are many assignments on this course and you are expected to do all of them by following the schedule prescribed for them in terms of when to attempt them and submit same for grading by your tutor.

9.0 TUTOR-MARKED ASSIGNMENT (TMAs)

There are fifteen tutor-marked assignments in this course and you are advised to attempt all. Aside from the course material provided, you are advised to read and research widely using other references which will give you a broader viewpoint and may provide a deeper understanding of the subject. Ensure all completed assignments are submitted on schedule before set deadlines. If for any reasons, you cannot complete your work on time, contact your Tutor before the assignment is due to discuss the possibility of an extension. Tutor-marked assignments shall carry 30% of the total course grade.

10.0 FINAL EXAMINATION AND GRADING

The final examination for this course will be of three hours' duration and have a value of 70% of the total course grade. All areas of the course will be assessed and the examination will consist of questions, which reflect and find it useful to review self-tests, tutor-marked assignments and comments on them before the examination.

11.0 COURSE MARKING SCHEME

The work you submit will count for 30% of your total course mark. At the end of the course, you will be required to sit for a final examination, which will also count for 70% of your total mark. The table below shows how the actual course marking is broken down.

Table 1: Course Marking Scheme

ASSESSMENT	MARKS
Assignment 6 (TMAs)	6 assignments, best 3 will be used for C.A = $10 \times 3 = 30\%$
Final Examination	70% of overall course marks
Total	100% of course marks

12.0 TUTORS AND TUTORIALS

There are 20 hours of tutorials (ten 2-hour sessions) provided in support of this course. You will be notified of the dates, times and location of these tutorials, together with the names and phone number of your tutor, as soon as you are allocated a tutorial group.

Your tutor will mark and comment on your assignments, keep a close watch on your progress and on any difficulties you might encounter as they would provide assistance to you during the course. You must mail your tutor-marked assignments to your tutor well before the due date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible. Do not hesitate to contact your tutor by telephone, e-mail, or discussion board if you need help. The following might be circumstances in which you would find help necessary: when

- you do not understand any part of the study units or the assigned readings.
- you have difficulty with the self-tests or exercises.
- you have a question or problem with an assignment with your tutor's comment on an assignment or with the grading of an assignment.

You should attend the tutorials. This is the only chance to have face-to-face contact with your tutor and to ask questions which are answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefit from

course tutorials, prepare a question list before attending them. You will learn a lot from participations in discussions.

13.0 SUMMARY

TSM349: Introduction to Airline Management intends to expose the graduate student to the rudiments of managing air line businesses. Upon completing the course, you will be equipped with the knowledge required to manage an airline.

We hope you enjoy your acquaintances with the National Open University of Nigeria (NOUN). We wish you every success in the future.

COURSE DEVELOPMENT

TSM 349

INTRODUCTION TO AIRLINE MANAGEMENT

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MODULE ONE

Unit 1	Overview of Air Transportation
Unit 2	Management Functions
Unit 3	Historical Perspective
Unit 4	Regulation in Air Transport

UNIT 1 OVERVIEW OF AIR TRANSPORTATION

Table of Contents

1.0	INTRODUCTION
2.0	OBJECTIVES
3.0	MAIN CONTENT
3.1	Elements of Transportation
3.1.1	The Route Way
3.1.2	Terminal Facilities
3.1.3	Mobile Facilities
3.1.4	Institutional Framework
3.2	Air Transportation
3.3	Air Transport Services
3.3.1	Airline Services in Nigeria
3.3.2	Segmentation in Air Transport
4.0	CONCLUSION
5.0	SUMMARY
6.0	TUTOR MARKED ASSIGNMENT
7.0	REFERENCES/ FURTHER READINGS

1.0 INTRODUCTION

Transportation involves the physical movement of goods and people from one point to another. The mode of movement may be by foot, beast of burden, aircraft, motor vehicle, ocean vessels, trains etc. These transport modes have four basic elements that are common to them, which will be highlighted to the learner in the early part of this unit.

Next, we shall gradually introduce the learner to commercial airline service industry by looking at the definition of air transport and the scope of airline management.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the basic elements of transportation;
- define air transportation and management;

- identify the scope of airline management;

3.0 MAIN CONTENT

3.1 Elements of Transportation

This deals with all modes of transportation i.e. foot, air, road, water and rail. It recognizes that there are basic elements common to all modes of transportation. These are:

- a) The route way
- b) Terminal facilities
- c) Mobile facilities, and
- d) Institutional framework.

3.1.1 The Route Way

This refers to the network or routes through which the carrier must follow. Such routes must meet the requirements of adequacy, efficiency and safety. Examples of route ways in relation to all modes of transportation are:

- Foot paths
- Roads
- Waterways
- Pipelines
- Airways, etc.

3.1.2 Terminal Facilities

This refers to locations for take off and arrival of carriers or vehicles. These locations must equally meet the three conditions of adequacy, efficiency and safety. Examples of terminal facilities are:

- Motor parks
- Garages
- Lay byes
- Taxi stops
- Bus stops
- Railway stations
- Seaports
- Airports etc.

3.1.3 Mobile Facilities

For each mode of transportation, a unique carrier or vehicle is required. The carrier performs the actual service of moving goods, people and messages on the

transportation network. Such vehicles may be considered on the bases of engine capacity, fuel efficiency, seating density, noise pollution, maintenance costs etc. Examples of vehicles or carriage units are:

- Motor cars, Buses for road transport
- Locomotives/Wagons for rail transport
- Ships and Boats for water transport
- Helicopters, Aeroplanes, Aircrafts for air transport.

3.1.4 Institutional Framework

This includes all agencies involved in traffic education such as:

- The Nigerian Civil Aviation Authority (NCAA).
- The Federal Airport Authority of Nigeria (FAAN)
- The Federal Road Safety Commission (FRSC)
- The Nigerian Police Force
- Institutions of Higher Learning
- Vehicle Inspection Unit
- The Mass media – Radio, Televisions and Newspapers
- All institutions in traffic control, management and enforcement.

The above elements of transportation system have been found out not to be functioning efficiently in the Nigerian context. When anyone of the element is inefficient or inadequate or defective, it then becomes a potential source of delay and accident to users. An example is the improper maintenance of roads or the existence of narrow bridges and bends, which do not only hamper efficient movement but also exposes the users to accidents.

Similarly, the carrying unit (such as motor cars, aircrafts, ships etc.) that is mechanically defective or faulty is a problem to efficient and safe transportation.

3.2 Air Transportation

Air transportation is an arm of the aviation/aerospace industry. It refers to all aviation movements of passengers, cargoes and mails from one location to another by means of an aircraft or aeroplane. There are two components of air transportation, namely:

- (i) *Civil* air transportation, and
- (ii) *Military* air transportation.

The *civil component* of air transportation in Nigeria can be grouped into:

- (a) Airline or Air carrier (scheduled and unscheduled)
- (b) Passenger and Cargo operations
- (c) General aviation.

Airline or air carrier activities in Nigeria are the activities of certified commercial passenger and cargo airlines.

General aviation is a broad heterogeneous term which came out of the aviation history in the United States of America. It embraces a wide range of aircraft uses including:

- Business fire fighting
- Advertisement
- Institutional/pleasure or leisure
- Pipeline
- Highway and Marine air patrol
- Emergency and rescue operations
- Aerial photography
- Aerial surveying
- Ferry flights
- Research and development
- Sports
- Parachuting
- Agricultural applications etc.

3.3 Air Transport Services

This can be sub-divided into two, namely: airline services in Nigeria and segmentation in air transport.

3.3.1 Airline Services in Nigeria

Airline services in Nigeria can be categorized as follows:

(i) Foreign Airlines:

These airlines operate on the international routes and are owned and controlled by foreigners. They operate into the four international airports of Abuja, Lagos, Kano and Port Harcourt. Examples of such airlines that have bilateral service agreements with Nigeria are: The British Airway, Air France, etc.

(ii) Private Domestic Airlines:

These are airlines operating on the domestic scene. They are owned and controlled by Nigerians and they operate on the 20 airports in the country including the four international airports.

(iii) Private Airlines (Intercontinental and Domestic):

Since the demise of the Nigeria Airways Limited, some private airlines are now granted license to fly the international routes, both at the regional level and beyond. Examples of some of these airlines are: Bellview Airline, Arik Airline, Virgin Nigeria Airways etc.

3.3.2 Segmentation in Air Transport

Segmentation in air transport can also be done in the following categories:

(a) Regional Air Markets:

Regional air service agreements exist whereby States within a region such as the ECOWAS allow domestic trans-border routes. Airlines within the 'region' are granted slots or free access to airports under an accord or agreement. It is under this type of arrangement that airlines like Bellview Airlines Limited and Arik Air Limited can fly into some West African countries like Ghana, Sierra Leone and Liberia. Such airlines are small and operate commuter type aircraft.

(b) International (Schedules) Airlines:

These airlines operate scheduled flights on high coastal routes. International airlines are known to operate between the highly developed countries of the world and occasionally pick passengers and goods from the developing and the less developed countries. They fly about 45 million passengers over 40 billion passenger miles. They dominate the international aviation market by their fleet size and capacity.

(c) Charter Airlines:

Charter airlines are those airlines acquired by their owners solely for the purpose of offering them to small operators on charter basis. Hence, they do not operate on a regular basis and often associated with low costs.

Group of people or companies e.g. Oil Companies also hire aircrafts at a regular interval or seasonally e.g. holiday, festival, excursion, summer flight, surveillance exploration etc. all these services occur because of the complexities in the socio-economic environment in which the air transport system operates.

(d) Others:

Some other classification of air transport services also exists for various categories. Through the service in terms of the TRAFFIC e.g. passenger services, air cargo or freight services. Further division of these two are:-

a. *Quality of service:* Passenger service can be further divided in terms of quality of service thus:

- Economy class
- Business class
- First class service and
- Group or club services.

The categorization above is based on payment, that is, the higher the amount, the better the services. The group service rate is usually the cheapest.

b. *Frequency and Regularity of Service:* Frequency of is what often gives rise to fixed scheduled flight on regular routes e.g. Lagos-London-Lagos (twice a week).

c. *In terms of Freight:* Categorization is into perishable and non-perishable goods.

d. *Length of the service:* Here we have short distance service and long distance services which may require changing route or aircrafts which are either continental or intercontinental in nature. The aircraft design for Long haul is such that enough fuel capacity is provided to enable the craft take off and land at its destination without stopping over to refuel.

4.0 CONCLUSION

In this unit, you have learnt of the basic elements common to Rail, Water or Marine, Air, Road and other modes of Transportation. Whatever mode chosen, the aim is to arrive safely at one's destination at the appropriate time. At the concluding part of this unit, the student was introduced to the components of air transportation and the segmentations of air services.

5.0 SUMMARY

Transportation means the movement from point A to point B usually by means of a carrier or vehicle. There are various modes of transportation with all having four key elements common to them. These elements include:

- The Route Way,
- Terminal Facilities,
- The Mobile Facilities, and
- The Institutional Framework.

Air transportation, one of the modes of transportation, is an arm of the aviation/aerospace industry. It refers to all aviation movements of passengers, cargoes and mails from one location to another by means of an aircraft. There are two

components of air transportation, namely: *Civil* air transportation, and *Military* air transportation.

6.0 TUTOR MARKED ASSIGNMENT

What are the basic elements common to all modes of transportation?
Comment on each of them.

7.0 REFERENCES / FURTHER READINGS

- Adebayo, S.I. (2003), "Passengers' safety in the air," *The Movis Company*, Ikeja, Lagos.
- Williams, F. (2001), "Socio Economic Impact of Air Transport in Nigeria."
Unpublished Lecture Notes.

UNIT 2 THE MANAGEMENT FUNCTIONS

Table of Contents

1.0	INTRODUCTION
2.0	OBJECTIVES
3.0	MAIN CONTENT
3.1	Definition of Management
3.1.1	A Manager
3.1.2	Key Variables
3.1.3	Productivity, Effectiveness and Efficiency
3.1.4	Functions of Managers
3.1.5	Organisation Structures
4.0	CONCLUSION
5.0	SUMMARY
6.0	TUTOR MARKED ASSIGNMENT
7.0	REFERENCES / FURTHER READINGS

1.0 INTRODUCTION

Having learnt in the previous unit of what the element of air transport business entails, it is necessary for the learner to grasp the basic principles of management, as they apply to the business. Airline service industry is a knowledge-based service market that requires practitioners or managers to acquire a sound knowledge of management theory and practice. As managers, challenging management issues come up on a daily basis and it is important that learners are taught such tools that could enhance quality management decisions.

Management is facilitated by a useful and clear organisation of knowledge. The concepts, principles, theories and techniques of management are grouped into five managerial functions, namely: planning, organising, staffing, leading and controlling which we shall touch briefly in this unit.

In the concluding part, an example of a typical *organisational chart* of an airline company will be provided to enable the learner grasp the specific departmentation that suits the airline business.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define and describe the nature and purpose of management;
- discuss the role of a manager;
- understand the concept of productivity, effectiveness and efficiency;
- recognise that the aim of all managers is to create a 'surplus'; and
- prepare a typical organogram for an airline company.

3.0 MAIN CONTENT

3.1 Definition of Management

Management is the process of designing and maintaining an environment in which individuals, working together in groups, efficiently accomplish selected aims. This basic definition can be expanded thus:

- (i) As manager, people carry out the managerial functions of planning, organising, motivating and controlling;
- (ii) Management applies to any kind of organisation;
- (iii) It applies to managers at all organisational levels;
- (iv) The aim of all managers is the same: to create a surplus;
- (v) Managing is concerned with productivity; this implies to effectiveness, and efficiency which are key elements in airline management.

3.1.1 A Manager

A manager is someone who has formal responsibility for the work of one or more persons in the organisation. In other words, *he coordinates the activities of other persons or group with a view to achieving the set objectives of an enterprise.* Managers take actions that will make it possible for individuals to make their best contributions to group objectives. A manager achieves results through others.

3.1.2 Key Variables

All managers grapple with key variables which need to be understood and managed for results to be maximised. The variables internal to an airline as an organisation are:

- People
- Work and structures
- Systems and procedures
- The goals of the organisation
- The technology available in the organisation
- The culture of the organisation (its values, beliefs, practices, etc.)

Clearly, managers cannot perform their task well unless they have an understanding of, and are responsive to the many elements of the *External Environment* – economic, technological, social, political and ethical factors that affect their areas of operations.

3.1.3 Productivity, Effectiveness and Efficiency

Another way to view the aim of all managers is to say that they must be productive. This is the only way any business concern such as an airline company can minimise its yield and stay afloat in the face of dwindling revenue.

Productivity:

Successive companies create a surplus through productive operations. Although there is no complete agreement on the true meaning of **productivity**, let us define it as “the output-input ratio within a time period with due consideration for quality”. It can be expressed as follows:

$$\text{Productivity} = \frac{\text{Outputs}}{\text{Inputs}} \quad (\text{time period, quality considered})$$

The above formula indicates that productivity can be improved:

- (i) By increasing outputs with the same inputs. For example, an airline industry that maximises its available aircraft seating density because of the high degree of customer satisfaction would fare better than another airline in terms of productivity;
- (ii) By decreasing inputs, but maintaining the same outputs; an airline can do this by – reducing personnel costs; improving fuel efficiency for the airline fleet of aircrafts; optimizing available seat, mile/employee growth level;
- (iii) By increasing outputs and decreasing inputs to change the ratio favourably.

Finally, according to Peter F. Drucker, “The greatest opportunity for increasing productivity is surely to be found in knowledge, work itself, and especially in management”.

Effectiveness and Efficiency:

Productivity implies effectiveness and efficiency in individual and organisational performance. Effectiveness is the achievement of objectives. Efficiency is the achievement of the ends with the least amount of resources. Managers cannot know whether they are productive unless they first know their goals.

Examples of differences between ‘efficient’ managers and ‘effective’ managers, according to Redden, are that ‘efficient’ managers seek to solve problems and reduce costs, whereas ‘effective’ managers seek to produce creative alternatives and increase profits. On these bases, management activities as grouped under planning, organising, motivating and controlling (POMC) are more concerned with efficiency than effectiveness.

3.1.4 Functions of Managers

The system approach to organisations is based on the three major elements of inputs, throughputs/conversion, and outputs. The process of management is concerned with all of these three elements, and especially the conversion processes of organisations. The grouping of management activities can be summarised as follows:

- Planning
- Organizing
- Motivating
- Controlling

These traditional groupings – the POMC approach – are the ones chosen to represent the framework of our discussion. They are a convenient way of describing most of the key aspects of the work of managers in practice.

a. Planning:

Planning involves selecting missions and objectives and the actions to achieve them; it requires decision making that is, choosing future courses of action from among alternatives.

It involves decisions about *ends* (organisational aims/objectives), *means* (plans), *conduct* (policies) and *results*.

Planning is an activity that takes place against the background of:

- (i) the organisation's external environment;
- (ii) the organisation's internal strengths and weaknesses.

It can be *long-term*, as in strategic and corporate planning, or *short-term*, as in setting of annual departmental budgets. Long-term usually implies a time-horizon of about five years or more. Short-term can be any period from the immediate future (crisis management) up to about one year.

b. Organizing:

Plans have to be put into operation. This involves detailed organisation and coordination of tasks and the human and material resources needed to carry them out.

Organising is that part of management that involves establishing an intentional structure of roles for people to fill in an organisation. It is intentional in the sense of making sure that all the tasks necessary to accomplish goals are assigned and, it is hoped, assigned to staff who can do them best.

We shall examine an organisation structure in the latter stage of this unit.

c. Motivating:

This involves meeting the social and psychological needs of employees in the fulfillment of organisational goals. The motivating activities of managers, however, are essentially practical in their intent, for setting plans and executing them, managers have to gain the commitment of their employees.

d. Controlling:

This involves monitoring and evaluating activities, and providing corrective mechanisms. Controlling activities are concerned essentially with measuring progress and correcting deviations. The basic functions of control are:

- (i) to establish standards of performance;
- (ii) to measure actual performance against standards;
- (iii) to take corrective actions where appropriate.

Control activities act as the feedback mechanism for all managerial activities. Their use is, therefore, crucial to the success of management.

3.1.5 Organisation Structure

As a continuation of the discussion of the managerial function of organising, we will now introduce the learners to the features of organisation structure or organogram.

An organisation structure, according to Mintzberg (1979) is 'the sum total of the ways in which it divides its labour into distinct tasks and then achieves coordination between them'.

The purpose of an organisation structure is to help in creating an environment for human performance. It is, then, a management tool and not an end in and of itself. Although the structure must define the tasks to be done, the role so established must also be designed in the light of the abilities and motivations of the people available in the company or airline.

The grouping of activities and people into departments makes organisational expansion possible. This departmentation makes it possible to choose a particular organisational chart for different companies and all situations. Departmentation can be done:

- (i) by time
- (ii) by simple numbers
- (iii) by enterprise function
- (iv) by territory or geographical location
- (v) by the kinds of customers served, and

- (vi) by the process or equipment required.

3.1.5.1 Creating Departments by Enterprise Function:

It is important to note that the specific departmentation that suits the airline industry is the grouping of activities in accordance with the functions of an enterprise – functional departmentation. It embodies what an airline, as an enterprise, typically does. Functional departmentation is the most widely employed basis for organising activities and is present in almost every enterprise at some level in the organisation structure.

The Organization of an airline is made up of many departments, sections and subsections with the Board of Directors at the top. The Organizational Structure of any airline is affected by the following:

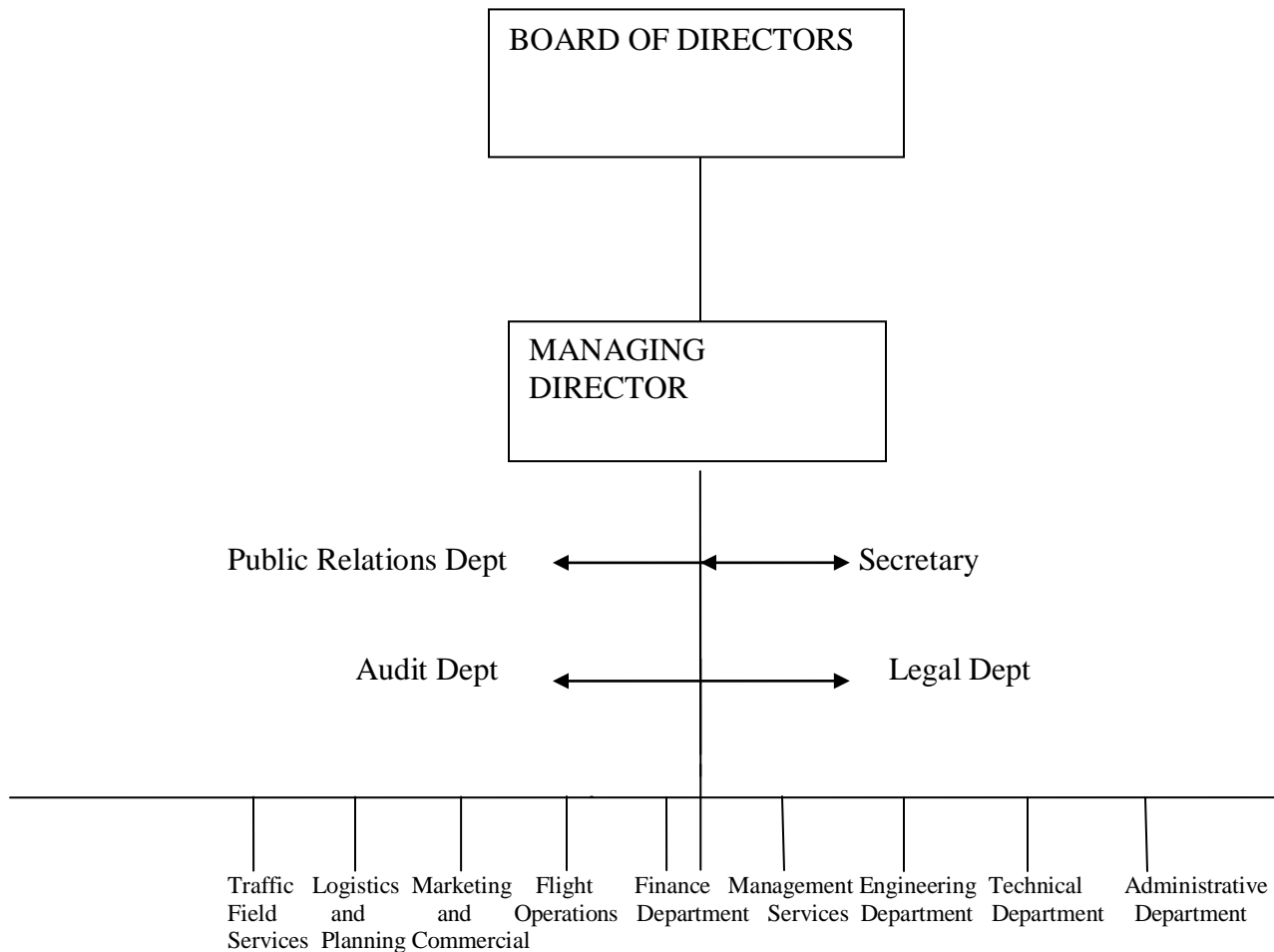
1. *Ownership*: Whether state ownership or private ownership. This will affect the finance, size, control, organization, employment pattern etc.
2. *Size*: The size of an airline is the level of involvement in air transportation. This include:
 - i. Volume(number) of aircrafts
 - ii. Component and size of aircrafts
 - iii. Financial and manpower resources therein,
 - iv. Sizes of offices,
 - v. Degree of patronage from customers etc.
3. *Function*: What an airline does affects its organizational structure. That is, whether, it is only for domestic or international services or both, whether it concentrates on passengers or cargoes or both, whether it is regular service or charter or both, all these affect the structure of the airline organization.

Coordination of activities may be achieved through rules and procedures, various aspects of planning (for example, goals and budgets), the organisational hierarchy, personal contacts, and sometimes, liaison departments.

It is important to note that the Organizational Structure varies from one airline to another and the need to reorganize an existing structure can be caused by a combination of the following:-

- (a) Nature and Size of the Airline
- (b) Type of ownership
- (c) Financial position and degree of patronage
- (d) Policy-employment policy and division of labour
- (e) Government influence-public sector,
- (f) Nature of the economy under which the airline operates etc.

3.1.5.2 Organizational Structure of an Airline.



3.1.5.3 The Board of Directors

The Board is saddled with the responsibility of making policies for the airline in the areas of management, operations, finance, marketing, personnel and employment within the airline organization. The Managing Director of the airline is always a member of the Board.

3.1.5.4 The Managing Director

After the Board of Directors is the Managing Director-the number one executive. He interprets the policies of the Board and puts them into action. As a Chief Executive, he is responsible for the whole airline organization and achieves the objectives of the policies through the use of his team of Directors who are heads of departments and are responsible to him.

3.1.5.5 The Secretary

The Secretary is responsible for the legal documents of the airline's activities, takes charge of all vital documents, drafting of contract advice, attends meetings and conferences and does other jobs within the capacity of a company secretary as to be delegated by the Managing Director.

4.0 CONCLUSION

Management is universal; hence, a clear understanding of the principles and techniques of management by practitioners in the aviation industry is a must if the survival of airlines is to be assured. The system approach to airline management which is based on the three elements of inputs, throughputs/conversion, and outputs has its focus on the conversion of resources to achieve the planned target of the airline.

An organizational structure, according to Mintzberg (1979) is 'the sum total of the ways in which it divides its labour into distinct tasks and then achieves coordination between them'. The purpose of this structure is to help in creating an environment for human performance.

5.0 SUMMARY

In this unit, you have been introduced to the principles and techniques of management in the aviation industry. We have also discussed the basic managerial functions in general and as they relate to an airline industry in particular.

In the final part of the unit, the student is introduced to the importance of an organizational structure to an airline business. An illustration of an Organogram of a big airline is displayed. This Structure varies from one airline to another because of the following reasons:

- (a) Nature and Size of the Airline
- (b) Type of ownership
- (c) Financial position and degree of patronage
- (d) Policy-employment policy and division of labour
- (e) Government influence-public sector,
- (f) Nature of the economy under which the airline operates etc.

5.0 TUTOR MARKED ASSIGNMENT

What are the traditional groupings of the key aspects of the work of managers in practice?

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UNIT 3 HISTORICAL PERSPECTIVE OF AVIATION INDUSTRY IN NIGERIA

Table of Contents

1.0	INTRODUCTION
2.0	OBJECTIVES
3.0	MAIN CONTENT
3.1	Evolution of the Airline Industry
3.2	The Aviation Industry in Nigeria
3.2.1	Pre-Independence
3.2.2	Emergence of the Nigerian Airways Limited
3.2.3	Deregulation of Airline Business in Nigeria
3.3	Airport Development
3.3.1	Airport Configuration
3.3.2	Federal Airport Authority
3.4	Air Traffic Control System
3.4.1	Nigerian Airspace Management Agency
4.0	CONCLUSION
5.0	SUMMARY
6.0	TUTOR MARKED ASSIGNMENT
7.0	REFERENCES/ FURTHER READINGS

1.0 INTRODUCTION

Air transport involves all activities that are put in place which enables the mode of transport to change from land to air or vice-versa.

In this unit, we shall discuss the evolution of powered aircraft and the historical development of the aviation industry in Nigeria. We shall also give a brief description of the Nigerian Aviation Agencies show their enormous role in ensuring aviation safety and security.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- appreciate the pioneering effort of the Write Brothers in bringing about the first flight;
- appreciate the historical development of the aviation industry in Nigeria;
- explain the role of government in airline management;
- recognize what constitutes airport configuration and the functions of key aviation parastatals.

3.0 MAIN CONTENT

3.1 Evolution of the Airline Industry

The development in the air industry started with the great interest in the development of powered aircraft at the turn of the century in both the United States and Europe. The first successful flight was in the late 1903 at Kitty Hawk, North Carolina.

This feat was accomplished by Wilbur and Orville Wright, two brothers who had a bicycle business in Dayton, Ohio. Their first flight lasted just under a minute, but by 1905, the Wright Brothers were making flight lasting as long as 30 minutes.

By 1910, a number of aircrafts had been developed both in Europe and the United States of America. Governments subsidized early aircraft development because they felt the real “value” of aircraft would be for military purpose. Therefore, aircrafts were manufactured for the purpose of fighting wars. Wartime also saw the beginning of pilot training, fighter pilots received considerable publicity, perhaps because of the fact that, for several years, the ground war was at a near stalemate.

The domestic airline industry began in the mid and late 1920's. The United States Government provided subsidies to the airline companies to carry mails. It means in effect that mail transport was the beginning of air industry. Passenger business however developed as an after-thought to the carriage of mails.

The first U.S. aircraft designed primarily to carry passengers was the Ford Trimotor, introduced in 1926. Passenger aircraft technology intensified during the 1930s culminating in the invention of the most important and successful passenger aircraft, the Douglas DC-3.

3.2 The Aviation Industry in Nigeria

The history of aviation industry in Nigeria can be divided into phases as follows:

3.2.1 Pre-Independence

A riotous situation resulting from a feud between the British colonial administration and the people of Kano City in 1925, forced a British Royal Air Force (RAF) fighter to land on a polo ground in Kano. That was the first flight and flying experience in Nigeria. The mission of the crew was to carry out a surveillance of the riot which broke out of protests by some Kano indigenes.

After the maiden flight, the RAF began yearly flight to Kano and Maiduguri from Sudan, relying solely on available intelligence reports and navigational aids on the aircraft.

At the end of the Second World War, the RAF continued regular flights to Nigeria carrying passengers and mails on the Lagos – Port Harcourt – Enugu – Jos route with an aircraft chartered from British Overseas Airways Corporation with the joint efforts of other three English-speaking West African countries namely: Gold Coast (now Ghana), The Gambia and Sierra Leone.

3.2.2 Emergence of the Nigerian Airways Limited

The activities of the British Overseas Airways Corporation (BOAC) in the Anglophone West African countries led to the formation of a commercial airline in the region, called the West African Airways Corporation (WAAC) Limited in 1947. This marked the early stage of development of air transportation in Nigeria.

On the attainment of independence, Ghana pulled out of WAAC in 1958 and formed the Ghana Airways Limited. The Nigerian government acquired the shares of the corporation from Ghana.

In 1961, WAAC was re-registered and named Nigeria Airways Limited. The ownership structure of the Nigeria Airways then was made up as follows:

- (i) Federal Government of Nigeria – 51 percent
- (ii) British Overseas Airways Corporation (BOAC) – 33 percent
- (iii) Elder Dempster – 16 percent.

On the 1st of May, 1961, the Nigeria Airways became wholly owned by the Federal Government when the BOAC and Elder Dempster sold their shares to the government. The Nigeria Airways grew steadily during its first eight years, operating domestic flights to then existing five international airports from Lagos to Kano, Sokoto, Maiduguri and Port Harcourt. It also operated sub-regional flights to such West African countries' capitals including Abidjan, Accra, and Robertsfield in Liberia, Freetown and Banjul. In addition the Nigeria Airways operated on the international routes on joint arrangements with other airlines, specifically, the British Airways to the United Kingdom, Amsterdam and the United States of America.

The Nigeria Airways scheduled flights were actualised with a fleet consisting two Boeing 707, two Boeing 737, three F.28, five F.27, one Astec plane and subsequent acquisition of jets to cope with the rising level of business and economic developments.

3.2.3 Deregulation of Airline Business in Nigeria

From the late 1970's up to mid-1980, the Nigerian air transport sub-sector recorded impressive operational performance and increase in the fleet of aircrafts. After the mid-1980's, the number of fleet and performance of the national carrier declined in line with the downturn in the economy.

The need for further development of the country's air transport services led to eventual deregulation of the industry by government. This action unleashed unrestricted competition among the operators, leading to the proliferation of small airlines.

The monopoly long enjoyed by the Nigeria Airways was eventually broken with the structural reform undertaken embodying the deregulation and restructuring of the air services industry.

In pursuance of the deregulation policy of the aviation industry, about 25 private airline operators were licensed in the early 1990's to contribute to the development of the industry. They were authorised to operate non-scheduled passenger and cargo air services within and outside Nigeria. Later, three domestic operators comprising Okada Airlines, Kabo Air Travels Limited and Gas were upgraded from the status of non-scheduled operators to scheduled operators. Kabo and Okada Airlines were later granted permission to operate international routes.

By 1994, the number of licensed private airlines rose to 28 out of which 14 catered for passenger air services; 7 operated cargo services and 7 chartered flights respectively. Furthermore, the ADC and Bellview Airlines were granted permission to operate international routes in 1995.

The emergence of private airline operators successfully broke the state monopoly (the Nigeria Airways) by running commercial air operation on most domestic trunk routes. However, the deregulation of air transport, especially its implementation has never been an easy process, as the industry still experiences state interventions with respect to air fares.

Even though the deregulation of air transport services has led to increased passengers, cargo capacity and revenues for the airline operators, not all the private airlines established in the country survived owing to the heavy capital investment outlay involved, the rising operational cost of aircraft maintenance, fierce market competition and the depressed market situation.

3.2.1. List of some local airlines operating in Nigeria

- i. Arik Air
- ii. Virgin Nigeria
- iii. Chanchangi Airlines
- iv. Dana Airlines
- v. Belview Airlines
- vi. Aero Contractors
- vii. IRS Airlines
- viii. Afrijet Airlines
- ix. Overland Airways
- x. Kabo Airlines etc.;

3.3 Airport Development

The Nigerian aviation industry witnessed a sharp increase in the number of airports as landing trips were gradually turned to modern aerodromes. The established airports, some of which were more of political consideration than economic include Abuja, Kano, Benin, Calabar, Enugu, Ibadan, Ilorin, Jos, Kaduna, Lagos (Ikeja), Maiduguri, Port Harcourt, Sokoto, Minna, Akure, Makurdi, Katsina, Yola, and Owerri.

It is instructive to note that only the four international airports i.e. Lagos, Abuja, Kano and Port Harcourt are viable, the rest are not. The decline in the domestic air passengers travels, handling of cargo services, aircraft movement and other allied activities accounted for the relative decline in the usage of most of the nation's airports.

3.3.1 Airport Configuration

Since the primary function of an airport is to facilitate the movement by air of passengers and cargo to different destinations within and outside international boundaries, it behoves that facilities must be provided for the take-off and landing of aircrafts as well as for passengers. Airport configuration consists of free zone and restricted zone. The airside area is a restricted zone only for authorised staff and passengers. Airport configuration consists of:

(A) AIRSIDE FACILITIES

- (1) Airfield pavement which include runways, taxiways, aprons, crash roads, services road and their drainage network.
- (2) Airfield lighting which includes approach lighting, runway lighting, stop-way lighting, taxiway lighting etc.
- (3) Aircraft fueling facilities.
- (4) Aircraft maintenance facilities.
- (5) Airside security network facilities.

(B) LANDSIDE FACILITIES

- (1) Land Transportation System including across roads, internal roads, vehicles, cargo trucks etc.
- (2) Land Telecommunication Network i.e. telephones, radios, walkie-talkie etc.

- (3) Power Supply and Distribution.
- (4) Water supply and distribution.
- (5) Security Network System in the public areas.
- (6) Sewage treatment and garbage disposal system.

(C) TERMINAL BUILDING FACILITIES

- (1) Flight information and general communication system.
- (2) Passenger processing and baggage check-in facilities.
- (3) Baggage conveying system.
- (4) Lighting, fire-prevention, cooling and ventilation system.
- (5) Anti-sabotage and anti-hijacking security system.
- (6) Airline offices, restaurants, shops etc.
- (7) Water supply to toilets, offices etc.

3.3.2 Federal Airport Authority

The Federal Airport Authority of Nigeria (FAAN) is the agency of government saddled with the management of all the 20 airports in the country. Its major functions are:

- (a) To provide, develop and maintain at the airports necessary services and facilities for the safe, orderly, expeditious and economic operation of air transport;
- (b) To provide adequate conditions under which passengers and goods may be carried by air;
- (c) To provide adequate facilities and personnel for effective security at all airports;
- (d) To charge for services provided by the authority at airports;
- (e) To create conditions for the development of air transport.

3.4 Air Traffic Control System

The air traffic control system comprises navigational aids and communication facilities. The airside infrastructure includes flight control, navigational aids, communication radar etc. Air traffic navigational aids include:

- (a) Instrument Landing Systems (ILS)
- (b) Very high Omni-directional Radio Range (VOR)
- (c) Non-Directional Radio Beacon (NDB)
- (d) Distance Measuring Equipment (DME)
- (e) Localizer
- (f) Radio Detection and Ranging (RADAR)

3.4.1 Nigerian Airspace Management Agency

The air traffic control facilities are provided and maintained by the Nigerian Airspace Management Agency (NAMA). The agency was formerly called the Federal Civil Aviation Authority (FCAA). Its major functions are:

- (a) To provide a safe and functional air navigation services that meet international standards;
- (b) The installation and effective maintenance of air navigation aids in all airports and air routes;
- (c) Restructuring of designated air routes for positive area airway control;
- (d) Provision of total radar control in Nigeria's airspace, and
- (e) Liaison with other international organisations for the improvement in the delivery of Nigeria's air navigation services.

4.0 CONCLUSION

In this unit, you have learnt the historical perspective of aviation industry in Nigeria which included the evolution of airline industry, the aviation industry in Nigeria prior to independence, and the emergence of the Nigeria Airways Limited and the deregulation of airline business in Nigeria. You have also learnt about airports development, airport configuration, the Federal Airports Authority of Nigeria (FAAN), the air traffic control system and the Nigerian Airspace Management Agency (NAMA).

5.0 SUMMARY

Nigeria's aviation industry has a modest beginning. The Wright Brothers carried out the first successful flight that lasted just under a minute in 1903. Since then, a number of aircrafts have been developed in Europe and America. But these were mainly war planes used by the Military.

The domestic airline industry began in the 1920's with the United States government providing subsidies to airlines companies to carry mail. The emergence of the West African Airways Corporation (WAAC) in 1947 which later transformed into the Nigeria Airways Limited 1961 signaled a remarkable development in the airline industry in Nigeria.

With the deregulation of the airline management in Nigeria, the country now has 20 airports including 4 international airports. The Federal Airport Authority of Nigeria (FAAN) was established by the Federal Government among other things to provide, develop and maintain the airports. It also provides adequate facilities and personnel for effective security. The air traffic control systems is under the Nigerian Airspace Management Agency (NAMA) whose function is the provision of a safe and functional air navigational services that meet international standards. It also engages in the restructuring of designated air routes for positive area airways control.

6.0 TUTOR MARKED ASSIGNMENT

- a) What do you understand by Airport Configuration?
- b) List the principal functions of the Federal Airport Authority of Nigeria.

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UNIT 4 REGULATION IN AIR TRANSPORT

Table of Contents

1.0	INTRODUCTION
2.0	OBJECTIVES
3.0	MAIN CONTENT
3.1	Economic Regulation
3.1.1	Entry
3.1.2	Routes
3.1.3	Rates
3.1.4	Subsidy
3.2	International Regulation
3.2.1	The “Six Freedoms” of the Air
3.3	Safety and Control Measures
3.4	National Legal Requirements
3.4.1	Requirement of a License
3.4.2	Requirement for Flying
3.4.3	Loading
3.4.4	Pre-Flight Action
3.4.5	Fatigue of Flight Crew and Pilots
3.4.6	Use of Aerodromes or Airports
4.0	CONCLUSION
5.0	SUMMARY
6.0	TUTOR MARKED ASSIGNMENT
7.0	REFERENCES / FURTHER READINGS

1.0 INTRODUCTION

Airways are designated lanes through the airspace along which aircrafts are guided in moving from airport to airport. Government control is however necessary in order to ensure the highest possible safety standards.

The sky is a part of the national domain and is open to all. For this and other reasons, the government assumed jurisdiction and has expended hundreds of millions of money in the establishment of airports and airways for the use of commercial, private and military aircrafts.

In this unit, we shall study the controls available to government aimed at ensuring the safety and security of passengers and cargo taking into consideration the commercial objective of private airlines. The National legal requirements for setting up an airline business will also be examined since there are built-in controls.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- list the requirements for registering an airline business;
- identify the economic controls which countries exercise to bring about orderliness in the airline business;
- list the freedoms of the air brought about by the Chicago Conference of 1944;
- prepare a Pilot check list before an aircraft takes-off from the ground.
- state some safety and control measures that often go with economic controls.

3.0 MAIN CONTENT

3.1 Economic Regulation

The government of many countries carries out some economic controls to make sure that international standards and recommended best practices are adhered to by airlines operating within the country.

3.1.1 Entry

In many countries, no air carrier may engage in any air transportation unless there is a certificate issued by a government body or agency authorizing such air carrier to engage in such transportation. This certificate is called an AOC (Air Operating Certificate) which represents the minimum International Civil Aviation Organisation (ICAO) standards. The minimum standards for the award of an AOC are:

- *Financial Capability* – there is a direct linkage between financial capability and safety requirements. Indigent airlines are in the habit of cutting corners. For instance, they may not do maintenance when they are supposed to do so.
- *Air worthiness of aircraft* – all technical checks and maintenance must have been done.
- *Qualified personnel* – they must be licensed and current in terms of knowledge, skills and experience.
- *Route structures* – the route structures approved for airlines by government must be adhered to.

Before issuing a certificate, the government must be satisfied that the applicant is fit, willing and able to perform the service of which certificate is requested and that the service will be in the public interest.

3.1.2 Routes

Certificate restricts operations to specified routes. This may be done to regulate entry and competition thus providing balanced services between all major airports in the nation. It may also be used to encourage airlines to develop new routes instead of concentrating on the highly profitable routes only. For example, Lagos – Abuja or

Lagos – Port Harcourt. This may also entail restrictions pertaining to scheduled flights frequencies and points served.

3.1.3 Rates

Regulation of rates of common carriers is extensive in many countries. This is necessitated by the need to avoid unjust or unreasonable, or justly discriminating or unduly preferential rates, fares and charges. Airlines are forbidden to charge or demand a rate or fare that differs from those specified in the currently effective tariff.

3.1.4 Subsidy

The government may grant subsidy to local airlines or to both local and foreign airlines as a way of encouraging them and improving on their yield. Such fees payable by airlines that could be subsidized include: airport fees, landing and packing, enroute and over-flight charges, ticket sales charges, cargo sales charges, fines payable for violation of air navigation regulation etc. Government could also give out right grants to the airlines to salvage them in times of difficulties as was the case in the U.S.A. after the September 11, 2001 attack and the consequent decline in passenger traffic and aviation business generally.

3.2 International Regulation

There exist international regulations bidding on all nations of the world. Such regulations often arise from international agreements and bilateralism, for example, the 1919 International Convention for Air Navigation (ICAN) established the sovereignty of the air doctrine. This sovereignty of the air doctrine states that “a nation could exercise control of the airspace above its territory and territorial waters and so can fix conditions for use.

3.2.1 The “Six Freedoms” of the Air

The Chicago 1944 Conference and the Bermuda Conference of 1946 established uniform regulations with worldwide applicability. In the Chicago Conference, five freedoms of the Air were adopted. The sixth and seventh freedoms later followed. These freedoms are:

(a) Freedom 1

This is the right of an aircraft to transit or overfly the Nigerian airspace without landing.

(b) Freedom 2

This is the right to land for technical reasons such as fuel or repairs, but not to pick up load or passenger.

(c) Freedom 3

This is the right to carry traffic from home country to a foreign country.

(d) Freedom 4

This is the right to carry homeward from any foreign country.

(e) Freedom 5

This is the right to carry traffic between foreign countries e.g. foreign nation B and foreign nation C.

(f) Freedom 6

This is the right to carry traffic from foreign nation B through Nigeria to foreign nation C.

(g) Freedom 7 – Cabotage

This is the right to carry traffic within the territory of a foreign nation.

Failure to accept the above freedoms has forced nations to adopt “bilateralism” and to go and negotiate with one another for permission to enjoy the privileges referred to above. Such an agreement between two nations is called ‘Bilateral Air Service Agreement’ (BASA). Multilateral agreements involving more than two countries are beginning to emerge largely due to cooperation of world’s nations and the work of International Air Transport Agency (IATA) and International Civil Aviation Organisation (ICAO).

3.3 Safety and Control Measures

Nations all over the world normally put in place certain safety and control measures to accompany the economic regulation. The measures vary from country to country, but generally include:

- (a) Plans and policies with respect to the *use of airspace*.
- (b) The issuance of *air traffic rules* governing the flight of aircraft to ensure safety of the aircraft and efficient utilisation of the airspace.
- (c) *Standard* governing the *design, construction* and *performance* of aircraft, engines, appliances and inspection and servicing thereof.

- (d) Reserve supply of *fuel* and oil carried in flight.
- (e) Maximum *hours of service* of *airmen*.
- (f) Issuance of *airmen certificate*, *airworthiness for aircraft*, and the suspension, revocation and modification thereof.

3.4 National Legal Requirements

There are basic legal requirements which proprietors of airline businesses must meet in Nigeria before their carriers are allowed to fly. These are:

3.4.1 Requirement of a License

The Civil Aviation (Air Transport) (licensing) Regulations which came into force on 1st of December, 1965 in Nigeria makes a comprehensive set of provisions for the licensing of those who wish to carry out the business of using aircrafts for carrying passengers or cargo by air. It is unlawful to carryout an airline business without an operating business. Principal Officers of such an airline company will be held personally liable unless they can prove that the offence was committed without their consent.

3.4.2 Requirement for Flying

An aircraft shall not fly in Nigeria unless:

- (i) it has a certificate of air worthiness issued by the Minister of Air Transport;
- (ii) a certificate of maintenance issued by the aircraft maintenance engineer or aircraft radio maintenance engineer;
- (iii) it is so equipped as to comply with the law of the country in which it is registered and to enable lights and markings to be displayed and signals to be made;
- (iv) it is equipped with radio apparatus to enable communications to be made and the aircraft to be navigated;
- (v) it carries log books;
- (vi) a flight crew of the number and description required by the law of the country.

3.4.3 Loading

Before an aircraft is loaded, a supervisor shall ensure that the distribution is done in such a way that:

- (a) the load may safely be carried on flight, and
- (b) any conditions subject to which the certificate of airworthiness was issued.

3.4.4 Pre-Flight Action

The commander or pilot of an aircraft shall satisfy himself inter-alia before the aircraft takes off:

- (a) that the flight can safely be made, taking into account the latest information available as to route and aerodromes to be used, the ***weather** reports* and *forecasts* available, and any alternative course of action which can be adopted in case the flight cannot be completed as planned;
- (b) that the *aircraft* is in every way *fit* for the intended flight;
- (c) that the *load carried* by the aircraft is of such weight and is so distributed and secured, that it may safely be carried on the intended flight;
- (d) that *sufficient fuel*, oil and engine coolant (if required) is carried;
- (e) that *pre-flight check* system has been complied with by each member of the crew of the aircraft.

3.4.5 Fatigue of Flight Crew and Pilots

Every operation shall ensure that members of the flight crew are afforded such periods for rest that their work and duties are not likely to cause them fatigue while flying in the aircraft as may endanger the safety of the aircraft. Hence, every airline operator shall establish for every member of crew thereof:

- (a) limits on the aggregate of all his flights time during every period of thirty days consecutively;
- (b) limits on his flying duty periods, and
- (c) minimum rest periods which they are to have immediately before any flight.

3.4.6 Use of Aerodromes or Airports

An aircraft shall not land at or take off from any place in Nigeria other than:

- (a) a government aerodrome or airport;
- (b) a licensed aerodrome or airport;
- (c) a place authorised by the Minister for use as aerodrome.

4.0 CONCLUSION

The security and safety of air transportation activities in any nation lies squarely on the *government*. Therefore, in order to ensure the highest safety standards, government control is necessary. The government exercises economic regulations to ensure that *Standards and Recommended Practices* (SARPS) are adhered to by all stakeholders including the airlines. Even before embarking on an airline business, government ensures that legal requirements are fully met by the prospective airline operator. Policies with regard to basic requirements for licensing, flying, loading, use of airports and aerodromes etc. are clearly spelt out.

5.0 SUMMARY

In this unit, you have learnt about regulatory framework in air transport which include economic regulation (such as the entry, routes, rates, and subsidy) and international regulation made up of the “six freedoms” of the air, safety and control measures, national legal requirements for registering aircrafts, requirements for flying, loading, fatigue of flight crew and pilots and use of aerodromes and airports.

6.0 TUTOR MARKED ASSIGNMENT

- (a) What do you understand by economic regulation in air transport?
- (b) List and discuss any four economic regulations known to you.

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MODULE TWO

Unit 5	Economic Characteristics of Airlines
Unit 6	Air Traffic and the Aviation Market
Unit 7	Performance Analysis
Unit 8	The Airline Yield

UNIT 5 ECONOMIC CHARACTERISTICS OF AIRLINES

Table of Contents

1.0	INTRODUCTION
2.0	OBJECTIVES
3.0	MAIN CONTENT
3.1	Demands for Air Transport
3.2	Factors affecting the Demand for Airline Service
3.2.1	Population
3.2.2	Passenger Income
3.2.3	Location of Activities
3.2.4	Physical Characteristics
3.2.5	Price
3.2.6	Quality of Service
3.3	Customer Service
3.4	Supply of Air Transport Service
3.5	Interdependence of Supply and Demand
3.6	Pricing of Air Transport Services
3.7	Demand Elasticity and Sensitivity
4.0	CONCLUSION
5.0	SUMMARY
6.0	TUTOR MARKED ASSIGNMENT
7.0	References and Further Readings

1.0 INTRODUCTION

In this unit, we shall discuss the demand and supply of air transport services. In the process, we shall examine the factors affecting both supply and demand, and their interdependence. The importance of pricing of airline services shall be highlighted to enable managers take decisions that will impact positively on profitability and yield. Demand elasticity and sensitivity would equally be discussed.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- discuss the concept of demand and supply of airline services;
- explain the factors affecting both demand and supply of airline services;

- realise the non-storability of airline services;
- discuss demand elasticity and sensitivity to changes in prices/airfares.

3.0 MAIN CONTENT

3.1 Demands for Air Transport

The demand for air transport is not exactly similar to the demand for a commodity since transport is a derived demand. For example, for a business traveler, the journey is basically an input of his firm – it can be seen as an element of the information process. For the tourist, an airline journey is merely part of a bigger item of the visit or holiday.

Effective demand of airline service is the willingness and ability of a consumer to pay for the service. Three concepts are quite important. They are:

- A service
- A particular price or fare, and
- A particular period of time.

3.2 Factors affecting the Demand for Airline Service

Factors that increase or decrease the demand for air transport are as follows:

3.2.1 Population

The smaller the population, the less the demand. Similarly, the larger the population, all things being equal, the greater the demand for transport.

3.2.2 Passenger Income

The higher the income, the higher the demand and vice-versa. If the income is low, passenger would seek for another mode which seems cheaper.

3.2.3 Location of Activities

The actual location of activities attracts business transaction. If activities are scattered, air transport will be needed to get to those activities.

3.2.4 Physical Characteristics

Air transport is demanded for its comfort and convenience. This is equally true for commodities with attractive/special packaging. For example, perishable goods that need urgent movement for timely marketing such as fruits can be achieved through air freight.

Also, high cost, low volume goods such as gold and diamond can also be airlifted in chartered aircraft for security reasons. Urgent medical supplies are also likely to be moved by private jets or military aircraft. All these goods require urgent and guaranteed delivery internally and internationally.

3.2.5 Price

The lower the fare charged, the more people are likely to demand for air transport services. However, those that can afford the services are prepared to pay higher fares for air transport because of speed, convenience and comfort.

3.2.6 Quality of Service

This refers to both frequency and standard of service. Frequency of service means that the arrival time or departure time must meet the taste of the customers. Standard of service, on the other hand, means that the airline operator must provide service(s) relevant to the customers' needs. The degree which travelers respond to the above factors is known as elasticity of demand.

Air passengers' demand in Nigeria, for example, will be influenced by fares more than any other factors. This will in turn depend on the change in the income of the travelers.

3.3 Customer Service

One important aspect that engages the attention of airline management is how best to take care of the customers' needs in terms of service. What do passengers care for most about the services rendered by airlines? Confirmed sources of investigation show that they are made up of the following:

(a) Efficient Check-in

The airline that makes booking and check-in easy for customers is likely to have an upper hand in terms of demand for its services.

(b) Baggage Handling

An efficient baggage handling system will enhance customer satisfaction. The passenger care very much for the safety of his luggage and will continue to patronize that airline that renders this service efficiently and effectively.

(c) Seat Comfort

One of the major advantages that air transport has over other modes of transportation like the road, railway, water etc. is the comfort and convenience that it provides.

Therefore, seat comfort is an attraction to the passengers and aircraft manufacturers have always taken this into account in their design specification.

(d) Performance of Reservation Agents

The Nigerian Civil Aviation Authority ensures that all reservation agents in the country are registered and their operations controlled. The performance of these agents appointed by the airlines, especially the use of the computer reservation system, impacts positively on passengers' satisfaction.

(e) Carrying-on Baggage Facilities

Baggage identification and carrying-on facilities give the passengers great relief as they move from one airport to another. The fear of missing or mishandled baggages is reduced to the barest minimum. Confidence in the airline is enhanced.

(f) On-time Performance

The leading airline seeks to maintain the best on-line performance record. It can hold this record for many years. The airline can improve on this record through ranking high in overall service as measured by surveys of passengers. A service enhancement programme can help the airline to maintain the top slot.

(g) Performance of Flight Attendants

When management ensures that high morale exists among flight attendants, this can lead to improved ratings on premium service. For premium service to exist:

- (i) The pilots should be well0trained in the use of public address systems.
- (ii) The passengers should be kept well informed about progress of each flight.
- (iii) The hostesses should be efficient, courteous and attractive.
- (iv) The airline should use sales "gimmicks" on occasions.
- (v) They should give packages in form of gifts to their customers during festivals like on Christmas day and Sallah days.

3.4 Supply of Air Transport Service

Supply of air transport involves offer of services to effect relocation or movement of goods, activities, messages etc. in terms of utility. It offers time and place utilities. Supply of air transport services is therefore the ability and wiliness to render services

to the various consumers of the product. This ability and willingness is measured in passenger/freight kilometres.

The supply of air transport must take cognizance of the fact that the air transport product is highly heterogeneous or varied in composition. It consists of short and medium distance travels. The products can also be seen in terms of commuting holiday traffic, business travel and travel for social purposes. More also, air travel product can be viewed in terms of general cargo or freight, special traffic or bulk traffic.

A unique feature of supply of air transport services is that the product cannot be stored. This non-storability of seats gives rise to the possibility of excess supply leading, in some cases, to waste. This makes the supply of transport services sensitive to cost considerations and not market price as in the case of ordinary commodities which can be stored in a warehouse.

The large size of carriage cannot be adjusted to cope with contraction in demand. For a B.737 aircraft, for example, you need a load factor of about 75 percent or 100 passengers before the company can breakeven.

3.5 Interdependence of Supply and Demand

For most commodities, supply and demand are regarded as interdependent and in elementary states, we have supply and demand curves shifting themselves in such a way as to produce an equilibrium point/price.

This is not all that true in transport e.g. a bigger supply or a more frequent service, will often generate bigger demand since frequency of service is one of the aspects of quality of services that customers will demand. Therefore, the supply and demand of transport is really in equilibrium position.

The interdependence in air transport will, to some extent, depend on accessibility of the transport services used. Air services are rarely door-to-door in nature; unlike rail or road which serves as feeds for the passengers or freights using air terminals.

3.6 Pricing of Air Transport Services

Demand and supply determines the prices in a totally competitive environment, but the airline industry, like many other sectors of transport, is subject to a great deal of regulation due to the following:

- (a) Maintenance of safety standard;
- (b) Maintenance of public service requirements by avoiding cut-throat competition or short-run marginal cost, which would eventually produce bankruptcies and chaos in services;

- (c) Provide a level playing field such that both the weak and the strong airlines can participate in the aviation market. In the absence of this, the large strongest airlines, by virtue of scale of advantage, would tend to undercut and eliminate the small ones to perform essential or vital services.

For the above reasons, the International Air Transport Association (IATA) set prices for scheduled international services.

3.7 Demand Elasticity and Sensitivity

Demand response to small changes in fares/prices will probably not be greater than unit change in price. This is more so for business travelers and for long haul flights. Also, in situations where there are no better alternatives to air travel, the above situation will hold.

A small change in airfare e.g. (Lagos – Kano) N3, 500 to N3, 850 which is about 10 percent change will not result in 10 percent drop in demand. This is more so when the cost of the increase is compared to the convenience, safety, reliability and time saved.

However, for air-trips of short duration where there appears to be greater competition between air mode and other transport modes, the situation will be different. Demand response will show a greater unit change than the unit change in fare. Similarly, if an airfare e.g. (Lagos – Ibadan or Benin) changes by 10 percent it will most likely result to a demand response greater than 10 percent loss. This is more likely to be so because the benefit of going by car on a trip of about an hour or three and hours and having the benefit/convenience of using the car at destination will far outweigh the advantage of making the trip by air.

The time needed to drive to the airport, check-in and waiting time to catch the flight is enough to have completed the trip to Ibadan. From the foregoing, therefore, there is low demand elasticity for non-stop long haul flights and high demand elasticity for short-haul air services.

In spite of the above situation, the demand elasticity for domestic air transport service is high. Thus, a significant fare increase will result in more than proportionate change in demand. This impacts more on personal and pleasure travels. While the response of non-business travelers can be easily predicted, the response from the bigger business community or organisations will be somewhat tampered by several considerations.

Big business travelers conversant with the inflationary levels and the value of the local currency may form their opinion of possible response to these factors. If big business travelers are already accustomed to increasing cost of doing business and accept increasing transportation costs as an inevitable cost of doing business, it will not deter them from patronizing air travel.

4.0 CONCLUSION

Demand and supply determine the prices or fares of airline services, in a competitive environment. However, the airline industry, like many other industries, is subject to a great deal of regulation. For most commodities, demand and supply curves shift themselves in such a way as to produce equilibrium point or price. This is not true in transport services since a bigger supply, or a more frequent service will often generate bigger demand. This is so because frequency of service is one of the aspects of quality of services that customers will demand for. Therefore, the supply of transport services is rarely in equilibrium position.

5.0 SUMMARY

In this unit, you have learnt the economic characteristics of airlines. It also touched on factors that affect demand for air transport such as population, passenger income, and location of activities, physical characteristics, price, and quality of service. Also, touched were the following: customer service, supply of air transport service, interdependence of supply and demand and pricing of air transport services. Finally, you learnt about airline services' demand elasticity and sensitivity.

6.0 TUTOR MARKED ASSIGNMENT

What do customers care most about services rendered by airlines? Discuss these services in detail.

7.0 REFERENCES AND FURTHER READINGS

Nwangbu, B. (2002), "The Economics of International Aviation."

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UNIT 6 AIR TRAFFIC AND THE AVIATION MARKET

Table of Contents

1.0	INTRODUCTION
2.0	OBJECTIVES
3.0	MAIN CONTENT
3.1	Aircraft and Air Traffic
3.1.1	Passenger Traffic
3.1.2	Segmentation
3.2	Cargo Traffic
3.3	Ticket and Freight Agents
3.4	Computer Reservation Systems (CRS)
4.0	CONCLUSION
5.0	SUMMARY
6.0	TUTOR MARKED ASSIGNMENT
7.0	REFERENCES AND FURTHER READINGS

1.0 INTRODUCTION

The civil component of air transportation can be grouped into *airline* or *air carrier* (scheduled and unscheduled), *passenger* or *cargo operations* and *general aviation*.

This unit dwells principally on passenger and cargo operations which are of great importance to students and managers of airline companies.

The usage of the aircraft is highlighted. Having acquainted ourselves with the needs of customers of airline companies in the previous units, it is important to learn how the use of aircrafts suits these needs. We have, for example, purely passenger aircrafts, purely cargo aircrafts and a mixture of both passenger and cargo aircrafts.

The manager has to make the commercial decision on which way to go. The functions and importance of airline agents in the search for passengers and cargo customers are highlighted.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- highlight and explain the nature and composition of air traffic;
- discuss the needs of the airline customers;
- describe the different types of freight and the factors critical to the management of air freight market;
- discuss the important role of airline agents;
- define the nature and purpose of Computer Reservation Systems (CRS).

3.0 MAIN CONTENT

3.1 Aircraft and Air Traffic

For its market appeal and dependability, the aircraft relies on its speed i.e. the saving of time and distance. No other mode of transport can compete with the aircraft, in terms of speed. This inherent technical advantage confers on air transport comparative advantage over and above other transport modes, particularly for movement over long distances.

By air traffic, we refer to the movement of aircrafts along designated routes. The aircraft is highly flexible simply because it needs no track or road. Its own track is the gift of nature i.e. the atmosphere. The only major problem, as far as market appeal is concerned, is the location of the airport. Today, it is becoming more and more difficult to have airports located near cities because of the requirement for large runways and ground installations.

3.1.1 Passenger Traffic

The passenger traffic represents an important aspect of airline business and a major focus of managers.

3.1.1.1 Speed and Comfort

The speed of the aircraft is an important element to the passenger. For example, the passenger travelling on business can utilise the aircraft to contact wide variety of customers in different parts of the world. By travelling through the air, he can cut down his hotel expenses. For tourists, similar consideration apply using aircraft hence they can visit tourist attractions in many parts of the world.

For the airline operator, a number of important factors must be considered when dealing with passenger market. Passengers require a good deal of special and pleasant surroundings and care e.g. he must be fed during the trip. Hence, the airline must take cognizance of the comfort of his passengers e.g. facilities for luggage retrieval, catering activities in flight, facilities for checking, etc.

3.1.2 Segmentation

Different kind of passengers are available and aircraft operators take advantage of this to make more revenue. In other words, the passenger market is segmented.

We have **First Class**, the **Economy Class** and the **Business Class** passengers. Each of these categories is given different type of treatment. Certain things are to be noted in case of passenger traffic.

First, the passenger loads and unloads himself and this is an advantage to the provider of the service because it saves time and time is money. In a sense, passenger traffic is a two-way traffic e.g. passengers that travel must return, and over the years, there is always a balance between arrivals and departures.

Passenger market is full of risks. It is a market that is very sensitive to mishaps, particularly accidents. Generally, passengers' traffic accounts for the greatest proportion of revenue for most aircrafts.

3.2 Cargo Traffic

Different types of cargo are available in the air transport market. We have **perishable** and **imperishable**, solid and liquid, fragile freight and bulk heavy freight. Certain air freights are weight loosing freight but are important in industrial production e.g. iron ore represents a basic raw material required in modern industry. It is bulky and this type of commodity is called a low value per unit weight commodity and therefore not very suitable for air transport.

However, in an emergency, air transport is utilised or highly suitable in carrying the required commodities, relief materials, drugs, etc. Although iron ore cannot stand high cost of transportation, the demand for it is a continuous one and occasionally, the aircraft is called upon to perform in that market.

In the alternative, you have high valued goods which are quite fragile e.g. electronics, computer parts, trinkets, wrist watches, diamonds etc. These types of goods can stand relatively high transport cost, and air transport provides a suitable medium of carrying such highly valued goods.

We also have perishable commodities some of which are bulky. The constant demand of these goods makes speed imperative or an important factor in their movement and air transport is usually needed to operate in this market.

Generally speaking, the air freight market depends on the following:

- (1) the nature of the commodity i.e. value per unit weight or size;
- (2) its perishability or otherwise;
- (3) its relationship with life; and
- (4) time, distance and place.

3.3 Ticket and Freight Agents

These are *travel agencies* operating as business outfits whose functions consist of:

- (a) Ticket *sales outlets* to book the airlines traffic;
- (b) Promote the business of the airline through intensive campaigns;
- (c) Use effective media outlets to communicate innovations in the industry to the public;
- (d) Assist the airline customers with information about desired flight information and reservation.

Some airlines sponsor these agencies by helping them to do their work of producing simple and pre-printed tickets as the case may apply. The airline gives some commission of a certain percentage to agents. Some airlines pay more than the standard in domestic airline industry.

The International Air Transport Association (IATA) fixes commission schedules for agents. However, since not every airline is a member of the association, some may dictate the commission they give to their own agents.

In Nigeria, Travel Agents' activities are regulated by the Nigerian Civil Aviation Authority (NCAA). Their activities are now automated and they are now required to use computer reservation systems (CRS) in booking and confirming seat reservations.

3.4 Computer Reservation Systems (CRS)

Computerized Reservation Systems allow customers to book plane tickets from home or work. Nearly all airlines are using internet sites, and United Airlines, for example, has a destination CompuServe to dispense flight and fare information.

Airlines are in the midst of implementing ticket-less travel programmes in which passengers purchase tickets, select their seats, and pick loading passes and luggage tags at machines resembling ATMs.

The quality of information about airline services available to travel agents who directly distribute such information to the travelling public and the ability of an airline to offer those agents competitive computer reservation systems (CRS) represent the foundation of an airline's competitive opportunities.

4.0 CONCLUSION

The passenger and cargo markets are important aspects of the airline business. The efficient management of these two markets ensures that the needs of the customer in terms of speed and comfort as well as the profitability objective of the airline are met.

The market appeal and dependability of the aircraft (as a carrier) lies on its *speed* i.e. the saving of time and distance. For both markets, the concept of *safe arrival* is important. Hence, the passengers who travel must get to their destination safely. Similarly, cargo characteristics must be taken into account for goods to arrive at their destination in perfection condition.

The role of travel agencies in ensuring that the airline customers derive satisfaction in both the passenger and cargo markets cannot be overemphasised. The convenience of the computer reservation system and the use of internet by airlines to dispense flight information give the airlines competitive opportunities.

5.0 SUMMARY

In this unit, you have learnt the nature and composition of air traffic, different types of freight and the factors critical to the management of air freight market, important role of airline agents, definition of computer reservation systems, its nature and purpose in air traffic. Also, you have learnt of the importance of meeting airline customers' needs in order to achieve the desired revenue targets.

6.0 TUTOR MARKED ASSIGNMENT

What are the functions of Travel Agencies in the Air Transport business?

7.0 REFERENCES AND FURTHER READINGS

Onwumere, N.M. (2003) "Air Transport Operation and Management."
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Havey, G. (2008), "Management in the Airline Industry." *Routledge.*

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Evolving Air Transport Industry." *Aviation and Allied
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UNIT 7 MARKETING

Table of Contents

1.0	INTRODUCTION
2.0	OBJECTIVES
3.0	MAIN CONTENT
3.1	Definition of Marketing
3.2	Marketing Concept
3.3	The Marketing Mix
3.3.1	Product or Service
3.3.2	Pricing
3.3.3	Promotional Strategy
3.3.4	The Place or Distribution Channels
4.0	SUMMARY
5.0	CONCLUSION
6.0	TUTOR MARKED ASSIGNMENT
7.0	REFERENCES AND FURTHER READINGS

1.0 INTRODUCTION

The highly competitive nature of the airline business and the non-storability of the services the airlines sell make it necessary for management to have a good knowledge of marketing strategies. The process of marketing practice includes all those business activities associated with the flow of goods and services from production to consumption.

Central to marketing is identifying the needs of the customer and meeting them. The airline manager must understand the tools with which to ensure that the needs of the travelling public and indeed all aircraft users are met at all times. The process of marketing a product and a service is basically the same. However, marketing services like the ones rendered by airlines are much harder. A product can at least be seen, handled and judged on performance. Selling an airline service which is intangible relies more on *promise* and *integrity*.

This unit introduces the learner to the concept of marketing and marketing mix.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define the term marketing;
- explain the marketing concept;
- discuss the marketing mix.

1.0 MAIN CONTENT

3.1 Definition of Marketing

Virtually every text on marketing states a different definition – (marketing predicament). Most people think of marketing as synonymous with selling and promotion. Ironically, selling is only one of several functions that marketers perform and often not the most important.

American Marketing Association defines marketing as “the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchange, that satisfy individual and organisational objectives”. This definition is comprehensive because it conceptualizes marketing activities, as permeating all organisational functions, be it the non-profit organisations or profit-oriented businesses.

3.2 Marketing Concept

Marketing concept refers to a customer focus or orientation that sees the satisfaction of customers’ needs and wants as the key to achieving organisational goals. It begins with the determination of the needs and wants of the target markets and then the organisation adapts (through the marketing mix) itself towards the effective and efficient delivery of the product or services for the satisfaction of customer.

The concept has as its goal, the achievement of three things, which are:

- (1) Customer orientation
- (2) Customer satisfaction, and
- (3) Integrated Marketing.

3.3 The Marketing Mix

This is the term that is used to describe the combination of four inputs (the four Ps) that constitutes the core of a company’s marketing system, which are:

1. The Product
2. The Price
3. The Promotional activities
4. The Place (distribution system).

Delving further, we can list the four Ps as:

Product

Technical specification
Features

Price

Retail
Trade

Quality
Packaging
After-sales services

Special offers
Investment terms

Place

Channels of distribution
Stockist's
Location

Promotion

Advertising
Sales promotion
Selling
Trade shows
Public Relations

Obviously, a management must select from the multitude of variables, the combination that will adapt to the environment. In other words, management seeking the mix that leads to optimum synergistic results.

3.3.1 Product or Service

The product is usually the basic element in the marketing mix. All subsequent decisions for other elements in the mix depend on the type of the product being offered. In marketing, anything capable of satisfying a consumer's want or need is called a product.

Therefore, a product could be a physical object, a service, a place, an idea or even a personality. Managing the product ingredient includes planning and developing the right products and/or services to be marketed by the company.

A product strategy therefore comprises decisions about package decisions, about package design, branding, trademarks, guarantees, product life cycles, after-sales service etc. It also considers the satisfaction of all consumer needs in relation to the good or service.

3.3.2 Pricing

One of the most difficult areas of marketing decision-making is with the method of setting profitable and justifiable prices. Price is one of the most crucial elements in marketing strategy. Pricing decisions directly affect every element of the marketing mix.

In pricing, management must determine the right base price for its products. It must establish policies concerning discounts, freight payment, and many other price-related variables.

3.3.3 Promotional Strategy

Marketing management communicates with its target market through promotional strategy. The promotional elements include advertising, personal selling, sales promotion and public relations. The various aspects of promotional strategy must be blended together for the organisation to communicate effectively with the market place.

3.3.4 The Place or Distribution Channels

This has to do with the physical distribution of products or services, and the selection of marketing channels. It is the responsibility of management to select and manage the trade channel through which the products will reach the right market at the right time and also develop a distribution system for physically handling and transporting the products through these channels. Marketing channels involve retailers, wholesalers, and other stockiest.

The four-fold classification referred to as the marketing mix is useful in study and analysis, but it is the total package or mix that determines the degree of marketing success.

4.0 CONCLUSION

Selling and promotion of airline services is not the something as marketing of airline services. Indeed, selling is only one of several functions that marketers perform. Marketing include all activities of the airline associated with the flow of services from production to consumption.

Marketing is only complete when ideas, goods and services satisfy the needs of the individual and organisational objectives. Therefore every focus must be on the customers' needs and wants, if organizational goals/objectives must be achieved.

5.0 SUMMARY

In this unit, you have learnt the definition of marketing, discussed the marketing as a concept and the variables that constitute or make up the marketing mix.

6.0 TUTOR MARKED ASSIGNMENT

- (a) Define marketing mix.
- (b) Discuss the variables of marketing mix.

7.0 REFERENCES AND FURTHER READINGS

Nwangbu, B. (2002), "The Economics of International Aviation." *Ambix Printers Nigeria, Imo State.*

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UNIT 8 AIRLINE MARKET ANALYSIS

Table of Contents

- 1.0 INTRODUCTION
- 2.0 OBJECTIVE
- 3.0 MAIN CONTENTS
 - 3.1 Marketing Strategy
 - 3.2 Examples of Marketing Strategy
 - 3.2.1 Advertisement
 - 3.2.2 Staff Attitude to Customers
 - 3.2.3 Sales Calls
 - 3.2.4 Refund of Unused Tickets
 - 3.2.5 Give-aways
 - 3.2.6 Discounts
 - 3.2.7 Sales Promotion
 - 3.3 The Product (Service) or Airline Production
 - 3.3.1 Product or Services sold to the Consumers
 - 3.4 Sources of Airline Market
 - 3.4.1 Individuals
 - 3.4.2 Commercial Accounts
 - 3.4.3 Religious Organisations
 - 3.4.4 Social Clubs and Associations
 - 3.4.5 Packaged Tours
 - 3.4.6 National Sports Commission
 - 3.4.7 Sales Leads and Attack
 - 3.4.8 Colleges and Universities
- 3.0 SUMMARY
- 5.0 CONCLUSION
- 6.0 TUTOR MARKED ASSIGNMENT
- 7.0 REFERENCES AND FURTHER READINGS

1.0 INTRODUCTION

In the last unit, we introduced learners to the meaning and concept of marketing. In this unit, we are going further to examine some marketing strategies designed to guide airline managers in getting services to customers and how to encourage customers to buy these services. We shall also identify the places where airlines search for customers and the products or services sold in these markets.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- State and explain the marketing strategies that link customers with the airline services and corporate goals and objectives.
- Identify the places where airlines can search for market.
- Describe the products or services that the airlines sell.

3.0 MAIN CONTENT

3.1 Marketing Strategy

Philip Kotler defines marketing strategy as “a managerial process of analysing marketing opportunities and choosing marketing proposals, programmes and control that create and support viable business which serves the company purposes and objectives”. The need for marketing strategy arises because managers need to develop a set of decisions and actions which lead to development of an effective marketing strategy or strategies to help achieve corporate goals and objectives.

The marketing place and the economic environment are continually changing. Customers’ needs and wants change everyday, competitors are increasing and their mode of satisfying customers has consistently improved. Technological innovations had greatly improved. As a result of these, marketers need to develop strategies aimed at achieving the objective of the organisation. Whatever kind of business an organisation undertakes, it has to evolve and include in its plan certain strategies that will lead to objective accomplishment. A firm’s competitive marketing strategy would have to take account of the following factors:

1. The company’s competitive size and position in the market;
2. The company’s resources, objectives and policies;
3. The competitors marketing strategies;
4. The target market’s buyer behaviour; and
5. The character of the economy.

These factors invariably dictate the kind of strategy to be formulated in a given situation. However, marketing strategies revolves around four important decision areas, which are crucial and these are:

- (i) Defining the business;
- (ii) Determining the mission;
- (iii) Formulation of functional strategies; and
- (iv) Implementation.

3.2 Examples of Marketing Strategy

Below are some of the strategies that may be pursued to win business for an airline through its agent(s).

3.2.1 Advertisement

Aggressive advertisement has played a prominent role in various business circles today. Through advertisement, your product will get to the market and face competition with equivalent substitutes. The market is therefore the field for your product to prove its qualities and acceptability to consumers.

In our circumstance, service is the product. The airlines you are representing fly, in some cases, the same type of competitors' equipment (aircraft). For example, KLM the Royal Dutch Airline flies some series of McDonnell Douglas DC10 aircraft and Nigeria Airways may be flying the same series in its fleet. These aircraft are made by the same American manufacturers. They have the same design and speed range. Mechanically, the difference could be in the engines. May be KLM has chosen Rolls Royce engines as against Nigeria Airways Pratt and Whitney engines.

Another difference could be the configuration (arrangement) of seats in the aircraft. While Airline 'A' maintains a three class of First, Business and Economy, Airline 'B' may opt for two classes. Thus, you see one type of aircraft having lesser number of seats than another type of the same model and series.

Where major differences in the services rendered exist, cut-throat competition among the airlines arises. You are competing with other agents in the sale of services of airlines. You have to create awareness for your Agency in, say, the dailies, business magazines, journals, radio and television.

3.2.2 Staff Attitude to Customers

Be ever ready to solve customers' reservation problems. Confirmation of reservation is a serious problem facing passengers these days as flights on all the airlines are provisionally fully booked despite the general outcry of the biting effects of economic recession/meltdown and the resultant inflation. A passenger that feels well treated by staff of an agency will return his patronage in future.

3.2.3 Sales Calls

A door to door campaign for patronage of the Agency services has shown better results. It gives opportunity for the salesman to discover new grounds.

An indisposed business executive or private businessman may make enquiries about sending an under-aged child, say a 13 year old girl, to her parents in London without being accompanied on the flight by an adult. If the salesman is a seasoned one, he would know that it is a product of the airlines termed "unaccompanied minor". An arrangement is made to deliver the child at the doorstep of her parents in London. As

age is a determining factor in fares payable to the airlines, her age bracket attracts half fare and the agency is entitled to 9 percent commission as well.

Cargo can as well be *air freighted* through the agent. In the course of combing the streets to canvass for passengers, an intending exporter of life animals or expert items like fruits hides and skin etc. may be by sheer coincidence meet the agency salesman who will secure the business for his company if his bargaining power is effective.

3.2.4 Refund of Unused Tickets

For one reason or the other, a passenger may return a completely or partly unused ticket for refund. Unreasonable period of delay before refund is made could constitute a potential source of frustration for the passenger and disaffection for the agency. Two weeks may be unreasonable time for a passenger to claim his money for a service not utilised.

Well-managed airlines and travel agencies make payments to their customers in respect of unused tickets on weekly basis. This policy will enable them hold on to what they have as regards retention of their share of the market. Refund is therefore a very sensitive aspect of both airlines and travel agency business.

3.2.5 Give-aways

This is a marketing tool for almost all the airlines in the world. Gifts in varied forms like cabin bags, fountain and ball pens, playing cards, ash-trays, cuff-links, wrist watches, wallets and purses, tee-shirts, ties, sports caps, etc. with logos and names of the airlines inscribed on them. Some passengers may have vowed to fly particular airlines for their generosity in distribution of expensive give-way items.

Major distribution channels of these give-away are the travel agencies who in turn distribute, according to merit, to their customers who are indirectly customers of the airlines. Steady flyers of first class tickets or business class may be the yardstick of measuring the merit.

3.2.6 Discounts

It has become a common phenomenon that agents these days offer a discount of between 3 and 4 percent of the accruing 9 percent commission as an inducement for passengers to give them their patronage.

The practice has come to stay because there is no airline or IATA regulation forbidding such practice, just as deregulation of fares by the airlines has become an acceptable norm.

3.2.7 Sales Promotion

It is an exercise by which interest of big customers are promoted. For example, a big brewery like International Breweries based at Ilesha, Oyo State of Nigeria whose popular brand of larger beer is 'Trophy'. The company has a football team playing in the premier division whose appellation is "Trophy Boys".

The team played in the finals of 1989 F.A. Challenge Cup Championships. To further promote the business of a travel agency with the brewery that has a fairly large population of expatriates whose travel business is handled by that agency, its management could offer to sponsor the team by providing it with playing outfits like jerseys and shorts. A party can as well be sponsored by the agency to celebrate the team's victory if it emerged champion. Name and logo of the agency, by agreement, would of course be written in front of the jerseys.

While promoting the interest of the customers, the agency was also advertising itself. International Brewers would at least for sometime stay with the agency for travel business of its expatriate and local staff.

3.3 The Product (Service) or Airline Production

An airline product or service is a combination of tangible and intangible elements and services that the airline offers to the travelling public and cargo shippers. Some of the underlying elements are:

- Destination
- Schedule
- Type of Service
- Type of Aircraft
- Fares and Rates
- Airports Served
- Ground Services
- In-flight Service
- Timeliness
- Safety
- Image.

3.3.1 Product or Services sold to the Consumers

What product does an airline sell to its customers? The type of service offered by an airline to its customers could be one or a combination of the following:

- A service
- Flights
- Sales
- Destinations
- Tickets
- Airway bills

- Transportation.

3.4 Sources of Airline Market

Management of airline companies and travel agents carry out aggressive marketing of their products or services in strategic locations. These locations become sources or accounts which airlines maintain with care and attention. The market sources are discussed below.

3.4.1 Individuals

Airlines and/or travel agents approach individual for patronage by offering all kinds of incentives such as discounts, free shuttle, seat comfort etc.

A satisfied individual will always use a preferred airline.

3.4.2 Commercial Accounts

A good number of companies with large expatriates' staff are targets of Travel Agents and Airlines. Companies engaged in manufacturing like UNILEVER Plc., P.Z., Oil exploration and marketing; hotels; banking and insurance. Engineering etc. are good examples of where prospective airline customers can be.

3.4.3 Religious Organisations

These include the Muslim and Christian Pilgrims Boards (state and federal); Islamic Centres, Seminaries; Mosques and churches etc. for their travel needs.

3.4.4 Social Clubs and Associations

Clubs like the Rotary and Inner wheel, Lion and Lioness, etc. and professional bodies like the Institute of Chartered Accountants of Nigeria (ICAN), Association of National Accountants of Nigeria (ANAN), the Nigerian Bar Association (NBA), the National Union of Teachers (NUT) etc. often send their members to attend conferences locally and internationally.

3.4.5 Packaged Tours

Places to look for are travel agents and tour operators.

3.4.6 National Sports Commission

Events like the Federation of International Football Associations (FIFA) organised soccer competitions, the International Olympic Committee (IOC) organised

competitions and Commonwealth Games make the National Sports Commission (NSC) a potential place for airline customers.

3.4.7 Sales Leads and Attack

This can be done via the media modes such as radio, television and prints.

3.4.8 Colleges and Universities

Airlines and travel agents staff visit the universities in search of customers travelling for seminars, international conferences, research, courses, etc.

4.0 CONCLUSION

Marketing strategies are designed to guide managers in getting products or services to customers and in encouraging customers to buy. Marketing strategies are closely linked to product or service strategies; they must be interrelated and mutually supportive.

The sources of airline market are well known and airline managers as well as travel agents must strive to get at customers wherever they are to remain competitive.

5.0 SUMMARY

In this unit, you have learnt about marketing strategies as applicable to airline services. We also identified the places or locations where airlines can search for market and discussed the products or services sold by the airlines.

6.0 TUTOR MARKED ASSESSMENT

- (a) Define marketing strategy.
- (b) Identify the places where airlines can search for market.

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MODULES 3

Unit 1	Airline Corporate Strategies and policies
Unit 2	Cost Characteristics of Air transportation
Unit 3	The Airline yield
Unit 4	Performance Analysis

UNIT 9: AIRLINE CORPORATE STRATEGIES AND POLICIES

CONTENTS

1.0	INTRODUCTION
2.0	OBJECTIVE
3.0	MAIN CONTENTS
3.1.	Definition of Strategy & Policies
3.2.	Purpose of Strategy
3.2.1	Fleet mix
3.2.2	Route structure
3.2.2.1	Market concentration
3.2.2.2	Market structure
3.2.2.3	Route length or Distance
3.2.2.4	Long Haul or Non-stop flight
3.2.3	Fuel Efficiency
3.2.3.1	Comparative use of aviation fuel
3.2.3.2	Methods of Addressing fuel consumption
3.2.4.	Labour productivity
3.2.5.	Corporate culture
3.2.6.	Strategic market policy.
4.0	SUMMARY
5.0	CONCLUSION
6.0	TUTOR MARKED ASSIGNMENT
7.0	REFERENCES AND FURTHER READINGS

1.0. INTRODUCTION

In this unit, we shall focus on strategies and policies in major facets of the airline business that impact on profitability and corporate culture. Areas to be discussed here

include decision relating to Fleet mix, Route Structure, Labour Productivity, Fuel management and Marketing.

2.0. OBJECTIVES

After going through this unit, you should be able to:

- Explain the nature and purpose of strategies and policies
- Identity the major characteristics of an airline route structure.
- Contribute to management strategic fleet decisions.
- Appreciate the motive of achieving fuel efficiency.
- Appreciate the importance of industrial harmony in commercial airline business.

3.0. MAIN CONTENT

3.1. DEFINITION OF STRATEGY AND POLICIES.

Strategy refers to the determination of the purpose (or mission) and the basic long-term objective of an enterprise, and the adoption of courses of action and allocation of resources necessary to achieve these aims. Policies on the hand are general statements or undertakings than guide managers` thinking in decision making. They ensure that decisions fall within certain boundaries. They usually do not require action but are intended to guide managers in their commitment to the decision they ultimately make.

The essence of policy is discretion. Strategy, on the other hand, concerns the direction in which human and material resources will be applied in order to increase the chance of achieving selected objectives.

3.2. PURPOSE OF STRATEGY.

In the airline business, strategies are aimed at improving profitability and good corporate culture. They unify and give direction to plans in the following areas:

1. Flee Mix
2. Route Structure
3. Labour Productivity
4. Fuel Management
5. Marketing.

3.2.1 FLEET MIX

All airlines pursue corporate strategies by evolving policies that improve the size and composition of its fleet. There are short-term, medium term and long-term strategic fleet decisions. Decisions as to how many aircrafts, the types of aircraft and their sizes will have to be taken in the short-term. Elimination of old and small aircrafts in its fleet and the maintenance of aircraft equipments are all major part of short-term decisions. The airline plans for competent personnel, and provides for updated

overhaul facilities, taking account of maintenance needs and planning for maintenance programmes to schedule requirements.

In deciding the model of aircraft to *purchase*, management must undertake a survey to select a *manufacturer* that presents realistic specifications such as:

- A realistic *price*
- A schedule of *advance* payments and *deposits*
- *Penalty* data
- *Operating* cost
- A complete *evaluation* exercise
- The *seating density* of the aircraft.

The long-term problems which require the attention of management in this aircraft purchase decision are:

- The control and regulation of *noise pollution*
- *Fuel* efficiency for the airline's fleet of aircrafts
- The aircraft mode *overhead* costs.

3.2.2. ROUTE STRUCTURE

Aircraft fly along designated route in the air. The corporate strategies of any particular airline must be formulated around route structure. Policies must take into account a number of coordinated service links in the airline operation programmes. Areas of interest are:

- a) Market concentration
- b) Market structure
- c) Route length or distance
- d) Long Haul or non-stop flight.

3.2.2.1. MARKET CONCENTRATION

The number of competing airline in a route is an indication of the potential size of the market. This level of concentration of airlines or competition in a particular city-pair market is determined by its total revenue passenger miles. In Nigeria, for instance, there is a high concentration of commuting airlines in the following routes.

1. Lagos -Port Harcourt
2. Lagos -Abuja
3. Lagos -Kano, and
4. Lagos – Kaduna.

It follows therefore that the bigger the market, the greater the number of airlines, or the concentration of sellers of airline services. Policies must be geared towards achieving total combined frequencies of flights and the deployment of the right aircrafts mix that will maximize seating capacity and therefore revenue

3.2.2.2. MARKET STRUCTURE

The airline industry has something close to Oligopolistic market structure that is characterized with substantial economies of scale, mutual dependence, price rigidity and non-price competition. Few airlines of various sizes characterize the market. This may explain the reason why of the over 150 registered airlines in Nigeria, not more than twenty-one are active at any point in time. As to varying sizes, it is also typified by the industry in Nigeria. There are those airlines with between 10 and 20 aircrafts, others between 5 and 10 and others between one and five aircrafts. The scale of operation and route network of an airline is usually a function of its size.

3.2.2.3. THE FLY ROUTE LENGTH OR DISTANCE

The air length of the airline's flight has a great impact in the cost structure in the sense that the longer the distance the lower is the cost. This is because airline costs are calculated by passenger miles flown.

The distance between two cities and the number of passengers moving between them are major factors, which influence the number of airlines providing service on the route. However, if the number of passenger miles on any two routes is equal, the route with shorter distance will have more aircraft serving it than the other. The reason is simply because, the distance factor is nearer.

$$\text{Performance} = \text{No. of passengers} \times \text{Miles flown.}$$

It follows from the above that where the performance on the two routes are the same, but one route has a shorter distance, then it means that the number of passenger on the other has to be more for the product of performance to be equal. This explains why more airlines, will tend to provide service on the shorter route distance.

WORKED EXAMPLE

An airline, with the same Route performance, flies between two City-pairs (Route A and Route B).

1. Lagos – Port Harcourt i.e. Route A
2. Lagos – Kano i.e. Route B.

The distance of Route A = 304 miles and Route = 480 miles. If both routes record the same performance, i.e. passenger miles, hypothetically taken as 2,000,000, calculate the number of passengers on each route and the implication on airline costs.

Answer:

Route performance = No. of passenger x Miles flown.

Route A: 2, 000,000 per miles = 304 miles x passengers carried on Route A.

$$2, 000, 000 = 304 \times P$$

$$2, 000,000 = 304 P$$

$$\therefore P = \frac{2,000,000}{304} = \underline{6,578.9 \text{ pax}}$$

$$\text{Route B: } 2, 000, 000 = 480 \times P$$

$$2, 000, 000 = 480p$$

$$\therefore P = \frac{2, 000, 000}{480} = 4, 166.6 \text{ pax}$$

In the above situation, Route A has 6, 578 passengers as against 4, 166 passengers on Route B. Since airline costs are calculated by passenger miles flown, there is economic sense to fly the route with shorter distance. Distance factor in this case favour Route A given that performance or passenger miles on both route are equivalent.

3.2.2.4. LONG HAUL OR NON-STOP FLIGHT

Airlines tend to greatly favour or have preference for long haul, non-stop flights. The following reasons make this so:-

(a) **Attractiveness to the customer.**

When compared to other modes of transportation like road, rail and water, air transport is more attractive the traveler or purchase of air service especially if the distance is long. It is also more profitable to travel by air over long distance than to do so using other modes.

(b) **Average passenger trip length:**

The distance between extreme terminal points of an airline route is called the *stage length*. The distance a passenger makes on the route before his/her disembarkation is the *passenger trip length*. When a route has intermediate stops, the average distance travelled on that route by passengers before disembarkation is called *average passenger trip length*. If the average disembarkation point on this particular route constitutes a much smaller distance compared to the total route length, the airline comes empty with seats for most of the route. This creates production but not sufficient sales or performance. It is for this reason that airlines are desirous for long haul, non-stop flights. By this, airlines are able to achieve that *average passenger trip length* that equals to the *route length*.

(c) **Operational Costs.**

Another cogent reason that airlines desire long haul and non-stop flight stems from operational costs. For instance:

- (i) The costs of take-off and landing are the same regardless of trip distance.
- (ii) The longer the trip, the longer the cruise. Aircrafts are more fuel efficient at cruise altitudes than at take-off and landing. Thus the longer the cruise, the more fuel savings from fuel – efficient cruise operations.
- (iii) Also the cost of producing an airline ticket is the same regardless of trip length. In this respect, the longer trip length results from greater sales than short trips. Thus the cost per mile on cost of ticket production is less on longer trips than shorter trip length. The same is true for all fixed costs.

3.2.3. **FUEL EFFICIENCY.**

Fuel costs are a significant component of the direct operating expenses of airline operations. Indeed it contributes over 50% of direct operating expense. When we consider fuel costs as a percentage of both direct and indirect airlines operating cost we are likely to come up with a figure of about 30%. This is why fuel usage and management is a major decision policy in fleet schedule and operation.

3.2.3.1. **COMPARATIVE USE OF AVIATION FUEL**

This is the policy of using fuel in relation to the dictate of competition and in relation to the extent to which other airlines use fuel. For any airline to survive, it must adopt the system of comparative fuel use or fuel efficiency. The individual airline has no control over the price at which aviation fuel is sold. Hence it has to use aviation fuel according to comparative price and reflection of comparative use.

Comparative use of aviation fuel is synonymous with fuel efficiency as the airline must institute programmes and policies to address sourcing decisions. To start with, reputable suppliers of aviation fuel must be identified with a view to concluding fuel purchase contracts. This will enable the airline gain cost advantages in purchase contracts which will not only allow it to withstand competition but also to complete planned route schedule. However, where price-regulated sources of aviation fuel exist, it is always better for the airline to have access to them.

3.2.3.2. **METHODS OF ADDRESSING FUEL CONSUMPTION**

Key areas requiring attention in order to influence aviation fuel efficiency or comparative use exist. Hence adequate policies and programme should guide management decisions in the following areas.

- i. Aircraft Type
- ii. Aircraft Weight and
- iii. Flying Conditions

i. **Aircraft type**

The recognized plan is to go for fuel efficient aircrafts preferably medium-range types with fewer engines. The airline pursues further the implementation of this policy by increasing the number of these aircraft types in its fleet.

ii. **Aircraft weight.**

A policy of weight reduction should be pursued if fuel efficiency in the fleet mix is to be achieved. Certain procedural changes or remodeling of some aircrafts could affect weight reduction. The achievement of a desired seating density which is comparable with efficient fuel use is the principal aim of a weight reduction policy.

iii. **Flying condition.**

An airline wishing to survive competition will institute plans to improve flying conditions for its aircraft crew and pilots. Improving pilot procedures, for example, could produce large amount of savings. To achieve this objective, it is proper to initiate conservation-oriented flight training for pilots and aircraft crew. Cost – controlled flight programmes can also be put in place by adopting a Computerized Flight Planning (CEP).

3.2.4. **LABOUR PRODUCTIVITY**

Every airline strives to increase the productivity of its workforce by putting an appropriate corporate strategy in place. The major areas in which strategies should be adopted are:-

- a. Head – count control
- b. Restrictive work rules of the airlines unions

a. **Head – count control**

Every airline tends to watch the rate of growth of its employees because of its impact on improving productivity. Growth in employee level is often directly related to the Available Seat Mile (ASM) growth. Therefore the airline must strive to optimize on ASM/employee growth level. The measure of average returns on ASM is in

comparison with the level of employee growth in the company. Their ratio should be brought to a manageable level.

b. The airline labour Unions.

An effective airline management team must include in its productivity strategy, ways of controlling the various unions. Approximately 60% of any airline's work force is unionized. For instance, workers in the store, maintenance, flight instruction and dispatch belong to the transport workers union (TWU). Pilots are organized under the Allied Pilot Association (ALPA) while the Flight Engineers International Association (FEIA) takes care of Flight Engineers. These unions work towards better compensation and negotiate more favourable work rules for their members. This is why challenges arising from faulty labour contracts must be addressed well in advance.

3.2.5. CORPORATE CULTURE

A culture cannot be precisely defined because the word culture has many meanings and connotations. There are several factors that are both a source of culture and a manifestation of it. We will take British Airway as an example:

<u>Source/means</u>	<u>Example</u>
• Organization Mission	“To be the best and most successful company in the airline industry”
• Corporate aims	“To provide overall superior service and good value for money in every market segment in which we compete”

If we cannot define corporate culture, we at least known what can promote it. It is the development of a reputation for market and top quality customer service. For British Airways or any airline for that matter to realize the above mission statement and corporate aims, it must monitor its performance in the following areas of its culture:-

- i. Offering a *superior service*
- ii. Scheduling flights on time and minimize *flight cancellation*
- iii. Having a higher than *average load factor* of say 80%.
- iv. Concentrate on *fewer cities* with higher market share.
- v. Attaining *improved profitability* relative to other airlines.
- vi. Having *manageable staff* content with high employee moral.

3.2.6. STRATEGIC MARKET POLICY

Strategic market policy should be formulated around critical areas of operations impinging on market share, traffic generation and promotion, airline yield and corporate culture.

Areas of management emphasis should include but not limited to.

- a. Development programmes towards yield improvement
- b. Pricing innovations
- c. Charging economic fares to attract principal business travelers through careful yield management.
- d. Minimize problems of revenue dilution
- e. Introduce fully automated systems.
- f. Make more use of customer database

4.0. CONCLUSION

The above discussion leads to the conclusion that the major purpose of strategies in an airline business is to unify and give direction to plans in the basic areas of its operations. These plans and programmes, if well coordinated would lead to the attainment of the airline corporate objective often, dominated by yield improvement, and the provision of superior service in its segment of operation. Policies formulated by management help to ensure that decision taken fall within certain boundaries

5.0. SUMMARY

In determining how the aims and objectives of an airline may be achieved, policies on appropriate actions in the following areas of operations have to be agreed and implemented.

- i. Fleet mix management
- ii. Route Structure
- iii. Aviation fuel efficiency
- iv. Labour productivity management
- v. Corporate culture and
- vi. Marketing policy.

6.0 TUTOR-MARKED ASSIGNMENT

How would Arik Air Nigeria Ltd. promote its corporate culture? List six ways it can monitor its performance in this regard.

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10: COST CHARACTERISTICS OF AIR TRANSPORT

CONTENTS

- 1.0 INTRODUCTION
- 2.0 OBJECTIVE
- 3.0 MAIN CONTENTS
 - 3.1 Cost Categories
 - 3.1.1 Fixed Costs
 - 3.1.2 Variable Costs
 - 3.1.3 Fixed and Variable Costs
 - 3.2 Measuring profitability
 - 3.2.1 Economic Viability
 - 3.2.2 Break even load factor
 - 3.2.3 Low Traffic Density
 - 3.2.4 Excessive competition
 - 3.2.5 Enhancing profitability
 - 3.2.6 Capacity Cost control
 - 3.2.7 Social Cost of Air transport
- 4.0 SUMMARY
- 5.0 CONCLUSION
- 6.0 TUTOR MARKED ASSIGNMENT
- 7.0 REFERENCES/ FURTHER READINGS

1.0 INTRODUCTION

In this unit, we shall examine the *variable* and *fixed costs* involved in airline operations and the management efforts aimed at controlling these costs in order to maximize revenue and profits. It will also expose the student to the social cost of noise pollution and measures against noise.

2.0 OBJECTIVES

At the end of this study, students should be able to:-

- Identify the main categories of cost of airline operations.
- Appreciate the influence of distance or route length in total operating costs.

- Calculate the breakeven load factor of an aircraft on a two city-pair market.
- State the importance of fleet improvement programmes.
- Identify the measures against noise pollution in and around the airports.

3.0 MAIN CONTENT

3.1 COST CATEGORIES

In strictly economic terms, the cost involved in air transport operations is divided into two main categories. These are:-

1. Fixed Costs.
2. Variable Costs.

It follows that $\text{Total Cost} = \text{Fixed Cost} + \text{Variable Cost}$.

3.1.1 FIXED COSTS

There are costs which the airline must incur irrespective whether its aircrafts fly or not. For purposes of costing the calculation of fixed cost will be based on per annum or per month as compared to variable cost which is based on per aircraft hour. Examples of an airline's *fixed costs* are:-

1. Pilots salaries
2. Salaries of other workers
3. Insurance premium
4. Cost of advertisement
5. Capital depreciation on aircraft fleet
6. Depreciation of flight equipments
7. Ground and indirect maintenance

It is important to note that airlines have no major fixed cost burden. Therefore if flight is not operated, 80% of the production cost of the service can be avoided.

3.1.2 VARIABLE COSTS

Variable costs at times called operational costs are those costs that vary directly with the level of operations. Whereas fixed cost is for long term costing, variable cost is for day-to-day operations since it is based on per aircraft hour. Variable costs are involved only when the aircraft is operating. They therefore depend on the number of hours flown by each aircraft. The greater the number of hours flown the higher the

operating variable costs and the lower the number of hours flown, the lower the operating cost. Major variable cost elements are:

- a) aviation fuel
- b) landing fees
- c) enroute and over flight charges

a. **Aviation Fuel**

The longer the distance, the longer the hour flown, the greater the quantity of aviation fuel consumed. It accounts for over 50% of direct operating expenses of an airline. However, when we consider both direct and indirect operating costs, we are likely to come up with a figure of about 30%.

b. **Landing Fees**

These are costs involved at each take-off and landing of aircrafts. These costs are very important, most especially where distances covered are short because a higher proportion of the aircraft time is spent on taking off and landing.

c. **En-route and Over-flight Charges**

Over-flight charges are paid to States or Governments each time foreign aircrafts over fly a territory whether it lands or not. En-route charges are fees paid when an aircraft flies through a route as it moves from one airport to another. In some countries, local airlines are also charged for en-route flights. Charges are calculated on the basis of:

- a) Type of aircraft
- b) Number of souls on board
- c) The weight of the aircraft.

3.1.3 FIXED AND VARIABLE COSTS

Sometimes it is difficult to categorize costs into fixed or variable as some costs may possess elements of both. Two examples are:

- a) the pilot salary
- b) maintenance and repair cost

a. **Pilot Salary**

Since the pilot's salary is normally calculated on an annual basis, it is regarded as a fixed cost. However if the pilot is given a bonus on the basis of hours flown, *the bonus is a variable cost*. This is because the bonus depends on the operation of the aircraft whereas the pilot salary is paid irrespective of whether the aircraft is operational or not.

b. Repair and Maintenance Costs

This also constitute big items normally considered under variable cost but it must be noted that some maintenance is necessary whether the aircraft flies or not because of the legal requirement of the air worthiness which the regulatory Authorities normally insist must be fulfilled. This aspect of maintenance is fixed.

3.2 MEASURING PROFITABILITY

3.2.1 Economic viability of routes

The economic viability of a route is dependent upon several factors such as:

1. The route length or distance
 2. Route traffic density
 3. Average passengers trip distance or length.
- Airline production costs are based on seat miles and as such, the longer the route distances, the less/lower per unit mile cost.
 - Traffic refers to people or other traffic items such as cargoes and the more the traffic the more viable the route. A disastrous combination to route viability is a long route with poor or low traffic density.
 - The longer the average passenger trip distances on a route, the higher the level of profit. This is more so because the measure of airline performance can be well determined by passenger seat mile.

For an airline to be profitable, viable or successful the factors of route length, traffic density and average passenger trip distance must inter-play. Any two of the three factors must be present for the route to be viable or break-even. However, the degree of viability will be determined by the degree of weakness of the missing factor.

Reversing the factor for viable route, may bring about an unviable condition. The determinants of unprofitable or unviable routes are:

- (a) Low load factor.
- (b) Low traffic density
- (c) Excessive competition on the route.

3.2.2. BREAKEVEN LOAD FACTOR

It is of little use to operate aircrafts to regions where there are no market for such services. In measuring the profitability or non-profitability of operating aircrafts in certain segment, it is important to take what is called the *load factor*.

Load Factor:

The load factor is defined as the proportion of seat or freight capacity actually sold to the maximum capacity offered by the aircraft.

$$\text{Load factor} = \frac{\text{Total Seat sold}}{\text{Total capacity of aircraft}} \times \frac{100}{1}$$

WORKED EXAMPLE

An aircraft B 747 has a total seat capacity of 250 passengers but on a particular trip from Lagos to Kaduna it sold tickets to only 100 passengers who all boarded the flight. (a) Calculate the achieved load factor of the aircraft. (b) If the breakeven load factor of this aircraft is 70% comment on your answer in (a).

Solution:

$$\begin{aligned} \text{(a) Achieved load factor} &= \frac{\text{Total seat sold}}{\text{Total capacity}} \times \frac{100}{1} \\ &= \frac{100}{250} \times \frac{100}{1} = 40\% \end{aligned}$$

- (b) The achieved load factor is lower than the breakeven load factor of 70%. Hence it is not viable to use this type of aircraft on this route. Perhaps a much smaller aircraft will do. The minimum average load that this aircraft must carry to be able to breakeven is: $70 \times \frac{250}{100} = 175$ passengers.

Breakeven Load Factor:

For a service to be profitable, breakeven load factor must be available. The factor is the percentage of that particular aircraft operating the service that must be filled with passengers for the operating cost of the service to be covered.

Thus a load factor below the break-even point leads to a loss situation.

3.2.3. LOW TRAFFIC DENSITY

If the population at any two city-pair market or along a route with intermediate stops do not patronize air travel or is too small to provide sufficient traffic, a situation of poor performance will result.

3.2.4. EXCESSIVE COMPETITION

Excessive competitive on a profitable route can lead to losses. Similarly, a relatively viable route can easily become unviable by excessive competition. This is caution for Lagos – Abuja route. Competition eats up profit and excessive competition thins out any probable profitability. Thus, the competition on a route must not exceed the traffic which that rout can support.

3.2.5 ENHANCING PROFITABILITY

To enhance the profitability of airline operations management will need to:-

1. Have a thorough knowledge and grip of economic regulation of the regulatory Agency as they affect mergers, competition, rates, equipment and routes.
2. Have a thorough understanding of restrictive economic regulations and their impact on the airline and the industry.
3. Recognition of the business cycle of the industry and national economy. This will guide the necessary strategies to improve sales when there is a lull or down turn in the economy.

To ensure continued success, management must ask itself the following three basic questions on actions to be taken and strategies or policies to be adopted.

- Will it improve or guarantee solving the problem?
- Will it improve or guarantee financial stability?
- Will it improve or guarantee profitability?

Competitive Advantage

A competition advantage in management efficiency can be achieved if the management of a particular airline does the following:-

- a. Can determine or measure its revenue generation costs.
- b. Be futuristic and develop its plans accordingly.
- c. Periodically determine its operational and financial efficiency.
- d. Measure its performance and profitability
- e. Maintain performance and evaluation review process.
- f. Imbibe accountability. Thus management must be prudent, economic, efficient and draw an established decision making process for sound decisions.

3.2.6 CAPACITY COST CONTROL

Fleet Improvement Programmes

The capacity cost control of an airline involves the formulation of policies aimed at the approval of the implementation of fleet improvement programmes. The airline management will certainly make decisions on the age, size and composition of its fleet in order to boost profit, yield and corporate culture of the airline. The following actions by management can bring about a rewarding fleet improvement.

- a. The *retirement of less-efficient aircrafts* and the purchase of new versions of aircrafts to reinforce the fleet mix.
- b. The appreciate *replacement* of smaller types of aircraft in the company's fleet with new aircraft types which meet the requirement of the current route structure.
- c. Generating *external funding* to finance additional aircrafts purchase.
- d. The *review of previous aircraft orders* to meet with current operational requirement and efficient operation.
- e. Pursuing *increases in seating density* to improve customer service.
- f. Alteration in unsatisfactory *route structure* and imitate more appropriate route assignments.

3.2.7 SOCIAL COST OF AIR TRANSPORT

Aircraft noise is a major social problem which all airlines must address. As with other social costs, the problem is the one, which include social costs of noise.

The take-off and landing of aircraft emits loud noise in and around the airports. For people living close to airports, this noise pollution can be unbearable.

In theory, it would be possible to give everyone a legal right to peace and tranquility, so that they could insist on a payment from whoever wishes to disturb them. In practice, however, social costs tend to be expressed through *political pressure*.

Measures against noise include:-

- i. Careful *routing* of incoming and outgoing aircraft, *away from residential areas*.
- ii. *Sound proofing* in areas of existing airports.
- iii. *Restriction* in the number of aircrafts using airports at night.
- iv. *Night flight concessions* for airline using quieter aircraft.
- v. *Location of new airports*
- vi. The *development of jet planes* with shorter take-offs to augment the capacity of existing airports.

4.0 CONCLUSION

In this unit, we have been able to expose the student to the main categories of costs involved in an airline operation as well as the strategies and policies to be adopted to ensure the airline's continued success in a highly competitive aviation market.

5.0 SUMMARY

As it obtains in all profit oriented businesses, the costs of an airline operation can be grouped into fixed and variable components or combination of both. Examples of *fixed* costs are:-

- ❑ Salaries of workers
- ❑ Insurance premium
- ❑ Capital depreciation of airline fleet of aircrafts
- ❑ Cost of advertisement etc

Fixed costs are incurred whether or not an operational airline company flies its aircrafts. Variable costs, on the other hand, are costs that vary directly with the level of operations. They therefore depend on the number of hours flown by each aircraft.

Examples of *variable* costs are:-

- ❑ Cost of Aviation fuel.
- ❑ Landing and take-off fees.
- ❑ Enroute and over flight charges.

Examples cost element that can have both *fixed* and *variable* component are:-

- ❑ Pilot Salary - fixed
Pilot bonuses - Variable.
- ❑ Repairs and maintenance.

The economic viability of any airline route depends on the following factors.

1. The route length or distance
2. Route traffic density
3. Average passenger trip distance or length.

Finally it is important that a *breakeven load factor* is calculated for all the airline routes in order to ensure the profitability of aircrafts in the fleet. Fleet Improvement Programmes must also be implemented by the company.

6.0 TUTOR MARKED ASSIGNMENT

- a. What do you understand by the term 'fleet mix'?

b. Discuss the importance of a Fleet Improvement Programme to an airline company.

7.0. **REFERENCES/LIST FOR FURTHER READING.**

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UNITS 11: THE AIRLINE YIELD

CONTENTS

1.0 INTRODUCTION

2.0 OBJECTIVE

3.0 MAIN CONTENTS

- 3.1. Meaning of Airline yield
- 3.1.1. Route structure
- 3.1.2. Traffic growth
- 3.1.3. Profitability.
- 3.2. Yield Improvement Methods
- 3.3. Yield Determination
- 3.4. Product Distribution
- 3.5. The Airline share Gap.

4.0 CONCLUSION

5.0 SUMMARY

6.0 TUTOR MARKED ASSIGNMENT

7.0 REFERENCES/FURTHER READING

1.0. INTRODUCTION

The principal objectives of any business concern, including an airline company, is to maximize profits whilst ensuring efficient service delivery that guarantees comfort, safety and security of passengers and cargoes in the special case of airline service.

The ability to generate *revenue* is crucial to the enhancement of profit. So also is a clear understanding of costs control and costs reduction techniques which airline managers must continually learn and apply.

In the airline business, revenue is expressed per passenger mile and the term Revenue Passenger Mile (RPM) is used to express the revenue an airline generates when it carries a passenger over a distance. The ability of an airline to maximize revenue per passenger mile determines its survival rating. The Airline Yield recognizes that while great emphasis may be placed on increasing the revenue base of the airline, no less attention must be placed on Costs Control and Costs Reduction techniques. Managers, in the airline business as well as students, must learn the basic sources that can improve yield in carrying out the business of air transportation.

For efficient management of revenue to take place in an airline, a clear and proper control of both its generation, allocation and planning is essential. In this unit, ways of

managing revenue development plans with a view to achieving targeted yield will be discussed.

2.0. OBJECTIVES

At the end of the unit, you should be able to:

- Explain the meaning of Revenue Passenger Mile (RPM)
- Understand some principal sources of improving Airline Yield
- Appreciate the use of Computer Reservation System (CRS) and Internet Based System in the distribution of airlines services.
- Explain what an Airline Share Gap is.

3.0. MAIN CONTENT.

3.1. MEANING OF AIRLINE YIELD

Yield as it relates to the airline business refers to the ability of the airline to *generate revenue* that will enhance *profit margins* per Revenue Passenger Mile (RPM). This means that there must be conscious efforts at reducing cost of operations on the part of management as revenue rises. This will ensure that profit margins are enhanced.

In order to improve on its yield therefore, an airline must focus on some principal areas of its operations such as:

- Route Structure
- Traffic Growth
- Profitability

3.1.1. ROUTE STRUCTURE

There should be a regular review of route structure forecasts. Such forecasts could be based on the inclusion of more flexible medium – range aircrafts and the enlargement of these ranges of aircraft types in the fleet. An appropriate route structure should take into consideration the following:

- 7.1 Modern engine technology for the aircrafts in the fleet,
- 7.2 Appropriate assignments of aircrafts in the fleet,

- 7.3 Average length of the airline's flight,
- 7.4 A more coordinated link system,
- 7.5 Avoidance of complicated scheduling of flight crews and aircraft
- 7.6 More efficient utilization of ground crews and ground facilities.

3.1.2. **TRAFFIC GROWTH**

An airline should be able forecast the future growth patterns of traffic revealing traffic size and composition. This may require an airline acquiring additional fleet of aircraft in order to attain projected revenue and profit

3.1.3. **PROFITABILITY**

It is essential that forecast level of profitability must ensure that the airline maintains stable growth and improved Revenue per Mile (RPM).

3.2. **YIELD IMPROVEMENT METHODS.**

So far we have discussed the sources of the airline operations that can improve yield. Student of airline management must understand the methods for yield improved improvement which can be discussed under the following headings:

1. Reduction in capital expenditure,
2. Identification of external sources of finance,
3. Creation of new sources of capital, and
4. Improvement on profitability.

(a) **Reduction in capital Expenditure:**

Conscious effort should be geared towards purchasing only new aircrafts that will add value to the fleet mix. Hence a detailed finance estimates for *projected fleet plan* must be a major periodic exercise. Similarly estimated capital investment in ground facilities must guide any successful airline operations.

(b) **Identification of external sources of capital.**

An airline with good fundamentals in terms of high revenue generation, improved profitability, adequate fleet mix of aircrafts, good management staff, fuel-efficient aircrafts, will always find it easy to source capital from the Capital Market, International Finance Agencies such as the World Bank, the African Development Bank, the International Finance Corporation (IFC) and a host of others.

(c) **Creation of new sources of Capital:**

The airline's require debt level should be determined and consequently the airline debt capacity. This debt capacity is the qualification of the company's average operating profit margin to support the necessary borrowings. It is when an airline has

excess debt capacity that creation of new sources of capital can be undertaken. Also identification of cheaper sources of capacity can also result in the drive for new sources.

(d) Improvement on profitability:

An effective management team must focus on all variables that impinge on profitability some of which are:

- (i) Fuel efficiency or comparative fuel use
- (ii) Fares determine by competitive forces, and sometime by International Agreements.
- (iii) Aircraft fleet mix determined by cost and fare policies.
- (iv) Maximizing market advantages of volume and increased frequency.
- (v) Reducing overhead costs.
- (vi) Labour cost control.
- (vii) Increase in revenue per passenger miles.
- (viii) Do away with inefficient costing system.

3.3. YIELD DETERMINATION

The determination of yield is rooted on airline estimated total revenue and on stable growth and improved Revenue Per Mile (RPM). For yield to be positive an airline must achieve a high breakeven level as a result of attaining a higher than average *load factor* in its major operations.

In measuring the profitability or non-profitability, as well as the yield of operating aircrafts in certain segments, it is important to take cognizance of the *LOAD FACTOR*. *The load factor is defined as the proportion of seats or freight capacity actually sold to the maximum capacity offered by the aircraft.*

E.g. Total capacity of aircraft	=	300 passengers
Total seat sold	=	150 seats / passenger
Achieved load factor	=	150/300 =50%

For calculating costs of operation, there will be a minimum average load that an aircraft must carry to be able to breakeven. Each aircraft in a pool must bear part of the total *fixed cost* as well as *operation expenses*.

Costs of operating an aircraft are related to hours flown by the aircraft and on the other hand, the revenue handing capacity of the aircraft will depend on the distance it can cover. Therefore, the faster the aircraft and the more kilometers flown, the greater is the revenue yielding capacity.

The utilization rate of aircraft: How often an aircraft is utilized is very important and hence the emphasis placed on increase in the aircraft cruising speed. The more work

the aircraft does, the more it will be possible to spread the cost of operation over time and geographical space.

3.4. PRODUCT DISTRIBUTION

The drive for revenue growth and improved yield requires that all airlines embrace innovations in production distribution.

The term product distribution refers to the sales and marketing of air transport services. It encompasses the development of information on the market requirement of service, the current and future strategies of other competing airlines.

Computer Reservation System (CRS): With the induction of Computer Reservation system, airline gained a new and valuable tool for their product distribution. CRS provide travel agents, as intermediaries in the product claim, with up-to-date information on:

- Airline flight schedule
- Fares
- Seat availability range of travel and leisure service.
- Making reservation and issuing ticket
- Non-stop flight on dense market route
- Interconnected service types for efficient product coverage

Internet Based System: In recent years, airlines' heavy reliance on traditional travel agents outlets through CRSs has gradually diminished as the internet has led to alternative outlet, which is more cost-effective for the carriers.

There is code of conduct and regulations for CRS activities and the use of *internet based system* in booking reservation. Countries, through their regulation bodies, should ensure the need that the internet based system provide consumers with comprehensive and non-deceptive information about airlines.

Although it is not yet clear whether new regulations covering airline product distribution through the internet should be adopted, States have been actively examining this issue under the existing CRS rules/regulation, consumer protection laws and competition laws.

3.5 THE AIRLINE SHARE GAP

The definition of the *airline share gap* is determined by two variables thus:

- (i) RPM Market share which represent the airline total revenue on per-passenger basis over a determined duration and
- (ii) The ASM market share which is the amount derivable from engaged capacity of available seat mile over duration of the airline's schedule activity. This is commonly reflected in the airline's share of seating capacity.

The difference between (i) and (ii) above represent an airline share gap.

The Available Seat Mile (ASM) market share is commonly reflected in the airline's share of seating capacity from scheduled flights.

The airline Revenue Per Mile (RPM) market share forms the basis for growth measurement since it is achieved as a result of consistent improvements on revenue from operation. The undertaken of profitability forecast must be based on determined stability in RPM growth and improvement

4.0 CONCLUSION

Airline yield relates to the generation of a large amount of revenue with considerable operating margins per revenue passenger mile. To improve yield airlines must address their *route structure*, *traffic growth* and *profitability*. In ensuring growth in revenue and therefore yield, airline must embrace new and valuable tools, like the *Computer Reservation System* and the *Internet based system*. Indeed, for an airline to record a positive share gap, it must maintain a positive balance its share of traffic and seating capacity.

5.0. SUMMARY

In this unit we have learnt the meaning of Airline Yield and the sources of improving it.. We have also learnt about yield improvement methods, yield determination and product distribution. A brief introduction of what constitutes an airline share gap forms the concluding part of this unit.

6.0 TUTOR MARKED ASSIGNMENT

List and discuss the four main methods of Yield Improvement.

7.0. REFERENCES/LIST FOR FURTHER READING.

Havey, G. (2008), "Management in the Airline Industry." *Routledge*.

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UNIT 12: PERFORMANCE ANALYSIS

CONTENTS

1.0 INTRODUCTION

2.0 OBJECTIVE

3.0 MAIN CONTENTS

3.1 Basis of performance Analysis

3.1.1 Aircraft interior arrangement

3.1.2 Passenger/Cargo Equipment Specificities

3.1.3 Technical Standard

3.1.4 Mission profile

3.1.5 Economic issues

3.1.5.1 Operating costs

3.1.5.2 Breakdown needs

3.1.5.3 Liquidity

3.1.5.4 Revenue development plans

3.1.5.5 Conventional investment criteria

3.1.5.6 Performance criteria to be approved by both airline and manufacturer.

4.0 CONCLUSION

5.0 SUMMARY

6.0 TUTOR MARKED ASSIGNMENT

7.0 REFERENCES/FURTHER READING

1.0 INTRODUCTION

In this unit, we shall focus on the assessment of the performance level of each aircraft in the fleet and subsequently of the total airline business. The student should be familiar with the indices to look for in assessing the viability or otherwise of an airline company.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- Explain the elements that form the basis of performance analysis.
- Appreciate the importance of the major areas of the airline mission statement.
- Understand the economic issues involved in performance analysis.
- Know some technical standards which airlines must meet.
- Calculate some conventional investment criteria.

3.0. MAIN CONTENT

3.1. BASIS OF PERFORMANCE ANALYSIS

3.1.1. AIRCRAFT INTERIOR ARRANGEMENTS.

The interior part of the aircraft is divided into two sections. They are the Cockpit section and the Cabin section.

(i) Cockpit Section

This is the front of the aircraft allocated to the flight crew. The crew comprises the pilot, co-pilot and in some cases flight engineer and the pilot observant.

Inside the cockpit are the flights instruments like:

- Flight Data Records.
- Cockpit Voice Records (Black Box)
- Traffic Alert System
- Collision Avoidance System and
- Various Kinds of Avionics Equipment.

The pilot monitors all the components in the aircraft from the cockpit so as to have a pre-knowledge of any fault that occurs. For safety in the air, all the flight instruments in the cockpit must be functional.

(ii) Cabin Section

The Cabin section is occupied by the passengers. It is sub-divided into two sections as well. These are the normal passenger's cabin and the executive passengers' cabin. Depending on the configuration, some aircrafts are clarified as follows:

- a) First Class Section,
- b) Business Class Section and
- c) Economic Class Section.

The Cabin has the galley where the cabin crew prepares the food/snacks for the passengers. There are also conveniences in the cabin for passenger's comfort.

3.1.2 PASSENGER / CARGO EQUIPMENT SPECIFICATION

It is important that the passenger seats meet with minimum specification as required by the International Civil Aviation Organization (ICAO). This is more so for long haul, non-stop, flights, which require seats that allow for passengers' relaxation. Seat comfort is of utmost concern to passengers. Similarly, for cargo aircraft, there must be in-built equipments to allow for easy loading and offloading.

3.1.3 TECHNICAL STANDARDS

The aircraft must meet basic technical standards as may be determined from:

- (i) Size of the aircraft
- (ii) Speed capability
- (iii) Range
- (iv) Propulsion
- (v) Comfort
- (vi) Accommodation
- (vii) Weight and balance
- (viii) Specification
- (ix) Maintainability

The manufacturers must keep strictly to technical specifications that add value to safety and comfort.

3.1.4 MISSION PROFILES

The corporate objectives of the airline must be pursued with vigour by the airline management in line with the Mission Statement. Mission profiles involve the process of cataloguing and identifying, in their grades of importance, the attainment of the airline's corporate objectives. These can be briefly put in 3 (three) major areas thus:

- a) Reduction in Capital Spending
- b) Improvement in Profitability
- c) The establishment of New Source of Capital for the airline.

3.1.5 ECONOMIC ISSUES

Some economic issues also form a major aspect of the performance analysis of airline. There economic issues embrace the following attributes.

3.1.5.1 Operating Costs

The ability of the airline operatives to avoid waist of available resources and institute programmes that enhances the yield of operating aircrafts will go a long way in minimizing the operating costs. Some of the ways of ensuring an efficient management of operating costs are:

- a) Labour costs control
- b) Fuel efficiency
- c) Aircraft fleet-mix management determined by cost and fare polices.
- d) Reducing overhead costs
- e) Doing away with inefficient costing system.

3.1.5.2 Breakdown Needs.

There must be appropriate stock of spares parts for minor repairs in times of breakdown.

3.1.5.3 Liquidity

An airline must at all times be liquid and liquidity ratio which measures the value of Current Assets to Current Liabilities should be at a minimum of about 1:1. Indeed the airline must be able to pay its current liabilities as they fall due. Without an adequate flow of liquidity, an otherwise efficient and profitable airline may be severely hampered it its activities. It is possible for a firm to expand so rapidly that its whole financial solvency is brought into question because there is insufficient current circulating capital to pay for the expansion.

3.1.5.4 Revenue Development Plans

The revenue development plans are aimed at generating improved aggregate Revenue Per Mile (RPM) from which allocation of capital expenditure for new company venture such as the purchase of new aircrafts and the replacement of existing inefficient fleet can be met.

Large sum of revenue has to be set aside for placing the company on growth paths. To grow the business, the airline should:

- a) Make its products more reasonably competitive
- b) Present product prices within acceptable market range.
- c) Adjust to competitive trends in the environment.

In carrying out a proper performance analysis in areas of revenue generation, allocation and planning, an airline must adopt proper financial control in the following manner:

- Establish an organised and efficient budgetary control.
- Do away with inefficient costing system
- Guard against incremental cash flow problems.
- Ensure optimal fleet utilization and modernization.
- Regular prices of its services

Finally revenue plans may include other elements such as issues of fare level and freight rate for passenger aircrafts and air-freighters respectively.

3.1.5.5 Conventional Investment Criteria

a) Payback period (PBP)

The pay back period refers to how long it will take an airline to recover all the money invested on a project. In using the pay back period, emphasis is placed on those items that actually involve the flow of cash for purpose of establishing the period income/profit. The PBP is also known as the cash recovery period or the pay-off-period. It can be calculated as follows:

$$\text{PBP} = \frac{I_0}{A_t} \quad \text{where:}$$

I_0 = Initial cash outlay (protect cost)
 A_t = constant period income/net cash inflow

Worked Example I:

An aircraft cost ₦2, 000,000. It has a useful life of 20 years after which it will be scrapped. The airline uses a straight line method of depreciation. The annual profit after charging Depreciation is ₦100, 000. Determine the aircraft pay back period.

<u>Solution:</u>		₦
Profit after depreciation		100,000
Add depreciation	$\frac{2,000,000}{20}$	<u>100,000</u>
Annual cash income		<u>200,000</u>
Pay back period	=	$\frac{2,000,000}{200,000}$
	=	10 years.

Worked Example II

If Y airlines Ltd is to execute a project which require initial cash outlay of ₦1,000,000 with the following cash income over its useful life

Years	1	2	3	4	5	6	7	8	9
Cash income	250000	200000	150000	100000	95000	90000	80000	70000	50000

Determine the project payback.

Solution:

Using project cost amortization schedule

Years	Cash flows	Cum. Cash flow
O	(1,000,000)	(1,000,000)
1	250,000	(750,000)
2	200,000	(550,000)
3	150,000	(400,000)
4	100,000	(300,000)
5	95,000	(205,000)
6	90,000	(115,000)
7	80,000	(35,000)
8	70,000	35,000

$$\text{PBP} = 7 \text{ yrs} + \frac{35,000}{80,000} \times \frac{12 \text{ months}}{1} = 7 \text{ years } 5 \text{ months}$$

8.0 Accounting Rate of Return (ARR)

This is the ratio average profit generated throughout the life of the project to the average investment value. The ARR can be calculated using the following formula.

$$\text{ARR} = \frac{\text{Average profit} \times 100}{\text{Average investment}}$$

$$\text{Average investment} = \frac{\text{initial outlay} + \text{residual value}}{2}$$

Worked Example III:

You are given the following cash income concerning a particular project:

Years	1	2	3	4	5
Cash Income	20,000	40,000	30,000	20,000	20,000

The Initial Cost of the Project is ₦80, 000 and the scrapped proceed expected at the end of the 5th year is ₦5, 000. Depreciation is provided on a straight line basis. Determine the Project Accounting Rate of Return.

Solution:

$$\text{Depreciation per year} = \frac{\text{₦}80,000 - \text{₦}5,000}{5 \text{ years}} = \text{₦}15,000$$

Annual profit and total profit

Year(s)	1	2	3	4	5	TOTAL
Cash income	20,000	40,000	30,000	20,000	20,000	130,000
Less: depreciation.	15,000	15,000	15,000	15,000	15,000	75,000
Profit	5,000	25,000	15,000	5,000	5,000	55,000

$$\text{Average profit} = \frac{\text{₦}80,000 - \text{₦}5,000}{5 \text{ years}} = \text{₦}15,000$$

$$\begin{aligned} \text{Average investment} &= \frac{\text{₦}11,000}{\text{₦}42,500} \times \frac{100}{1} \\ &= 25.88\% \end{aligned}$$

c. Return On Capital Employed (ROCE)

This is the ratio of Return On Capital Employed and attempts to measure profitability in terms of resources invested. It may be calculated for the airline company as a whole using:

- (1) Total Assets, which equal Total Long-term and Short-term Funds;
- (2) Total long-term Loans, and
- (3) Ordinary Shareholders' Fund only.

$$\begin{aligned} \text{ROCE} &= \frac{\text{Net Profit before Interest and Tax}}{\text{Total Assets}} \quad \text{or} \\ &= \frac{\text{Net Profit before Interest and Tax}}{\text{Long-term Capital}} \quad \text{or} \\ &= \frac{\text{Net profit before Interest and Tax}}{\text{Ordinary Shareholders' Fund}} \end{aligned}$$

3.1.5.6 Performance Criteria For The Purchase Of Aircraft.

Because they influence purchase decisions, some performance criteria must be negotiated and approved by both the airline company and the manufacturer of the aircraft type. They include:

- a) Lower prices.
- a) Easier financing
- b) Better aircraft performance, in terms of air-fields and en-route, winds and temperature.
- d) Higher payloads.
- e) Better galleys.

9.0 CONCLUSION

In this unit, we have been able to expose the student to elements that form the basis of performance analysis including the attribute of major economic issues.

10.0 SUMMARY

Our discussion in this unit centered on how to carry out a performance analysis of an airline company. We started by looking at the internal part of the aircraft which is divided into the cockpit section and carbine section. We listed the flight instruments in the cockpit and stated that they must all be functional. We went further to the passengers and cabin crew. We went further to detail those features of an aircraft that must meet basic technical standards for an airline to rated highly.

Because of the competitive nature of the aviation business, each airline must develop strategies and policies around three major areas if the targeted profitability and yield are to be achieved. These are:

- a) Reduction in capital spending
- b) Improvement in profitability, and
- c) The establishment of new sources of capital.

We concluded the unit by examining some economic issues that form a major aspect of performance analysis of airline. Issues examined include:

- i. Operating costs
- ii. Liquidity
- iii. Breakdown needs
- iv. Revenue development plans and
- v. Conventional investment criteria

11.0 TUTOR MARKED ASSIGNMENT

List and discuss any five basis of performance analysis of airline operations.

12.0 REFERENCES/LIST FOR FURTHER READING.

Havey, G. (2008), “Management in the Airline Industry.” *Routledge*.

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UNIT 13: SOCIO-ECONOMIC IMPORTANCE OF AIR TRANSPORTATION

CONTENTS

- 1.0 INTRODUCTION
- 2.0 OBJECTIVES
- 3.0 MAIN CONTENT
 - 3.1 Advantages of Air Transport to a Nation
 - 3.1.1 Tourism
 - 3.1.2 Employment
 - 3.1.3 Social Benefits
 - 3.1.4 Reliability and Safety
 - 3.1.5 Population Distribution and Re-distribution
 - 3.1.6 Absence of Physical Barriers.
 - 3.1.7 Oil Industry Activities
 - 3.1.8 Defense
- 4.0 CONCLUSION
- 5.0 SUMMARY
- 6.0 TUTOR MARKED ASSIGNMENT
- 7.0 REFERENCES / FURTHER READINGS.

1.0 INTRODUCTION

Air transportation is now a major undertaking on an International Scale. It is vital to all aspect, of the world's affair. It has been one of the most important factors sharpening the economic and demographic pattern of the world. It affects living standards, life styles and where people live and work. Air transportation affects foreign policy and trade relationships as well as communication with other nations and cultures.

2.0 OBJECTIVES:

- To explain in detail the importance of air mode of transportation
- Appreciate the advantages of air transport mode over other modes like road, rail and water.
- Appreciate the special role of air transportation to the oil sector of the Nigeria economy.

3.0 MAIN CONTENT

3.1. Advantages of Air Transport to a Nation

The advantages of air transportation to a nation such as Nigeria are many. From being the mode of transportation of tourists into and out of the country, it creates employment opportunities for youths, serves as a means of cultural, technical,

educational and social exchanges among nations, aid population distribution, revenue generation and defense of the territorial integrity of a nation. Some of these advantages are discussed in detail below.

3.1.1 Tourism

Air transport is essential for world business and tourism as it constitutes the most important means for foreign visitors to any country of the world. For example federal office of statistics of Nigeria reflected on its annual abstract of statistics 1996 edition, that there were 2, 548, 212 movements by foreign nationals in Nigeria between 1987 through 1990. Of these, 2, 241, 639 representing 87.8% were by air. In fact almost 9 of 10 visitors to Nigeria do so by air. Road transport and sea transport account for 10.9% and 1.3% respectively. The import of air transportation to the Nigerian economy are tremendous be it tourism business, finance, cultural interchange and other industrial commercial activities.

3.1.2. Employment

Air transport industry has increased the employment opportunities and career prospects of Nigerians. Aviation careers span from reservation and engineering through flying, aviation service jobs, government, manufacturing, oil, electronics/avionics, etc. These careers are demanding and challenging. The defunct Nigeria Airways at its prime had 10,634 employees in 1982. Aviation in Nigeria is one of the largest employer of labour. Air transport provides 28 million direct, indirect and induced jobs worldwide. This figure is expected to rise to 31 million by 2010.

3.1.3. Cultural, Educational and Social Exchanges

Air transport forms a unique global transport network linking people, countries and cultures safely. It provides the only worldwide transport network without a commercially viable alternative for medium and long haul travel. It has made possible educational exchange programmes and studies outside one's home country.

3.1.4. Fast, Reliable and Safe

Technological developments and consistent consideration for safety have made air travel not only the most reliable means of transport but also the safest means of travel. Industry developments in computerization, sophistication of ground facilities, aircraft systems and designs have all increased air transport reliability and safety over other modes of transports. Based on the study of accidents between 1990 and 1994, air transport compared to road transport recorded 39 accidents and 34 fatalities while road transport recorded 106, 883 accidents and 431, 881 fatalities.

3.1.5. Population Distribution and Re-Distribution

Cities with airports have replaced cities with seaports or on trade routes of other countries as centre of civilization and development. The same is true in Nigeria. The cities in Nigeria where the major airports are located constitute the largest centre of population, commercial and industrial activities. Examples of such cities are Lagos, Kano, Abuja, Port Harcourt, Kaduna and Maiduguri. In the same token, easy accessibility and availability of air transport has also influenced the re-distribution of population around or in the vicinity of airports cities. Air transport has more than surpassed the effects of seaports and cities on trade routes of earlier centuries in influencing population distribution and re-distribution.

3.1.6. Absence of Physical Barriers

Air transport has no physical barriers and thus increased time saving. This has made dramatic changes in our preparation and readiness for global events. Nigeria relies on air transport to move members of her national football team based abroad to be assembled for crucial encounters. The sky is seamless without obstructions or physical barriers. This is an advantage over road and rail modes of transportation.

3.1.7. Oil Industry Activities

The Oil Industry's rapid response to emergencies in their operational areas, especially in the Niger Delta and offshore locations, is made possible by air transport. In this regard, the air transport system brings about swift and efficient responses to emergencies and rescue operations in areas that are otherwise inaccessible.

The oil sector relies heavily on air transport amongst other transport modes for its global movement of human resources and equipment. It also depends on it for exploration of both on-shore and off-shore oil resources. The choice means of travel by the industry that sustains the national economy is the air mode.

3.1.8. Defense

The euro-space industries of Europe started with the manufacturing of airplanes for purposes of defense and the prosecution of wars. It was later that planes were manufactured for commercial use in the movement of passengers, mails and cargoes. Today, planes play a major role in the prosecution of modern warfare. The Nigerian government's massive investment in airports and airspace infrastructure was informed by the need to have a verile, safe and secure military and civil aviation industry. The matter of defence forms a major policy objective of emerging national airlines and therefore could influence their aircraft utilization decisions. During the Nigerian civil war for instance, the Nigerian Airways aircrafts were occasionally used to transport food. Defence plays a dominant operations objective because of the set aims of government who provide what the National carrier needs to remain in business. In most living cases, a national airline is disposed to combine roles

between attaining defence objective, and profitability. However, the private airlines are commercial in nature and aim at profitability enhancement and yield maximization, Other National defense value of aircraft use include pilot training capability, civil air patrol, surveillance of the airspace, etc.

3.1.9. International Trade

Between 1987 and 1991, there was a net export of 8.7 million liters of aviation fuel. The Nigerian airports handled =N=21.5 billion import and export between 1988 and 1992 with exports accounting for =N=1.2 billion . The =N=21.5 million was combined contribution of air transport to our International trade for the period under review.

3.1.10. Contribution to GDP

Air transport contributes greatly to the nation's Gross Domestic Product (GDP). The Naira value aggregate contribution of the Air Transport to the GDP of Nigeria for the period 1991 to 1992 was =N=2.622 billion.

4.0 CONCLUSION

The mode of Transportation by Air, because of the unique absence of physical barriers, has contributed immensely to the development of the Nigerian economy. Nations have gained in the areas of international trade, tourism business, finance, cultural interchange, sports, oil explorations, population distribution, employment generation, defense and other industrial/commercial activities.

5.0 SUMMARY

In this unit we learnt about the importance of, a safe, regular and economic, air transportation system to all nations. We also learnt about its uniqueness over other modes of transport like road, rail, water and road, especially the absence of physical barriers.

6.0 TUTOR MARKED ASSIGNMENT

List and explain 8 advantages of Air Transportation to a developing nation like Nigeria?

7.0. REFERENCES/LIST FOR FURTHER READING.

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UNIT 13: AVIATION SAFETY AND SECURITY

CONTENTS

- 1.0 INTRODUCTION**
- 2.0 OBJECTIVES**
- 3.0 MAIN CONTENT**
 - 3.1 Safety Issues
 - 3.1.1 Fire
 - 3.1.2 Accidents
 - 3.1.3 Attack
 - 3.1.4 Bird Strike
 - 3.2 Security Issues
 - 3.2.1 Other Agencies
 - 3.2.2 Movement with Airports
 - 3.2.3 Security Facilities
 - 3.3 Health of and Airline
 - 3.3.1 Ramp Safety
 - 3.4 Aviation Safety Committee
 - 3.4.1 Members of the Committee
 - 3.4.2 Functions of Safety Committee
 - 3.5 Why Promote Safety
 - 3.5.1 Personnel Level
 - 3.5.2 Company Level
- 4.0 CONCLUSION**
- 5.0 SUMMARY**
- 6.0 TUTOR MARKED ASSIGNMENT**
- 7.0 REFERENCE/FURTHER READINGS.**

1.0 INTRODUCTION

In this unit, we will be discussing airport safety and security issues which are of great important to airline operators. There are basic facilities that must be provided at both the airport and the airspace for airline business to thrive in an atmosphere of safety and security. The unit will touch on all those areas requiring utmost attention of management of the airport, airspace and the airlines in order to put in place adequate safety and security measures to protect and cargoes.

2.0 OBJECTIVES

At the end of this unit, students should be able to:

- ❖ Appreciate the overall security environment within which the airline business operates.

- ❖ Discuss safety issues of any Airport.
- ❖ Assess the safety health of an airline
- ❖ Understand the major problems facing aircraft operations
- ❖ Know the airport facilities that must be provided to ensure adequate security and safety.

3.0 **MAIN CONTENTS**

3.1 **SAFETY ISSUES**

The operation of Airport is faced with a lot of accidents, incidents and security. It is for this reason that management of both the airport and the airlines must take adequate measure to protect passengers. Adequate safety measures can be in place by addressing the following areas:-

- i Fire
- ii Accident
- iii Attack
- iv Bird strike

3.1.1 **FIRE**

An airport must have fire service available whenever aircraft is flying. This is part of the conditions given by ICAO and indeed this provision is clearly stated in the Airport license issued by NCAA. A stipulated number of firemen, fire appliances including quantity of extinguishing media and rescue equipment are required by each airport according to the level of operation it handles. Airport fire service must have heavy-duty fire tender, light rescue unit and heavy-duty air crash trucks.

3.1.2 **ACCIDENT**

The Airport Authority or management is responsible for the plans and provision of facility to cover emergency situation especially aircraft accident, that may be caused by engine malfunctions or other systems. Rescue personnel and police to cope with cases of accidents covering emergencies for both on and off the airport should be available at the airport.

In controlling cases of accidents, the Airport management should co-ordinate the rescue operation and makes all necessary arrangement for handling light injured persons and survivors who will be suffering from shock.

3.1.3 **ATTACK**

One of the major problems of Air transportation is the attack of the Aircraft and the captain/pilot by:

- ❖ Terrorists
- ❖ Hijackers
- ❖ Criminal

- ❖ People with unsound mind or mental disorder
- ❖ Unruly passengers.
- ❖ Under the influence of alcohol, smoking, illegal drugs etc
- ❖ Use of laptop and mobile phone.

The Airport Authority or management is responsible to plan and prepare people by drilling them to combat case of hijacking and terrorism. There is need to review strategies at regular intervals to ensure that hijackers and terrorists can be identified in good time. This can be achieved if management to make adequate arrangement for inquiries from people who would wish to get information on the incidence including relatives of the victims and the public.

3.1.4 BIRD STRIKE

This is a major problem which airplanes face while in the air or on ground. Bird strikes occur when a bird or birds fly into the aircraft engine causing major damage to the engine. Bird strikes are common in both developing and developed countries and apart from the engine, birds cause damage on the wing or tail plane. If a plane is in the air during a bird strike, it could result to a crash and loss of lives.

3.1.4.1 BIRD STRIKES CONTROL MEASURES

The Airport Authority has a primary duty to institute measure for “Bird Control” in all the airports in Nigeria and else where in the world. Such measure includes:

- a) Obtaining proper equipment for bird control based on civil Aviation Authority (CAA) advice.
- b) Appoint somebody to be in charge with the task of coordinating the bird scanning effort.
- c) Ensuring that bird controls are properly coordinated and supervised.
- d) Issuing a comprehensive set of instructions setting out how bird control should be carried out and the techniques to be applied when necessary.
- e) Report any incident of bird strike to the Civil Aviations Authority.

3.2 SECURITY ISSUES

Enhancing Security surveillance and facilitation is a primary duty of the Federal Airport Authority of Nigeria (FAAN). Aviation security is very important in this modern time and airport management effort is directed towards arresting the prevalent of the following:

- i. Thieves and pilferers
- ii. Illegal immigrants
- iii. Drug traffickers
- iv. Smugglers of all kinds.

3.2.1 There are some other agencies, at the airports that provide essential and complimentary services for airport operations and security. Some of these organizations are:

- ❖ Nigerian Custom Service
- ❖ Immigration Service
- ❖ Nigerian Drug Law Enforcement Agency
- ❖ State Security Service
- ❖ Nigerian Police.

3.2.2 MOVEMENT WITHIN THE AIRPORTS.

Free movement of passengers and their companions is allowed within the unrestricted areas. Restricted areas are usually marked with warning signs for passengers and for companions. For escorts who accompany passengers to the departure halls, they are usually not allowed beyond the relevant lines' ticketing desks. Similarly contact with them after the final custom checks.

3.2.3 SECURITY FACILITIES

To ensure security at the airports, management should provide the following facilities:

- a) Perimeter Fencing: - There should be a fence which will ideally have a ten-foot clear area in either side. Where installed, a microwave fence has the ability to flash a warning of intruders still some distance away.
- b) Identity Cards are issued to Airport workers and checked by security guards.
- c) Cargo terminals are installed with closed circuit TV with zoom lens cameras, videotape recording twin-lock system for high value articles, with one key held by security guards and the other by a document acceptance officer.
- d) Airports and Airlines may install X-ray machines to have all cargoes x-rayed. A portable explosive detector gives an audible alarm.
- e) Airports and Airlines may routinely decompress containerized cargoes cargoes for 12 hours to reduce the possibility of bombs exploding in aircraft cargo hold. Airport and Airlines have metal detective gateways which have electromagnetic field between frames sized metal columns. Each door gives an alarm for any metallic object. Most modern airports now screen passengers through electro-magnetic metal-detectors.
- f) Hand baggage is visually searched using low dosage x-ray equipment, and the contents are displayed on a high definition TV screen. In recent times,

a combined check-in desk and electronic weigh unit with digital read out and x-ray security screening points are used by Airlines.

g) **Crew Training and Licensing**

The operation of aircraft is very delicate and risky as a single case of accident may cause a lot in term of lives and valuable properties. To ensure safety at air, all safety requirements by ICAO for Airport Operators and Airlines must be met. Crew Training and licensing must be seriously considered.

3.3 FACTORS IN ASSESSING THE SAFETY HEALTH OF AN AIRLINE

There are safety factors that determine the health of an Airline which top management must address. These are:

- i. Proper coordination of ramp safety
- ii. Quality of aircraft maintenance
- iii. Pilot competence: training and Re-training
- iv. Management attitude towards safety.

3.3.1 Ramp safety

This is the avoidance of risk around the aircraft. When we talk of ramp safety, it is imperative to consider such factors as: - experience, adequate training, correct tools, consultation, vigilance, will, carefulness and other related human factors that interfere to ensure the concept of safety. Data of airline operation are usually recorded, stored and analyzed. The results are used to determine the safety limits for the future.

Classification of Ramp safety.

This can be classified into:

- i. Safety of equipment
- ii. Safety of personnel.

i. Safety of Equipment.

This can be sub-divided into:-

Safety of aircraft, gland handling Equipment,
Spare parts and Engineering tools etc.

ii. Safety of Personnel

Factors which pose high danger to personnel on the ramp includes:-

- a. Airport noise and air pollution due to air jet efflux.
- b. Accidents to personnel while at work.
- c. Exposure to 'S' 'C' and 'X' microwaves of aircraft radar during grand testing.
- d. Ingestion of personnel to engine air intake.
- e. Effect of exhaust jet blast on personnel.

3.4. AVIATION SAFETY COMMITTEE

3.4.1. Management Safety Committee consists of:-

- i. Airline safety co-coordinator – Chairman
- ii. Head of safety.
- iii. Chief Air Safety Investigator.
- iv. Senior Manager, Safety.
- v. Snr. Air Safety Investigators.
- vi. Air safety Investigator
- vii. Departmental Safety Officers representing Marketing, Medical, Catering, Engineering and maintenance, Ground Equipment, Properties, Division, Personnel and Carbin Services, Fire and Security Units.

3.4.2. FUNCTIONS OF SAFETY COMMITTEE.

These are:-

- a. Help communicate safety programmes to everyone.
- b. Makes sure inspections are carried out regularly and reports of safety hazards sent to the appropriate authority.
- c. Handles complains and emergency cases.
- d. meets twice a month.
- e. organizes safety drills regularly.
- f. Organize Ramp safety week.
- g. Make recommendations to improve safety programmes.

3.5 WHY PROMOTE SAFETY

3.5.1. Personnel Level

- To save ourselves from pain.
- To save our lives and limbs
- To save us from loss of income and unnecessary expenses.
- To save us and our loved ones from sorrow.

3.5.2. Company Level

Cost of an accident cannot fully be quantified but when an aircraft crashes following the neglect of safety regulations, the effects on the airline are:-

- Damage to the Aircraft and other equipment.
- Loss of production e.g. accident mishap due to bad weather.
- Reduces productivity.
- Lower morale.
- Cost of recruitment, training or replacement.
- Hospital costs – may be borne by the Airline.
- Compensation cost can be very high.
- Displeasure of the Government.

4.0. **CONCLUSION**

It must be remembered that issues of security and safety in air transportation are the responsibility of everybody. However the primary responsibility is that of the Government. In Nigeria, the Federal Ministry of Aviation is saddled with improved safety regulation in its safety oversight functions. The government also ensures improved Airport and Aviation security Management as well as improved airspace management.

5.0 **SUMMARY**

The aviation industry cannot exist if issues bordering on security and safety are not handled adequately by government agencies, the Airline companies and the general public. Safety issues at the airports are:-

- Fire.
- Accidents and rescue operations.
- Attack.
- Bird strike.

Security issues include:-

- Thieves and pilferers.
- Illegal immigrant
- Drug traffickers.
- Smugglers.

Security Agencies at the Airports are:-

- The Nigerian Custom Service.
- Immigration Service.
- Nigerian Drug Law Enforcement Agency
- State Security Service.
- Nigerian Police.

In assessing the health of an Airline, the following factors are important.

- i. Proper coordination of ramp safety.
- ii. Quantity of Aircraft Maintenance.
- iii. Pilot competence

- iv. Management's attitude towards safety.

Finally, an Aviation Safety committee must make recommendations to improve safety programmes and communicate the improved safety programmes to every one.

6.0. TUTOR MARKED ASSIGNMENT

How would you address the issues involved in the pursuit of safety and security of passengers in the air transport industry.

7.0. REFERENCES/LIST FOR FURTHER READING.

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UNIT 15: INTERNATIONAL ORGANIZATIONS IN AIR TRANSPORT

CONTENTS

- 1.0 INTRODUCTION
- 2.0 OBJECTIVES
- 3.0 MAIN CONTENT
 - 3.1 International Civil Aviation Organization (ICAO)
 - 3.1.1 Aims and Objectives
 - 3.1.2 Functions of ICAO
 - 3.1.3 ICAO Committees
 - 3.1.4 The Administrative Structure of ICAO
 - 3.1.4.1 The General Assembly
 - 3.1.4.2 The Council
 - 3.1.4.3 The Secretariat
 - 3.1.5. How ICAO has tried to achieve its objectives.
 - 3.2. International Air Transport Association
 - 3.2.1. Basic Source of Authority
 - 3.2.2. Aims and objectives of IATA
 - 3.2.3. Functions of IATA
 - 3.2.4. Achievement of IATA.
- 4.0 CONCLUSION
- 5.0 SUMMARY
- 6.0 TUTOR MARKED ASSIGNMENT
- 7.0 REFERENCES/FURTHER READING

1.0 INTRODUCTION

In the previous unit, we discussed the need to have adequate safety and security in the aviation industry. There are international organizations responsible for setting standards and practices that enhance safety and security. In this unit we shall discuss these organizations and let the students know the role they play in the industry in order to bring about safe, orderly and efficient air transportation... First we shall learn about the role of the International Civil Aviation Organization (ICAO) that sets Standards and Recommended Practices (SARPS) for the entire aviation industry before discussing briefly, The International Air Transport Association (IATA) which deals on regulatory, unfair competition and enforcement of established fares, rates and charges among airlines.

2.0 OBJECTIVES

After going through this unit, the student should be able to:

- Appreciate the international nature of aviation industry.
- Know the administrative structure of ICAO.
- Explain the functions of ICAO.
- Appreciate the role of IATA, as an association, in the establishment of fares and rate-tariff regulation of airlines. .

- Identify the differences between IATA and ICAO.

3.0 MAIN CONTENT

International bodies and associations in Air Transportation are organizations involved in issues of international nature in the provision, supply, control and use of air transport facilities and equipment. We shall discuss ICAO and IATA in detail.

3.1 International Civil Aviation Organization (ICAO)

The International Civil Aviation Organization-ICAO is an assembly of sovereign States and an agent of the United Nations charged with the responsibilities of standardizing uniform procedure and facilities for international air transport. It was formed in 1944 after the Chicago Convention, with its headquarters in Montreal-Chicago. ICAO deals directly with governments of member nations.

3.1.1. Aims and Objectives

The aims and objectives of ICAO are:-

“to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport so as to:

- (i) Ensure the and orderly growth of international civil aviation throughout the world;
- (ii) Encourage the art of aircraft design and operation for peaceful purpose;
- (iii) Encourage the development o airways, airports and air navigation facilities for international civil aviation;
- (iv) Meet the needs of the people of the world for safe, regular, efficient and economical air transport;
- (v) Prevent economic waste caused by unreasonable competition;
- (vi) Ensure that the rights of contracting states are fully respected and that every contracting state has a fair opportunity to operate international airlines.
- (vii) Avoid discrimination between contracting states;
- (viii) Promote generally the development of all aspects of international civil aeronautics.”

3.1.2. Functions of ICAO

1. Promotion and improvement of facilities for regular and safe air transportation, ensuring standard runways, standard procedures, supervision of airport construction, lighting, beacons, various navigational aids and air traffic control.
2. Deals with governments in order to ensure that all its resolutions and recommendations are practiced and complied.

3. ICAO ensures that IATA members implement Annex 9 which deals with standardization of forms used in passenger handling of international traffic such as general declaration, passenger manifest, cargo manifest etc.
4. It maintains a close liaison with the Universal Postal Union for orderly and systematic carriage of post office mails on international routes.

3.1.3. ICAO Committees

For ICAO to achieve its functions, it established the following committees for effective and efficient coordination:

- a) **Air Navigation Committee:** To deal with licensing of crew, standardization of airports, navigational aids and communication equipment, etc.
- b) **Transport Committee:** To meet with IATA for safe, economic and easy handling.
- c) **Legal Committee:** Making Aviation Laws and ensuring that they are added in individual national laws and legal matters. It records international legal agreements and draws up the next future international conventions.
- d) **Joint Support of Air Navigation Services Committee.**
- e) **Unlawful Interference Committee.** To serve as a check on States against any interference of airlines flying through their territory.

3.1.4. The Administrative Structure of ICAO

The structure of the International Civil Aviation Organization-ICAO is as follows:

- The General Assembly
- The Council
- The Secretariat.

3.1.4.1. The General Assembly

All the states that ratified the Chicago Convention are in General Assembly. Those states which were not sovereign states as at 1944 can be members by adherence. The assembly meets and holds a full scale meeting every three years.

The general assembly does the following functions:

1. To elect the council
2. To vote the annual budget
3. To make amendment to the convention
4. To delegate the necessary powers to the council for the discharge of the duties of the organization.

3.1.4.2. The Council of ICAO

The Council is composed of 33 contracting states elected by the Assembly.

The council elects its own President, (Executive body of ICAO). It deals with the problems which ICAO has come to solve and it is made of the committee as stated above.

3.1.4.3. The Secretariat

The secretariat is the administrative centre of the organization and it is headed by the Secretary-General who is in charge of the secretariat. The secretariat does all functions within its power and any other duties assigned to it by the assembly. It is divided into five main divisions:

- (i) The air navigation bureau
- (ii) The air transport bureau
- (iii) The Technical Assistance bureau
- (iv) The Legal Bureau and
- (v) The Bureau of Administration and services.

The senior personnel of the secretariat are recruited on a broad geographical basis. In addition to the regular staff, the services of experts are obtained from time to time by loan or secondment from contracting states while clerical or secretarial employees are generally recruited locally in the areas where the organization has offices. ICAO has 7 regional offices.

3.1.5. How ICAO has tried to achieve the objectives.

The International Civil Aviation Organization has been successful in meeting the objectives especially in the safety, operations and technical aspects. Although it has not fully achieved much in the economic points of view due to the problems of multi-lateral agreements, it has succeeded in providing a generally accepted;

- Safety standard of operations;
- Design of aircrafts and airports;
- Introduction of common practice and equipments throughout the world.

ICAO has achieved these by:

1. Passing orders through national aviation authorities of different nations to ensure:
 - a) The compliance with the national and international standard and regulations including designs, construction and maintenance of airports, liaison with aircraft manufacturers and airlines.
 - b) Standard maintenance and regular servicing of aircrafts and equipments.
 - c) Training and licensing of operating crew.
 - d) Operation of aircraft and crew.
2. ICAO has ensured that the art of aircraft design and operation are for peaceful purpose.

3. By meeting with IATA and other international bodies, ICAO has tried to needs of the people of the world for safe, regular, efficient and economic air transportation.
4. It has avoided economic waste among airlines and different nations by not allowing unnecessary competition. It has achieved this by licensing.
5. By making rules and regulations, it has successfully achieved many of its objectives. It provided a level playing ground for airlines operating in the aviation market.

3.2. THE INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

The International Air Transport Association-IATA is a world organization of Scheduled Airlines. It is a private, democratic, international, non-profit making organization of world Airlines. IATA as a voluntary, non-political and democratic association had its Articles of Association was adopted by the International Air Transport Operators Conference at Havana, Cuba, in April 1945 at which the Association was founded. It has its Headquarters in Montreal, Canada.

There are two kinds of membership into the association-Active and Associate. Active members are Airlines that operate scheduled international or International plus Domestic services. Associate members are those Airlines that operate Scheduled Domestic services only.

3.2.1 Basic Source of Authority.

The highest body in IATA is the Annual General Meeting (AGM). In the AGM, all members have equal vote. There are many committees in IATA and highest committee is the Executive Committee (EXCO) which is directly responsible to the Annual General Meeting (AGM). The year round policy direction is provided by the Executive Committees.

1. Legal Committee
2. Financial Committee
3. Technical Committee
4. Traffic Advisory Committee
5. Medical Committee

There are also Sub Committees, Boards, Agencies and Panels set up from time to time to enhance the efficiency of IATA.

3.2.2. Aims and Objectives of IATA.

The aims and objectives of the associating are:

- a) To promote safe, regular and economic air transport bodies engaged directly and indirectly in international air transport services.

- b) To provide means for calibration among the air transport bodies engaged in international air transport services.
- c) To foster air commerce.
- d) To cooperate with ICAO and other international organizations.

3.2.3. Functions of IATA

The functions are:-

- i. Organizes cooperation between airlines.
- ii. Acts as spokesman for the air transport industry in relation with government and governmental organizations.
- iii. Standardization of Traffic Procedures, including format for international tickets, Miscellaneous Charges Order (MCO), Air Waybill, Prepaid Ticket Advice (PTA), Excess Baggage ticket, etc.
- iv. Removing unfair competition and enforcement of established fares, rates and charges.
- v. Establishment of a clearing house in London for transaction of financial business by members.
- vi. Establishment of uniform procedures in the form of IATA Recommended Practices and/or Resolutions.

3.2.4. Achievements of IATA.

Contributions to Airlines and the people of the world at large are:

- a. Integrated global service air-network: IATA developed co-operative efforts that produced the basic operational and technical procedures, systems, agreements manuals that have aided the smooth the performance of airlines globally.
- b. Co-ordination of international rates and fares.
- c. Helped the fast and economic carriage of passengers and cargoes.
- d. Contributed to the development of international commerce.
- e. Solving airlines problems: Problems arising from the differences between languages, currencies, laws and measurements have been solved by IATA.
- f. For the public interest, IATA has achieved a standard air transport operation, with the lowest possible rates and fares.
- g. Maintain peace and co-operation with other international organizations especially ICAO which is its direct associates.

4.0 CONCLUSION

The Airline industry operates under internationally set standards and practices that provide a level playing field for all operators. Uniform standards and procedures exist for the construction of airports and facilities, provision of navigational aids and communication equipments, licensing of crew, aircraft design etc. ICAO has been largely successful in providing a generally accepted safety standard of operations, design of aircrafts and airports and introducing common practice and equipments. IATA serves as a cartel of airlines operators which supply the aircrafts on international routes, monitor unfair competition among member airlines and serves as a clearing house on financial transaction of airlines.

5.0. SUMMARY

This unit which deals with the key international organizations that regulate aviation practice worldwide can be summarized as follows:

ICAO	IATA
1. An organization of governments	A body consisting of Airlines.
2. Financed by governments of sovereign States who are members.	Financed by Airlines who are members.
3. Major objectives are to ensure safe and orderly growth of civil aviation, development of airports, airways etc.	Major objective is for the airlines to form a “cartel” so as to influence its market by regulating competition.
4. Has responsibilities of promoting, improving and ensuring standards on airport constructions and facilities, air traffic control etc.	Acts as spokesman for the transport industry, organizes cooperation between airlines, establish standardization for traffic procedures and a clearing house on financial transactions.
5. Makes recommendations and sets standards for crew licensing and airline route licensing.	Set standard formats for international tickets and fixes minimum fares for scheduled passenger air services and air freight.
6. Organized through the General Assembly, The Council and The Secretariat.	Organized through the Annual General Assembly (AGM), The Executive Committee (EXCO), and five standing committees.

6.0 TUTOR MARKED ASSIGNMENT

How would you assess the contribution of the International Air Transport Association (IATA) to the development of Airlines and the people of the world at large?

7.0 REFERENCES / LIST FOR FURTHER READING

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