



सत्यमेव जयते

**REPORT OF THE  
COMPTROLLER AND AUDITOR GENERAL  
OF INDIA**

**UNION GOVERNMENT  
No. 12 (COMMERCIAL) OF 1995**

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**AIR INDIA LIMITED**

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NO. 13 (COMMERCIAL) OF 1988  
UNION GOVERNMENT

OF INDIA  
COMPTROLLER AND AUDITOR GENERAL  
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## TABLE OF CONTENTS

<b>Chapter</b>	<b>Subject</b>	<b>Page No.</b>
	Preface	ii
	Glossary of Technical Terms	iv
	Overview	v
1.	Introduction	1
2.	Procurement and Operation of Aircraft	6
3.	Commercial performance	18
4.	Airport Services Department (ASD)	36
5.	Material Management	40
6.	Fuel	44
7.	Human Resources Development Department	46
8.	Financial Position and Working Results	55
9.	Internal Audit	62
10.	Other Topics of Interest	64
	Annexures	

## PREFACE

Audit Boards are set up under the supervision and control of the Comptroller and Auditor General of India (CAG) to undertake comprehensive appraisals of the performance of the Companies and Corporations subject to audit by CAG.

2. The report on Air India Limited was prepared by an Audit Board consisting of the following members:

- |                         |   |
|-------------------------|---|
| 1. Shri C.K. Joseph     | Deputy Comptroller and Auditor General-cum-Chairman, Audit Board from 13th December, 1993 till date.                                |
| 2. Shri R.S. Prasad     | Principal Director of Commercial Audit and Ex-Officio Member-II, Audit Board Bombay from 15th July 1992 till date.                  |
| 3. Shri N. Sunder Rajan | Principal Director of Commercial Audit and Ex-Officio Member-I, Audit Board, New Delhi from 25th November 1993 to 27th April, 1994. |
| 4. Shri T.G. Srinivasan | Principal Director of Commercial Audit and Ex-Officio Member, Audit Board-I, New Delhi from 5th September, 1994 till date.          |
| 5. Shri R. Chandramouli | Asstt. Comptroller and Auditor General (Comml.) and Secretary, Audit Board from 2nd August, 1993 till date.                         |

6. Shri K.L. Thapar  
Part time Member

Retired Principal  
Adviser, Planning  
Commission.

7. Shri S. Ramamritham

Retired Director General  
Part time Member  
of Civil Aviation

The part time members are appointed by the Government of India (in the respective Ministry or Department controlling the Company or Corporation) with the concurrence of Comptroller and Auditor General of India.

3. The report was finalised by the Audit Board after taking into consideration the discussions held with the Ministry of Civil Aviation on 21st October 1994.

4. The Comptroller and Auditor General of India wishes to place on record his appreciation of the work done by the Audit Board.

Acting Director  
Federal Bureau of Investigation  
Washington, D.C.

Mr. J. Edgar Hoover  
Director  
Federal Bureau of Investigation  
Washington, D.C.

The following information was received from the  
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## GLOSSARY OF TECHNICAL TERMS USED

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### **Definitions**

1. **Distance in Kilometres:** This is based on the great circle distance between airports.
2. **Available Tonne Kilometres (ATKM):** Product obtained by multiplying the capacity in metric tonnes (1000 Kg) available for passengers mail and cargo by the distance in kilometres flown by the aircraft.
3. **Revenue Tonne Kilometres (RTKM):** Revenue earning load of passengers, mail and cargo in metric tonnes multiplied by the distance flown in kilometres.
4. **Available Seat Kilometres:** Product obtained by multiplying the number of passenger seat available in the aircraft by the distance of kilometres flown.
5. **Revenue Passenger Kilometres:** Product obtained by multiplying the number of fare paying passengers by distance in kilometres flown by them.
6. **Tonnes Kilometres:** A unit for measuring traffic, equivalent to the carriage of one tonne of load over one kilometre.
7. **Overall load factor:** Ratio of Revenue tonne kilometres to available tonne kilometres usually expressed as percentage.
8. **Passenger Load Factor:** Ratio of revenue passenger kilometres to available seat kilometres usually expressed as percentage.
9. **Break-even Load Factor:** The load factor that has to be achieved in earning such revenue as would just cover operating expenses.
10. **Yield:** Revenue earned per Revenue Tonne Kilometre and is obtained by dividing the total Revenue by Revenue Tonne Kilometres flown.
11. **On-line stations:** Station on the route map of the Corporation to and/or through which any one of the Corporation's flights is operated.
12. **Off-line stations:** Stations not on the route map of the Corporation and where Corporation has established sales offices.

Definitions

1. Directly Proportional - Two quantities are said to be directly proportional when the ratio of one to the other is constant.
2. Inversely Proportional - Two quantities are said to be inversely proportional when the product of one and the other is constant.
3. Arithmetical Progression - A series of numbers in which the difference between any two consecutive terms is constant.
4. Geometrical Progression - A series of numbers in which each term is a constant multiple of the preceding term.
5. Harmonic Progression - A series of numbers in which the reciprocals of the terms form an arithmetical progression.
6. Binomial Theorem - A theorem that gives the expansion of a binomial raised to a power.
7. Pascal's Triangle - A triangular arrangement of numbers in which each number is the sum of the two numbers directly above it.
8. Permutation - An arrangement of objects in a specific order.
9. Combination - A selection of objects without regard to order.
10. Probability - A measure of the likelihood of an event occurring.



## OVERVIEW

### I. Introduction

Air India was established on 15 June, 1953. Consequent to the repealing of the Air Corporations Act, the assets and liabilities of Air India were transferred and vested in the company Air India Ltd. with effect from 1 March, 1994.

(Paras 1.1.1 and 1.1.2)

The main objectives of Air India are to provide safe, efficient, adequate, economical and properly coordinated air services to customers.

(Para 1.2.1)

### II. Procurement and Operation of Aircraft

Air India had 23 aircraft at the end of 1986-87, the fleet increased to 25 aircraft by 31 March, 1994.

(Para 2.2.1)

Air India had acquired six A310-300 aircraft, in preference to a technically superior aircraft, as the A 310-300 fleet was expected to result in a marginally lower operating loss and lower fuel consumption. Despite the aircraft manufacturer's guarantee regarding fuel burn and the engine manufacturer's guarantee of compensation for excess fuel consumption beyond specified limits, the expectations about fuel consumption did not come true. Air India continuously suffered operating losses on Airbus A-310-300 aircraft during the first five years of their operation till 1990-91.

These aircraft were not deployed on the routes for which their purchase was justified.

Four Airbus A-310-300 aircraft suffered corrosion on pressure panel and Air India spent US \$ 0.353 million to repair them; the loss of revenue due to extended grounding of these aircraft for repair of corroded pressure panels was Rs.2.92 crores.

**(Paras 2.3.6, 2.3.7, 2.3.8, 2.3.15)**

The utilisation of Air India's aircraft was always lower than the budgeted flying hours, the lowest being 87.9 percent in 1990-91. Air India's per day average utilisation of 747-200 and 747-300 aircraft was substantially lower than the industry average for the same type of aircraft.

**(Para as 2.4.1 and 2.4.2)**

There was no tangible improvement in on-time performance.

**(Para 2.5.1)**

### **III. Commercial Performance**

The capacity provided (ATKMs) and utilised (RTKMs) by Air India was lower than the plan/ budgeted targets, except during 1987-88. During the years 1990-91 to 1992-93, there was a continuous decrease in the capacity offered and utilised.

**(Para 3.1.2)**

Air India's growth of passenger traffic had been slow and its share of the market had been declining.

**(Paras 3.2.1 to 3.2.6)**

Air India's fare structure suffered from a directional imbalance which coupled with liberalisation of the Foreign Exchange Regulation Act led to a substantial outgo of foreign exchange.

**(Para 3.3.4)**

Air India's cargo traffic had been on the decline during the years 1990-91 to 1992-93. There was, however, a marginal improvement during 1993-94.

**(Para 3.4.1)**

A test check of the performance of a private GSA indicated that the sales made by them were much below the target set for them; the adverse variance ranged from 12.03 percent to 52.16 percent during the period 1986-87 to 1990-91.

**(Para 3..5.3)**

Air India had written off Rs. 962.50 lakhs as bad debts and also provided Rs. 2431 lakhs for bad and doubtful debts as on 31 March, 1994 which were to be recovered from sales agents and other parties. The lacunae in realisation of sales revenue from these agents mainly related to inadequate bank guarantee, placing of excessive ticket stock with them inadequate internal check, acceptance of outstation cheques which were finally dishonoured and misuse of credit card facilities.

**(Para 3.5.6)**

Out of fifteen scheduled passenger services operated by Air India, only four routes were consistently making profit.

**(Paras 3.6.1 )**

There were a number of off-line stations whose cost to revenue ratio was alarmingly high.

**(Para 3.6.5)**

The Corporation, while awarding catering contracts abroad, had sustained avoidable expenditure of Rs. 365.88 lakhs.

**(Para 3.8.2)**

#### **IV. Airport Service Department**

The total handling revenue earned by Airport Services Department increased from Rs. 42.08 crores in 1986-87 to Rs. 156.10 crores in 1993-94; the increase was partly due to exchange rate fluctuation.

**(Paras 4.1.2 and 4.1.3)**

#### **V. Material Management**

Inventory of aircraft/ engine spares maintained by the Corporation has been progressively increasing year after year till 1991-92 after which it showed a declining trend.

**(Para 5.2.5)**

Between 1987-88 and 1993-94 there was an increase of 98.26 percent (in value) of non-moving items of Boeing 747 aircraft spares. During the same period the value of non-moving items of A 300 aircraft spares increased by more than six times.

**(Para 5.3.2)**

#### **VI. Human Resources Development Department**

The average deployment of members of the operating crew was less than the stipulated minimum of 50 hours per month.

**(Para 7.2.4)**

The deployment of cabin crew was far in excess of the requirements identified by the Planning Group on Civil Aviation.

**(Paras 7.2.7 and 7.2.8)**

Deployment of staff at some stations was disproportionate to the number of flights handled by the station.

**(Para 7.3)**

## **VII. Financial Position and Working Results**

Debt equity ratio increased from 1.71:1 in 1986-87 to 2.1:1 in 1993-94. This was mainly due to foreign loans taken for acquisition of aircraft.

**(Para 8.1.1)**

Despite earning profits continually during the period from 1981-82 to 1993-94 except in the year 1987-88, Air India declared dividends only in the years 1982-83 (10%), 1989-90 (10%), 1991-92 (20%), 1992-93 (20%) and 1993-94 (10%).

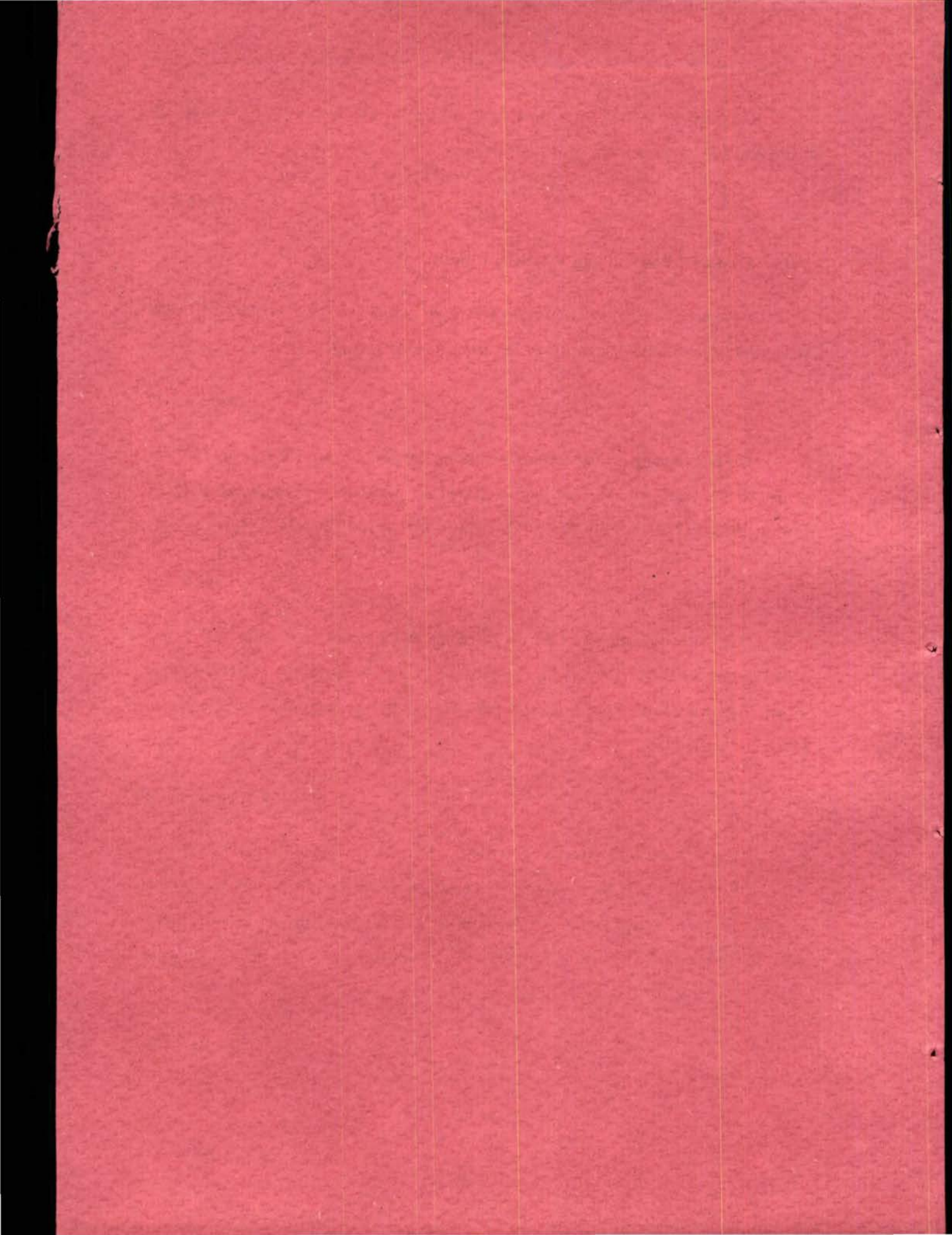
**(Para 8.2.3)**

Air India's investment of Rs. 18.21 crores in Vayudoot was written off during 1990-91 and 1993-94. Air India's investment of Rs. 40.60 crores in its subsidiary Hotel Corporation of India has been fully eroded by the subsidiary's accumulated losses.

**(Paras 8.2.4 and 8.2.5)**

Against the estimated profit of Rs. 407.04 crores envisaged during the Seventh Plan (1985-86 to 1989-90), the actual profit earned by Air India was only Rs. 166.94 crores. This was mainly due to reduction in the RTKMs (i.e. capacity utilised) and a substantial drop in the actual yield per RTKM as compared to projections made for the Plan.

**(Para 8.3.4)**



## CHAPTER - 1

### INTRODUCTION

**1.1.1** The first air service was started in India by Tata Airlines on 15 October, 1932, the predecessor of Air India. Air India International (later named Air India) was established under Section 3(1) of the Air Corporations Act, 1953. It took over the assets, liabilities and business of its immediate predecessor, Air India International Limited as a going concern. Air India operates air services to various points in USA, UK., Europe, Middle East, Far East, the Gulf, Asia and Africa, covering 43 on-line stations (March, 1994). Air India had established two wholly owned subsidiaries, viz., Hotel Corporation of India (July 8, 1971) and Air India Charters Limited (Sept. 9, 1971) with the approval of the Government.

**1.1.2** The Air Corporations Act was repealed by an Ordinance issued by the President on 29 January, 1994. A new company by the name of 'Air India Limited' was incorporated on 1 May, 1992. By virtue of Government of India Notification dated 18 February, 1994, all the assets and liabilities of the erstwhile Air India were transferred to and vested in Air India Limited with effect from 1 March, 1994.

**1.1.3** The capital of Air India, which was contributed solely by the Central Government, was equally divided between equity and loan capital till 1987-88. The amount of equity capital and loan capital at the end of February, 1994 stood at Rs.79.47 crores and Rs.74.36 crores respectively. However, the loan capital of Rs. 74.36 crores has been shown as 'unsecured loan' in the accounts of Air India Limited for the year ending March, 1994.

**1.1.4** The working of Air India was examined by the Estimates Committee in 1956-57 in their Forty-First Report (First Lok Sabha), and by the Committee on Public Undertakings (COPU) from time to time, the last main report being the Fourteenth Report on the working results and traffic growth (Eighth Lok Sabha) in 1986-87. The

action taken by the Government on this report was considered by COPU in their Thirty-Fifth Report (Eighth Lok Sabha) in 1987-88.

## **1.2 INTERNATIONAL AVIATION SCENARIO**

**1.2.1** Air India's operations like those of other world airlines have been affected by the sweeping changes that have taken place in the international aviation environment. During the 1950s, 1960s and 1970s air transport progressed in an orderly fashion under the protection of the bilateral system of exchange of traffic rights and the IATA price fixing regime.

**1.2.2** The 1980s witnessed sweeping changes in the airline industry - the collapse of the IATA price fixing machinery, a move towards greater liberalisation in the exchange of traffic rights and the beginning of the process of airline consolidation and globalisation - through mergers, acquisitions and marketing alliances. These changes have totally transformed the market place - concentrating market power in the hands of a few mega carriers and carrier groups. This trend towards greater liberalisation, globalisation and consolidation has continued in the 1990s and, inevitably, affected the ability of a small airline, like Air India, to survive in the market place.

**1.2.3** The 1990s began somewhat ominously for the international airline industry. The Gulf crisis, the continuing recession in the world's major traffic generating economies and over capacity (caused primarily by indiscriminate fleet expansion by the major international carriers in an effort to garner market share) have diluted revenues and yields and placed heavy interest and depreciation burdens on the airlines. During the period from 1990 to 1993, the international aviation industry incurred huge losses totalling USD 15.0 billion - more than the entire profits earned since World War II. Some airlines have gone bankrupt, others have curtailed operations, resorted to layoffs and postponed/cancelled new aircraft acquisitions.



**1.2.4** The global economic outlook has been improving since 1993 and the developed economies of the western world are coming out of recession. The world airline industry is reported to have achieved a positive operating result both in 1993 and in 1994 even though the net result after interest has continued to be negative.

**1.2.5** During the last few years, with the liberalisation of the traffic rights regime in India, many foreign airlines have sought and obtained additional traffic right and have, therefore, been able to substantially expand their capacity deployment to/from India. Also, Indian Airlines have been permitted to mount additional capacity on several international routes such as the India/Gulf route. This has resulted in excess capacity and pressure on yields in the passenger market to/from India.

### **1.3 Scope of Appraisal**

The main areas which have been examined in this report are fleet size and fleet utilisation vis-a-vis the targets, growth of passenger and cargo traffic, route-wise profitability, deployment of operating and cabin crew, the financial performance of the company, and other subsidiary activities like flight handling and catering services. These and other related aspects of the working of Air India for the period 1986-87 to 1992-93 were generally reviewed in Audit. However, the position prevailing in 1993-94 has also been indicated wherever the data was available. Certain other aspects like engineering, computerisation, reservation system, revenue accounting, passenger and cargo handling have not been covered in this study.

### **1.4 Objectives**

**1.4.1** The main objectives, as initially set out in Section 7 of the Air Corporations' Act, 1953, include providing safe, efficient, adequate, economical and properly coordinated air services of high standard to passengers and customers on the ground and in the air; making efficient contribution to the nation by maximising revenue; and promoting international tourism to India with a view to improving the country's foreign

exchange reserves. These objectives have been included in the Memorandum Of Association of Air India Limited.

**1.4.2** The micro objectives framed by Air India were approved by the Ministry of Civil Aviation and Tourism in September, 1984. The financial and economic objectives inter-alia included a fair return on capital employed; resource planning to meet the capital commitments out of its own internal resource; creation of reserves; and increase in its capacity. Out of these, Air India has not been able to achieve its objective of increase in capacity, which has been examined in paragraphs 2.2 and 3.2.5.

**1.4.3** Air India first signed a Memorandum of Understanding (MOU) with the Ministry of Civil Aviation for the year 1988-89. However, no MOUs were signed for the years 1990-91 and 1991-92. Air India's performance rating as per the MOU targets was 'Good' in 1989-90 and 'Very Good' during 1992-93. It has never got the 'Excellent' rating so far. There were shortfalls in the achievement of MOU targets during 1992-93 and 1993-94 also, which were attributed to reduction in the tourist traffic in the wake of riots (December, 1992), flight engineer's strike (February-April, 1993), poor on-time performance, and the fact that only a few routes were profitable.

The Ministry, while admitting that the targets were not very closely monitored, stated (October, 1994) that there was a system of quarterly review in the Ministry where such important indicators like fleet utilisation, load factor, number of passengers carried etc. were monitored.

## **1.5 Organisational set up**

**1.5.1** The headquarters of Air India is in Bombay and the services are organised and managed by regional offices located at Bombay (for East Asia and India), Dubai (for the Middle East), London (for UK and Europe), New York (for USA and Canada) and Johannesburg (for Africa). The organisational chart of Air India headquarters at Bombay as on 31 March, 1994 is given in Annexure-I. The post of Chairman and

Managing Director was bifurcated into a part-time Chairman and a Managing Director by Ministry of Civil Aviation Notification dated 28 February, 1994.

**1.5.2** It was observed that some of the key posts such as Director of Finance lay vacant from March, 1993 to February, 1994 and again from November, 1994 onwards (January, 1995). The post of Director (Engineering) was also being looked after by an officiating arrangement from July, 1992 to October, 1993. The three posts of Deputy Managing Directors have also remained unfilled from 12 March, 1990 onwards. Though Air India has been converted into a company with effect from 1 March, 1994, the old designations like 'Director' for an executive who is not a member of the Board of Directors still continue in contravention of the Bureau of Public Enterprises circular dated 20 January, 1983. Only the part-time Chairman and the Managing Director (earlier the Chairman & Managing Director) are on the Board of Air India. Neither the Ministry nor Air India have so far commissioned or conducted any study to assess the need for restructuring the top level management.

## CHAPTER - 2

### PROCUREMENT AND OPERATION OF AIRCRAFT

**2.1** The number of stations/cities served by Air India at the time of nationalisation in August, 1953 was 12. Air India's network steadily increased over the years till it reached the peak of 48 stations in 1982-83. But again there was a reduction in the number of cities served by Air India and it had been fluctuating around 40 during the period subsequent to 1984-85. During 1991-92 and 1992-93, Air India had been operating to 40 stations. Six more stations, namely, Johannesburg, Durban, Dar-es-salaam, Jakarta, Amritsar and Calicut were added as online and three existing online stations, namely, Fujairah, Sharjah and Ras-al-khaimah were converted into offline stations during the year 1993-94. Thus, as on 31 March, 1994, Air India was operating to 43 stations.

#### **2.2 Augmentation of fleet**

**2.2.1** At the time of formulation of the Seventh Five Year Plan, Air India had presented scenarios with four percent, six percent, and eight percent average annual growth rates for the consideration of the Planning Commission. In the eight percent growth scenario, Air India had projected the acquisition of 12 new aircraft, while in the four percent scenario it was limited to 9 new aircraft. The Planning Commission recommended that Air India's average annual growth rate may be limited to four percent.

Air India's actual fleet position vis-a-vis the planned target at the end of each financial year during the last eight years was as under:

Year	Boeing 747	Airbus A300 B4	Airbus A 310	Total Planned	Actual	New aircraft acquired
1986-87	10	3	6	19	23*	6 Airbus A310-300
1987-88	10	3	6	19	20	
1988-89	10	3	8	21	21	2 Boeing 747-300 (Combi)
1989-90	11	3	8	22	21	
1990-91	12	3	8	23	22	2 Airbus A310-300
1991-92	11	3	8	22	22	
1992-93	11	3	8	22	22	
1993-94	12	3	8	23	25	3 Boeing 747-400

\* The actuals were higher than the planned target during the year as the 5 Boeing 707 aircraft, which were to be phased out by 1986-87, were phased out during 1987-88 & 1988-89.

The figures for the planned size of the fleet for the years 1990-91 to 1993-94 have been taken from Annual Revenue/Expenditure Budgets of Air India as these were not reflected in the Annual Plans submitted to the Government.

**2.2.2** Against the envisaged average annual growth rate of four percent, the growth rate actually achieved during the Seventh Plan period (1985-90) was only 3.7 percent. However, during the same period the traffic actually grew at the rate of over 5 percent per annum. The reason for this lower rate of growth, as explained by the Management, was delay in induction of two A310-300 aircraft from 1988-89 to 1990-91. During the Seventh Plan period there was no shortage of capacity except in 1989-90 when there were 21 aircraft against the planned capacity of 22. Three Boeing 747-400 aircraft were inducted during 1993-94 and their commercial operation started with effect from 1 September, 1993, 14 November, 1993, 12 December, 1993 respectively.

2.2.3 The budgeted and actual growth in passenger and cargo traffic during the years 1990-91 to 1993-94 is shown in the table below:

(in million RTKMs)

Statement showing the traffic growth during 1990-91, 1991-92, 1992-93 and 1993-94

Year	Passenger Traffic		Cargo Traffic		Total Traffic	
	B	A	B	A	B	A
1989-90 (Last year of 7th Plan taken as base year)		844.2		594.8		1439.0
1990-91	930.5	808.0	603.2	569.0	1533.7	1377.0
	10.2	(-)4.3	1.4	(-)4.3	6.6	(-)4.3
1991-92	850.9	735.7	499.4	404.8	1350.3	1140.5
	5.3	(-)8.9	(-)12.2	(-)28.9	(-)1.9	(-)17.2
1992-93	823.2	764.5	430.0	321.5	1253.2	1086.0
	11.9	3.9	6.2	(-)20.6	9.9	(-)4.8
1993-94	842.7	728.2	387.7	364.9	1230.4	1093.1
	10.2	(-)4.7	20.6	13.5	13.3	0.6

B = Budget, A = Actual

The figures in the second line against each year indicate the percentage growth over the previous year calculated as under:-

Projected growth rate =

$$\frac{(\text{Budget} - \text{Last years actual}) \times 100}{\text{Last year's actual}}$$

Actual growth achieved =

$$\frac{(\text{Actual} - \text{Last year's actual}) \times 100}{\text{Last year's actual}}$$

2.2.4 It is clear that:-

- There has been a steady decline in Air India's passenger traffic over the years. The marginal improvement made during 1992-93 could not be

sustained during 1993-94 when the passenger traffic touched the lowest level of 720.2 million RTKM.

- b) The cargo traffic fell even more rapidly to 321.5 million RTKM in 1992-93 from 594.8 million RTKM in 1989-90. There was, however, an uptrend during 1993-94.
- c) The actual rate of growth was very significantly lower than the budgeted rate of growth for both passenger and cargo traffic in all the four years.
- d) There was a positive growth of 0.6 percent in overall traffic during 1993-94 only. This was achieved by a 13.5 percent growth in cargo traffic during the year. However, compared to the budgeted overall growth rate of 13.3%, it indicated a poor performance.

### **2.3 Acquisition of six airbus A-310-300 aircraft**

**2.3.1** During 1981-82 Air India, which had a fleet of seven Boeing 707 aircraft, acquired three A-300-B4 aircraft, even though it was clearly understood that this aircraft could not fully replace the Boeing 707 on all the routes due to its range limitations. It was realised at that time that depending on market and technological developments, it would be necessary for Air India to consider acquisition of some other type of aircraft for delivery in 1984-85 to replace the remaining Boeing 707 aircraft.

**2.3.2** However, it was observed in Audit that while phasing out the remaining Boeing 707 aircraft, Air India opted and acquired six A310-300 airbus aircraft eventhough the sub-committee (headed by Shri JRD Tata) appointed by the Board of Air India had recommended (9 January, 1984) acquisition of Boeing 767-200 aircraft due to its technical superiority. Soon thereafter, in the very next Board meeting, the Air India Board constituted a negotiating group, without Shri JRD Tata, to obtain the best

possible terms and conditions from the manufacturers as it felt that considerable scope existed for negotiations on price and other terms and conditions with the manufacturers, which would have an impact on product cost and the final selection of the aircraft.

**2.3.3** The proposal to acquire Airbus A310-300 aircraft was approved based on the outcome of these negotiations and a comparative evaluation by the negotiating group of the financial results of the two negotiated offers.

**2.3.4** The considerations on which the final decision to purchase the six Airbus A 310-300 aircraft in preference to the Boeing 767-200 ER was arrived at by the Board of Directors of Air India are briefly summed up below:

- a) Achieving higher level of profitability by purchasing Airbus (six or twelve aircraft) instead of Boeing 767-200 ER aircraft. Both types of aircraft were expected to yield operating losses over a period of 10 years, the loss in Airbus being less by Rs.21.34 crores.
- b) Replacing Boeing 707 aircraft on India-Africa route, for augmentation of the capacity on the India-Gulf route, and thereafter for the replacement of the Boeing 747 aircraft on the India-Japan and India-Australia routes, to produce better financial results, especially in view of anticipated lower fuel consumption of the Airbus aircraft which was to be fitted with new generation G.E. CF6-80 C2 engines.

**2.3.5** The Board of Directors of Air India considered the technical advantages of acquiring Boeing 767-200 ER for long haul routes. After satisfying itself about the financial advantages of the offer by Airbus Industrie, the Board decided (6 June, 1984) to acquire six A 310-300 aircraft in 1986 subject to Government's approval. Based on Government of India approval on 2 April, 1985, an agreement was entered into with



Airbus Industrie on 8 April, 1985 for supply of six A 310-300 Airbus aircraft at a total cost of Rs.531.78 crores.

### **Performance guarantee regarding**

#### **Fuel Burn**

2.3.6 The agreement with Airbus Industrie for purchase of six A310-300 aircraft provided for a performance guarantee regarding fuel burn, clearly specifying the extent of penalties, which was introduced for the first time in an aircraft purchase agreement executed by Air India. In case the aircraft did not meet the guaranteed fuel burn specifications at the time of delivery, Airbus Industrie would pay a penalty of US \$ 4000 for each percentage point of excess fuel burnt per aircraft per month for the first five years from the date of delivery of such aircraft and subject to a maximum of US \$ 4,00,000 per deficient aircraft covered by the agreement. None of the six Airbus A 310-300 aircraft could achieve the guaranteed fuel burn figures at the time of delivery and the excess fuel burnt was found to be 1.07 percent per aircraft per month. As per the terms agreed to at the time of purchase of A310-300 aircraft, Air India had recovered from Airbus Industrie an amount of US \$ 15,40,800 towards 1.07 percent shortfall in performance of the first six aircraft over the guarantee during the first five years of operation.

2.3.7 Apart from 'fuel burn guarantee', Air India also obtained a deterioration guarantee from the engine manufacturers at the time of purchase of the aircraft. According to this guarantee, excess cost of fuel due to increase in fuel consumption beyond 2 percent over the base-line established during initial service was to be compensated by the engine manufacturers viz. General Electric Company of USA.

2.3.8 From the performance reports prepared by Performance Engineering and Fleet Management Section of Engineering Department, it was observed that at several times Air India had noticed occurrence of excess or higher fuel consumption and rapid

deterioration or increasing trend of CF6 80C2 engine degradation. A performance audit carried out by Airbus Industrie at the request of Air India in mid 1989 revealed that there was 4.1 percent specific range variation in fuel consumption of which 3.4 percent was related to engine deviation or deterioration.

The Management explained (February,1994) that during the initial revenue flights after procurement, the range variation in fuel consumption was found to be 1.8 percent which was taken as the base. As subsequent engine degradations did not exceed the margin of 2 percent over the base-line of 1.8 percent i.e. 3.8 percent in all, no claim could be lodged with the engine manufacturers.

**2.3.9** Further, in order to improve the range capabilities of Airbus A310-300 and to make it more comparable with Boeing 767-200 ER aircraft, Airbus Industrie had proposed that additional fuel could be carried in the lower cargo holds, by reduction in the number of baggage containers, and consequently reducing the payload availability. With this configuration, fuel efficiency of the Airbus did not compare favourably with that of Boeing 767-200 ER. Air India, however, did not opt for this configuration. Airbus A310-300 was selected primarily because of the fuel burn guarantee (for first five years only). This also did not prove to be beneficial in the long run. Thus, Air India got saddled with Airbus A 310-300 aircraft instead of buying Boeing 767-200 ER, which was a technically superior aircraft as brought out earlier by Tata Committee and also accepted in the Memorandum for Public Investment Board. It is pertinent to point out here that Air India was the first customer of Airbus aircraft fitted with G.E.'s new engine CF6-80C2, which had not yet been tried out.

### **Economics of purchase**

**2.3.10** The negotiating committee constituted by the Air India Board in January 1984, after their negotiations with manufacturers, prepared (May, 1984) a comparative statement of all likely revenues and expenses for both Boeing 767-200 ER and Airbus

A310-300 aircraft over a period of ten years and came to the following computation for a fleet of six aircraft of each type:

(Rs. in crores)			
Aircraft	Revenues	Expenses	Profit(+)/ Loss(-)
Airbus A310-300	1747.90	1955.90	(-)208.08
Boeing 767-200	1748.60	1978.02	(-)229.42
(Reduction in loss for Airbus Rs.21.34 crores).			

**2.3.11** A scrutiny of the comparative statement revealed that reduction in loss by Rs.21.34 crores in case of Airbus A 310-300 was mainly on account of estimated savings in (i)fuel cost (Rs.7.94 crores), (ii)depreciation (Rs.9.03 crores), and (iii)interest on loans (Rs.8.50 crores), which was partly offset by excess consumption of spare parts and repairs (Rs.4.10 crores). Although supporting details of the calculations done by the negotiating committee were not made available, the saving of Rs.7.94 crores in fuel consumption was estimated as a sequel to the fuel burn guarantee given by Airbus Industrie, which has already been commented upon. The Management in their reply (November, 1993) stated that the supporting details of the calculations leading to the figure of Rs. 21.34 crores were not available with them. The Ministry's reply (October, 1994) was silent on this issue.

**2.3.12** There was no correlation between the calculations of the negotiating committee and the projections of profitability made in the Project Report prepared by Air India in September, 1984. The Project Report, which formed part of the memorandum for the Public Investment Board, envisaged an incremental profit of Rs.61.57 crores from the operation of six Airbus A 310-300 aircraft over a period of four years from 1987-88 to 1990-91. As against this, the actual loss suffered by Air India on operation of these aircraft during these years amounted to Rs.106.78 crores. This was mainly due to under-estimation of costs and over-estimation of revenues in the Project Report.

The Ministry in its reply stated (October, 1994) that the losses incurred on A310-300 operations during the years 1987-88 to 1990-91 have been made up from profit during the next two years i.e. 1991-92 and 1992-93. During the year 1993-94 also, Air India earned a profit of Rs. 104 crores from operations of A310-300 aircraft by the deployment of these aircraft on the profit making routes viz. the Gulf sector and Singapore/ Jakarta route. In any case, the projections made for the first four years of operations, which formed the basis for the purchase decision, did not come true.

### **2.3.13 Deployment of purchased Aircraft**

One of the major considerations for purchase of Airbus A310-300 was replacement of Boeing 747 aircraft on leaner routes like India-Japan. Some of the advantages cited by the Management were (a)15% lower fuel consumption compared to Boeing 747, (b)reduction in operating costs and doubling frequencies etc.

**2.3.14** However, Airbus A310-300 was not deployed on India-Japan route at all during five years ending 1990-91. The Management in reply stated that the aircraft was not deployed on this route because the feedback received from the field was that this would be a retrograde step and switching from Boeing 747s to A310-300s on India-Japan route would adversely affect Air India's appeal and image. Thus, there was a total about turn in Air India's perception, planning and strategy in this regard. One of the main planks on which the purchase of Airbus A310-300 aircraft was justified ceased to exist soon after its acquisition.

### **2.3.15 Pressure panel Corrosion on Airbus aircraft**

An inspection in February 1992 revealed that out of six (earlier purchased) A310-300 aircraft, four aircraft had suffered corrosion on the pressure panel. Air India till July, 1992 had to incur a total expenditure of US \$ 0.353 million equivalent to Rs.1.06 crores (approx.) on repair. In addition Air India also suffered a loss of potential revenue to the extent of Rs.2.92 crores due to extended grounding of these aircraft for the repair of corroded pressure panels. It is pertinent to mention here that

Airbus Industrie has already rejected the comprehensive warranty claim of US \$ 1.48 million made by Air India on this account.

The Ministry stated (October, 1994) that, based on further legal advice, the issue was once again taken up with Airbus Industrie, who have agreed to give an immediate credit of US \$0.24 million towards pro-rata compensation for the material cost.

## 2.4 Fleet Utilisation

2.4.1 The following table indicates the budgeted as well as actual utilisation of aircraft in terms of flying hours for the years 1986-87 to 1993-94 for aircraft owned/leased by Air India:

Year	Budgeted flying hours	Actual hours flown	Utilisation percentage
1986-87	58222	54210	93.1
1987-88	66855	64167	96.0
1988-89	67245	64088	95.3
1989-90	69895	67155	96.1
1990-91	72870	64077	87.9
1991-92	67463	62423	92.5
1992-93	70282	63818	90.8
1993-94	70447	64336	91.3

It would be observed that utilisation of aircraft did not match the budgeted hours especially during the year 1990-91, when the utilisation was 87.9 percent.

The Ministry stated (October, 1994) that since the budgeted figure was based on targeted flying task for a given schedule/ flights proposed to be operated, any subsequent changes in actual operation due to cancellation of flights, industrial unrest, reduction in fleet etc. tended to reduce the actual utilisation.

2.4.2 When compared to the aviation industry performance world-wide, the average daily utilisation of each aircraft in Air India's fleet had shown a downward trend as detailed below:

(In terms of hours).

Year	Industry utilisation per day - per aircraft					Air India utilisation per day - per aircraft				
	747-200	747-300	A-310	A-300	747-400	747-200	747-300	A-310	A-300	747-400
1986-87	10.35	12.46	6.79	6.52	--	9.98	-	7.21	8.69	--
1987-88	10.69	11.96	6.96	7.11	--	9.72	-	9.04	8.43	--
1988-89	11.10	12.22	6.82	8.13	--	9.18	10.38	8.45	7.66	--
1989-90	11.19	11.88	6.52	8.21	--	9.48	10.25	8.61	8.06	--
1990-91	10.27	11.34	6.28	8.03	--	9.77	10.34	7.70	6.96	--
1991-92	10.12	10.85	6.06	8.26	--	9.52	9.38	9.48	6.42	--
1992-93	10.10	10.60	8.80	6.20	--	8.84	9.23	9.96	9.07	--
1993-94	9.60	10.90	9.00	6.20	11.90	8.01	8.62	9.87	6.89	8.64

It may be mentioned here that industry utilisation per day for Airbus A-310 was low because this aircraft is mainly used for short haul flights.

It would be observed that the utilisation of Air India's Boeing 747-200 and Boeing 747-300 aircraft was lower than the industry utilisation in all the years. Similarly, the utilisation of Airbus A300 aircraft was also lower than the aviation industry average during the years 1988-89 to 1991-92.

2.4.3 Even though the budgets were prepared by the Management after taking into consideration the requirements of Commercial, Engineering and Operational Departments while finalising the schedule of operations, the actual utilisation of aircraft had been much below the budgeted level. One of the reasons for under utilisation was grounding of the aircraft for longer periods than planned. The following table compares the actual and planned grounding in number of days for the period from 1986-87 to 1993-94:

Grounding in number of days:

Year	B-747-200		B-747-300		A-300-B4		A-310-300	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
1986-87	330	576	-	-	137	161	-	-
1987-88	302	538	-	-	119	113	77	185
1988-89	329	439	-	-	203	143	251	293
1989-90	376	503	47	42	124	218	235	346
1990-91	289	654	44	101	107	201	263	426
1991-92	357	751	52	71	182	260	241	548
1992-93	433	732	37	46	51	162	226	307
1993-94	454	616	47	67	101	141	368	536

## 2.5 Delays and cancellations

The following table indicates delays in flights :

Year	Total No. of flights	No. of flights delayed beyond 30 minutes	Percentage of on-time performance	No. of delays due to engineering
1988-89	15825	2420	84.7	509
1989-90	15907	2463	84.5	522
1990-91	14198	2291	83.9	628
1991-92	15453	1766	88.6	460
1992-93	15890	1933	87.8	437
1993-94	16230	2004	87.7	410

2.5.1 It would be seen that there was no steady improvement in on-time performance by Air India. Majority of flight delays were for reasons other than engineering. A detailed analysis of the delays and cancellations of flights operated by Air India from 1986-87 to 1988-89 (October, 1988) and its consequential impact on Air India's operations and finances was made in the C&AG's Audit Report (Comm.) No.10 of 1989.

## CHAPTER - 3

### COMMERCIAL PERFORMANCE

#### 3.1 Capacity utilisation

3.1.1 The available capacity (ATKMs), the capacity utilised (RTKMs) and load factor, planned as well as actually achieved, for each type of aircraft during the last eight years ended 1993-94 were as under :

Sl. No.	Particulars	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
<b>1. Capacity offered: ATKMs (in Millions)</b>									
a)	707	35.2	-	-	-	-	-	-	-
b)	747-200	1197.5	1281.7	1241.8	1213.9	1086.0	996.1	933.8	824.3
c)	747(Combi)	-	-	138.0	361.1	349.2	305.6	302.4	257.4
d)	Airbus B4	192.7	182.9	173.0	175.7	161.5	100.1	133.0	146.5
e)	Airbus310	143.5	328.0	327.6	341.1	375.1	449.3	477.0	454.5
f)	Wet lease	350.6	387.6	295.6	199.7	288.4	122.0	58.5	82.3
g)	747-400	-	-	-	-	-	-	-	142.9
h)	737-200	-	-	-	-	-	-	-	0.4
<b>Total</b>									
i)	Actual	1919.5	2180.2	2176.0	2291.5	2260.2	1973.1	1904.7	1908.4
<b>ii) Plan</b>									
	target	1957.5	2066.1	2203.1	2352.5	2418.2	2176.9	2145.8	2121.3
<b>2. Capacity utilised: RTKMs (in Millions)</b>									
a)	707	18.5	-	-	-	-	-	-	-
b)	747-200	737.8	818.1	783.3	749.3	667.4	600.5	558.4	468.7
c)	747(Combi)	-	-	78.6	220.9	208.2	174.0	159.8	134.1
d)	Airbus B4	124.4	118.8	102.6	106.9	100.5	58.8	80.5	75.2
e)	Airbus310	70.2	167.5	181.3	201.0	206.0	244.8	266.3	266.7
f)	Wet lease	255.4	281.6	226.5	163.5	198.6	70.6	29.8	65.9
g)	747-400	-	-	-	-	-	-	-	82.1
h)	737-200	-	-	-	-	-	-	-	0.1
<b>Total</b>									
i)	Actual	1206.3	1386.0	1372.3	1441.6	1380.7	1148.7	1094.8	1093.1
<b>ii) Plan</b>									
	target	1267.5	1344.0	1428.5	1525.1	1540.8	1353.1	1260.2	1239.3



Sl. No.	Particulars	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
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### 3. Load factor for each aircraft type

#### a) 707

Overall	54.1	( Phased out)							
Breakeven	56.5								

#### b) 747-200

Overall	61.8	63.9	63.4	62.0	61.7	60.9	60.6	56.9
Breakeven	63.1	68.2	59.9	56.8	57.2	52.7	50.0	50.0

#### c) 747(Comb)

Overall	-	-	57.0	61.2	59.6	56.9	52.9	52.1
Breakeven	-	-	56.4	63.0	61.6	58.5	56.1	57.1

#### d) Airbus B4

Overall	64.4	65.0	59.3	60.8	62.2	58.7	60.5	51.7
Breakeven	50.9	55.8	50.3	47.8	49.5	62.2	42.3	48.5

#### e) Airbus310

Overall	49.4	51.1	55.4	59.1	55.0	54.5	55.8	58.7
Breakeven	54.7	63.0	62.6	65.5	56.8	51.4	48.7	48.5

#### f) Wet lease\*

Overall	75.2	67.4	73.8	74.6	66.8	58.1	48.1	80.1
Breakeven	64.7	58.3	59.9	66.1	59.4	51.3	37.2	75.0

#### g) 747-400

Overall	-	-	-	-	-	-	-	57.6
Breakeven	-	-	-	-	-	-	-	97.0

#### h) 747-200

Overall	-	-	-	-	-	-	-	23.5
Breakeven	-	-	-	-	-	-	60.3	

### 4. Load factor for the system as a whole

#### Overall

i) Actual	63.1	63.7	63.2	63.1	61.2	58.5	57.8	57.3
ii) Plan target	64.6	65.1	64.8	64.8	63.8	62.3	58.8	58.5

#### Breakeven

i) Actual	60.8	66.6	60.7	59.6	57.9	53.7	49.1	51.7
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\*Note: Average except for 1986-87

Plan targets for 1990-91, 1991-92 and 1992-93 and 1993-94 have been taken from Revenue/Expenditure Budgets, as these were not reflected in the Annual Plans.

3.1.2 An analysis of these figures revealed the following:

i) The capacity provided (ATKMS) and utilised (RTKMS) by Air India during the Seventh Plan period except in the 1987-88 was lower than the plan targets. Similarly, the capacity provided and utilised by Air India during the last four years ended 31 March, 1994 was also lower than the budget estimates.

ii) From 1990-91 to 1992-93, there was a continuous decrease in actual capacity offered (ATKMS) as well as capacity utilised (RTKMS) by Air India largely due to gradual reduction in the ATKMs and RTKMs of the wet lease aircraft. The position seemed to have been stabilised during 1993-94.

iii) The overall actual load factor dropped from 63.1 percent in 1989-90 to 57.3 percent in 1993-94 and the system breakeven load factor also dropped from 59.6 percent in 1989-90 to 51.7 percent in 1993-94, thereby increasing the differential between the actual and the breakeven load factors from 3.5 in 1989-90 to 5.6 in 1993-94. This increased differential, mainly enabled Air India to earn improved profits despite reduction in ATKMS and RTKMS.

**3.2.1** The following table indicates the growth of passenger and cargo traffic during the last eight years ended 1993-94.

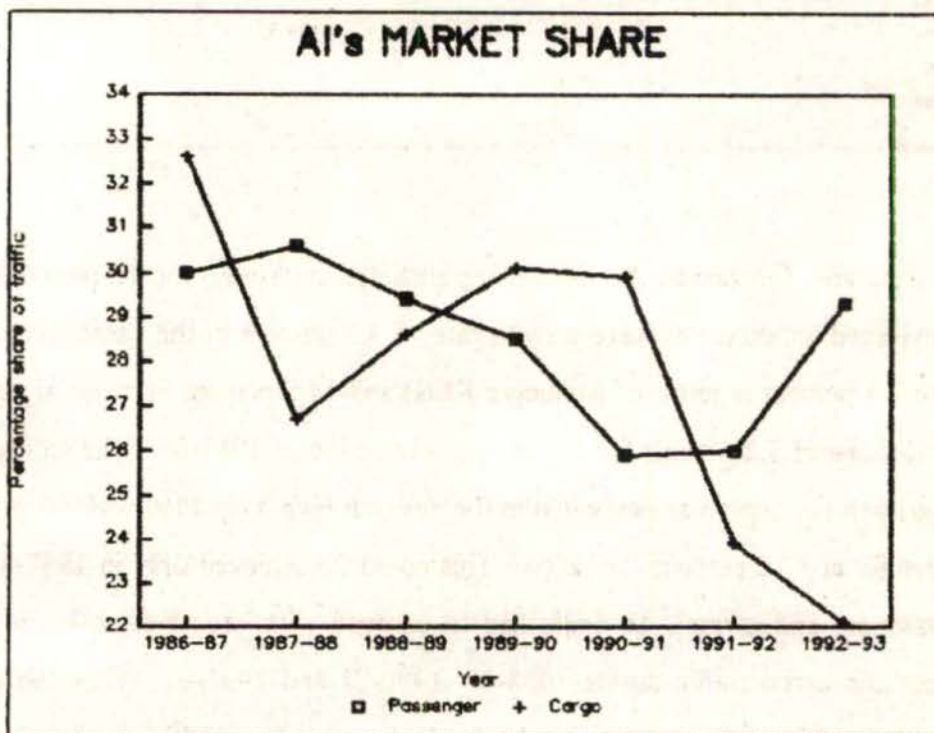
Sr. Year	No of passenger carried	Percentage of growth over previous year.	Cargo carried (in tonnes).	Percentage of growth over previous year.
1. 1986-87	18,30,078	2.8	85,529	27.80
2. 1987-88	21,33,333	16.6	97,621	14.00
3. 1988-89	21,22,573	(-) 0.05	96,700	(-) 0.90
4. 1989-90	22,46,204	5.80	1,06,457	10.09
5. 1990-91	21,61,364	(-) 3.78	95,211	(-) 10.05
6. 1991-92	20,04,487	(-) 7.26	75,621	(-) 20.58
7. 1992-93	22,01,449	9.83	66,992	(-)11.90
8. 1993-94	19,90,669	(-) 9.58	71,373	6.54
9. Percentage of growth during the eight year period from 1986-87 to 1993-94		8.77		(-) 16.55
10. Average growth per annum		1.09		(-) 2.06

**3.2.2** The traffic forecast by Air India (Aircraft Selection Study) for the period 1981-1992 envisaged an annual average growth rate of 9.6 percent in the passenger traffic (equal to 9.4 percent in terms of passenger KMs) and 14.5 percent in cargo as against IATA's forecast of 5.2 percent for the comparable period of 1981-89. The anticipated rate of growth per annum as envisaged in the Seventh Five Year Plan was 6.9 percent for passenger and 12 percent for cargo. This could be achieved only in 1987-88 for both passenger and cargo. Air India had to contend with negative growth in both passenger and cargo traffic during 1988-89, 1990-91 and 1991-92. While the cargo traffic continued its down slide during 1992-93 as well before picking up in 1993-94, the passenger traffic which had picked up during 1992-93, faced a reversal of trend in 1993-94. The average rate of growth per annum during the eight year period ending

1993-94 worked out to a very marginal level of 1.09 percent for passenger and a negative growth of 2.06 percent for cargo respectively.

**3.2.3** The slow rate of growth does not appear to be the result of any adverse factor in the industry except during 1990 when the airline industry the world over was in a turmoil due to the Gulf War. It was mainly due to lack of capacity expansion. Air India's fleet size had remained virtually static upto the year 1992-93. There was an increase in capacity during 1993-94 with the induction of three Boeing 747-400 aircraft during the year. One more Boeing 747-400 aircraft was inducted in June, 1994.

**3.2.4** Air India's market share of passenger and cargo traffic to/from points operated by Air India during the period from 1986-87 to 1992-93 was as under :



\* This graph excludes industry data for points to which Air India does not operate and therefore has zero market share.

3.2.5 It would be seen that Air India's market share of passenger traffic into and from India had been sharply declining from 1987-88 to 1990-91. However, there was a significant improvement during the year 1992-93. But the market share of cargo traffic had plummeted during the last two years ending March 1993.

3.2.6. The Management stated (February, 1995) that in order to reverse this trend, Air India has embarked on an ambitious expansion plan of more than doubling the number of aircraft in its fleet over the next seven years - from 26 at present to 54 in the year 2001/02.

### 3.3 Passenger Revenue

3.3.1 The data tabulated below indicates the average revenue realised per passenger during the eight year period ending 1993-94.

Sr. Particulars	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
1. Passenger Revenue (Rs. in crores)	574.03	651.91	778.87	959.90	1155.81	1388.94	1799.71	1831.12
2. Total No. of Revenue passengers	1830078	2133333	2122573	2246204	2161364	2004487	2201449	1990669
3. Average Revenue realised per passenger (Rs)	3136.64	3055.83	3669.46	4273.43	5347.60	6929.15	8175.11	9198.52
4. Increase in Passenger Revenue on account of increase in average fare (Rs. in crores)	-	-	130.25	273.50	495.33	776.40	1126.98	1222.81
5. Passenger Revenue at 1987-88 fare level (Rs. in crores)	-	651.91	648.62	686.40	660.48	612.54	672.73	608.31

**3.3.2** While the passenger revenue increased from Rs.574.03 crores in 1986-87 to Rs.1831.12 crores in 1993-94, i.e. an increase of about 219 percent, the declining trend in the number of passengers carried during the years 1990-91 and 1991-92 was reversed during the year 1992-93 but it again decreased by 9.6 percent during 1993-94 to reach a level below that of 1991-92. The increase in profitability for the last three years was due to increase in fares and the difference between breakeven and overall load factors.

**3.3.3** Air India's fare structure consists of normal fare for first, executive and economy class and promotional or excursion fares, which are only for economy class.

**3.3.4** The international fare structure to/from India had a high directional imbalance as the fares for tickets procured in India were much lower than those procured outside. This imbalance became very pronounced after the devaluation of the Rupee in July, 1991. The imbalance ranged from 14 percent to as much as 197 percent. While the dollar fares remained at the same level, the rupee fares were not increased sufficiently upwards to bring them at par with dollar fares. It thus became cheaper to procure tickets in rupees rather than dollars. Further, as a result of relaxation of FERA regulations in January, 1993, any foreign national could purchase a ticket in Indian rupees for sectors outside India also. Even foreign airlines not operating to India could sell tickets in Indian Rupees through their agents. This resulted in substantial outgo of foreign exchange. In order to reduce the imbalance, Air India increased its fares on three occasions between April, 1991 and June, 1993 by approximately 92 percent. But the imbalance still persists, though at a reduced level.

The Ministry, while accepting the problem caused by directional imbalance in fares, stated (October, 1994) that it had raised the Rupee fares and thus put an end to further erosion of the Indian Rupee fares in US dollar terms and reduced the imbalance appreciably.

### 3.4 Cargo

3.4.1 The following table shows the budgeted and actual revenue from cargo operations, freight carried in tonnes and increase in cargo over the years:

(Rs. in crores)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Budget	198.60	217.11	210.3	219.90	275.02	282.80	315.01	297.22
Actual	170.87	190.12	204.66	231.85	268.40	269.67	255.97	297.21
Achievement(%)	86.0	87.6	97.3	105.4	97.6	95.4	81.26	99.99

A further analysis of the quantum of cargo actually carried and the revenue earned during these eight years is given below:

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
1. Cargo Revenue (Rs. in crores)	170.87	190.12	204.66	231.85	268.40	269.67	255.97	297.21
2. Freight carried (in tonnes)	85529	97621	96700	106457	95211	75621	66992	71373
3. Average Revenue realised per tonne (in Rs.)	19978	19475	21164	21779	28190	35660	38209	41643
4. Increase in cargo revenue due to increase in average rates (Rs. in crores)	-	-	16.33	24.52	82.98	122.40	125.50	158.22
5. Cargo revenue at 1987-88 level (Rs. in crores)	-	190.12	188.32	207.33	188.42	147.27	130.47	139.00

3.4.2 The quantum of cargo actually carried in 1993-94 as compared to 1986-87 showed a downward trend of 16.55 percent. The cargo revenue computed for the

years 1988-89 to 1993-94 at the 1987-88 tariff level conclusively proves that the increase in the cargo revenue was not due to increase in load carried.

This is evident from the fact that though the yield gradually increased from Rs. 21,779 per tonne in 1989-90 to Rs. 41,643 per tonne in 1993-94, the freight carried dropped from 106,457 tonnes to 71,373 tonnes during the same period. The increase in yield was on account of the following:-

- a) Effective April, 1990, Government deregulated cargo rates allowing airlines to charge rates depending upon market conditions, using IATA rates as the floor level; and abolished the mandatory rates applicable to Air India;
- b) Substantial increase in IATA rates into India in 1990-91 and 1991-92; and
- c) Devaluation of the Rupee.

**3.4.3** It was brought out by the Management during the Audit Board meeting (January, 1994) and by the Ministry in their reply (October, 1994) that the reduction in Air India's market share in cargo was due to:

- a) Government of India's directive imposing 36 hours cooling period (subsequently reduced to 24 hours) on cargo carried by Air India;
- b) Government's open sky policy (March, 1990) permitting foreign carriers to substantially increase their cargo capacity, and operate freely, even with multiple halts;
- c) imposition of restrictions in 1991 on imports by PSUs;
- d) discontinuation of wet leased freighter capacity by Air India due to uneconomical operations; and



- e) advantageous position of the foreign airlines for the major cargo markets of Europe, UK and USA as they had a direct product from Indian gateways, coupled with the directional imbalance between export and import cargo.

Owing to these constraints, Air India Management had taken a conscious decision during the year 1992-93 to carry cargo mainly in its line flights and not to invest in the cargo infrastructure.

There was, however, a change in Air India's policy on cargo during 1993-94 and Air India decided to once again take freighters on lease to augment its cargo capacity. Accordingly, twice weekly IL76 operations were restarted on the India/Zurich route and once weekly services on the India/USA route from July, 1993. This was partly responsible for increase in the cargo tonnage during 1993-94.

#### **3.4.4 Cargo operations at London - Reduction in earnings**

The cargo handled by Air India, London dropped from 4285.6 tonnes in 1989-90 to 2512.5 tonnes in 1991-92. Consequently, the revenues dropped from Rs. 14.80 crores to Rs. 11.92 crores in 1991-92, resulting in a substantial reduction in earnings to the extent of Rs.2.88 crores. But the percentage ratio of commission/ incentive to revenues increased from 48.52 in 1989-90 to 89.28 in 1991-92.

The Ministry stated (October, 1994) that the increase in quantum of commission/ incentive was mainly due to:

- (a) reduction in the market driven rates on account of increased competition in the wake of open sky policy; and
- (b) adverse fluctuation in the exchange rate of Indian rupee vis-a-vis Pound Sterling.

### **3.5 General Sales Agent**

**3.5.1** A General Sales Agent's (GSA) role is to act as a sales and ticketing office for an airline where the airline is not adequately represented or does not have any representation in a particular country/territory. GSAs are appointed under IATA Resolution NO.876. In countries of the Gulf Region, Air India had to appoint GSAs inspite of having its own offices, because such agencies in these countries are owned by influential people who have control over the market. In certain situations, GSAs are appointed because the local law stipulates such appointment of GSAs for the area concerned. GSAs are of two types viz, an airline party and non-airline private parties. Air India had appointed 77 GSAs as on 1 January, 1994 all over the world (42 Airline GSAs and 35 private party GSAs) and Air India acts as a GSA for 33 foreign carriers within India. GSAs are entitled to agency commission of 9 percent on passenger sales and 5 percent on cargo sales besides 3 percent and 2 1/2 percent overriding commission for passenger and cargo transportation respectively.

**3.5.2** Indian Airlines has been appointed as GSA of Air India within India (except Bombay, Delhi, Calcutta, Madras, Bangalore, Hyderabad, Ahmedabad, Vadodara, Pune, States of Kerala, Goa and Jammu and Kashmir where Air India has its own office) and in Nepal and Afghanistan. In Punjab, Haryana, Himachal Pradesh, Chandigarh, Delhi, Uttar Pradesh, Rajasthan, Bihar, Orissa, Assam, West Bengal(except Calcutta Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Manipur and Tripura) Air India has appointed other GSAs.

#### **3.5.3 Performance of private General Sales Agents**

A test check of the performance of one of the private GSAs, revealed that their performance was far from satisfactory. They were appointed by Air India as GSA for passenger and cargo transportation in the territory of Delhi, Uttar Pradesh, Rajasthan, Punjab, Himachal Pradesh and Haryana with effect from 11 August, 1978.

3.5.4 The table below shows that the sales made by this GSA were much below the target set for him.

(Rs. in lakhs)			
Year (1)	Target (2)	Revenue (3)	Variance (4)
1986-87	1150	899.01	(-) 21.8
1987-88	1500	1315.97	(-) 12.03
1988-89	2004	1613.97	(-) 19.96
1989-90	2642	1552.28	(-) 14.17
1990-91	2700	1291.62	(-) 52.16
1991-92	2574	2588.00	(+) 0.54
1992-93	3183.	3200.00	(+) 0.17

GSA's revenue had been far below the target upto the year 1990-91.

3.5.5 When a GSA, other than an airline is appointed, the financial risk is required to be given due consideration and a bank guarantee is obtained for an amount to cover two fortnight's sales proceeds with a view to safeguard the interests of Air India. In the case of this particular GSA, a bank guarantee of Rs.25 lakhs was furnished in the initial period in 1978, which was raised to Rs.40 lakhs. Though there was increase in the sales subsequently there was no corresponding increase in the bank guarantee. This is inspite of the fact that Internal Audit Department of Air India suggested raising the minimum bank guarantee to Rs.70 lakhs way back in 1983. Besides, the Manager/RD, New Delhi also had recommended (1987-88) that in view of the monthly business being approximately Rs.100 lakhs, the bank guarantee should be raised to Rs.85 lakhs.

The Ministry stated (October, 1994) that since September, 1990 the Bank guarantees had been increased to Rs. 95 lacs. However, the guarantee currently required (October, 1994) from this agent was Rs. 267 lacs.

### 3.5.6 Loss due to non-payment of Sales revenue by the Agents

During the year 1990-91 to 1993-94, Air India had written off as bad debts a sum of Rs.962.50 lakhs which was to be recovered from sales agents and other

parties. Further, Air India as on March 1994 had identified a sum of Rs.2431 lakhs as bad debts and made suitable provision in the books of account. In this regard the following lacunae were observed in the realisation of sales revenue from the agents who became defaulters:

- (1) Inadequate bank guarantees, which were disproportionately lower than the average credit sales made by agents.
- (2) Excessive ticket stocks were placed with agents without taking into consideration the credit worthiness and previous sales performance.
- (3) An inadequate system of internal check on the working of agency functions resulted in agents resorting to ticketing irregularities which finally led to non-payment.
- (4) Acceptance of out-station cheques from the agents which were finally dishonoured by the banks. This enabled the agents to sell as much as possible before the non-payment of their cheques could be intimated by Air India's banks.
- (5) Mis-use of credit card facilities, by the agents especially in USA.

A few cases of defaults noticed in audit are given in Annexure II.

While maintaining that write off of outstanding dues from agents forms an insignificant percentage of the total passenger revenue, the Ministry stated (October, 1994) that the position had been reviewed and suitable remedial measures taken.

### **3.6 Routewise profitability**

**3.6.1** During the period under review, fifteen scheduled passenger services and four freighters were under operation. Out of the fifteen scheduled passenger services, only four routes were consistently making profit (with the exception of India/Japan during

1992-93), three routes were intermittently making profit and the other eight routes were always loss making as given below:

I. Routes consistently making profit

(Rs. in lakhs)

Route	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	Total
India/Japan	330	1234	1836	130	1948	(-) 406	1584	6656
India/Gulf	4329	5107	9331	10596	12154	28433	21947	91897
India/USSR	375	1008	1298	1647	2317	1164	1217	9026
India/Jakarta	--	--	--	--	--	--	279	279
<b>Total Pax (Profit)</b>	<b>5034</b>	<b>7349</b>	<b>12465</b>	<b>12373</b>	<b>16419</b>	<b>29191</b>	<b>25027</b>	<b>107858</b>

II. Routes intermittently making profits

Route	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	Total
India/USA	(-)1668	371	329	(-)1257	508	469	(-)4252	(-)5500
India/Singapore	(-)1158	(-)394	284	61	1139	1091	1785	2808
India/East Africa	(-) 205	(-) 70	2	(-) 94	(-) 287	(-)351	492	513
<b>Total</b>	<b>(-)3031</b>	<b>(-) 93</b>	<b>615</b>	<b>(-)1290</b>	<b>1360</b>	<b>1209</b>	<b>(-)1975</b>	<b>(-)3205</b>

III. Routes incurring losses

Route	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	Total
India/UK	(-)1697	(-) 818	(-) 485	(-) 688	(-) 356	(-)1049	(-) 3014	(-) 8058
India/Continental	(-) 785	(-)1031	(-) 164	(-)1236	(-) 88	(-)1293	(-) 8586	(-)13183
India/(Australia)	(-) 788	(-) 288	(-) 269	(-) 840	since-discontinued	--	---	(-) 2185
India/Hongkong	(-) 521	(-) 235	(-) 268	(-) 432	(-) 366	dis-continued	(-) 56	(-) 1878
India/Canada	--	--	--	--	(-)1284 (Started from June '91)	(-) 804	(-) 2034	(-) 4122
India/Bangkok	--	--	--	--	---	(-) 616	---	(-) 616
India/Dacca	--	--	--	--	---	(-) 84	(-) 219	(-) 303
India/South Africa	--	--	--	--	---	--	(-) 109 (Started from 2 Oct., 93)	(-) 109
<b>Total Pax (Loss)</b>	<b>(-)3791</b>	<b>(-)2372</b>	<b>(-)1186</b>	<b>(-)3196</b>	<b>(-)2094</b>	<b>(-)3846</b>	<b>(-)14018</b>	<b>(-)30503</b>

### 3.6.2 Route wise profitability in freighter services

Route	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	Total
India/Japan	392	135	(Services withdrawn since Oct. 1988)				---	527
India/Zurich	382	501	59	264	110	(-)164	(-)602	550
India/USA	(-)236	(-)285	(-)412	(-)1100	(-)290	discontinued	(-)294	(-)2617
India/Europe	(-)319	(-)306	--	(-) 857	(-) 47	discontinued	--	(-)1529
	219	45	(-)353	(-)1693	(-)227	(-)164	(-)896	(-)3069

Out of the four freighter routes, one route viz. India/Zurich made profit consistently upto 1991-92 after which it was incurring losses. Two routes namely, India/USA and India/Europe were consistently incurring losses.

**3.6.3** The table in paragraph 3.6.1 indicates that India/Gulf route is the major route which fetches maximum profit. The pattern of traffic on Gulf route reveals that the major factor which had made this route profitable is the movement of ethnic traffic from/to India. But for the Gulf route, Air India would have incurred an operating loss of Rs.177 lakhs in 1988-89 and Rs.4402 lakhs in 1990-91 and suffered a substantial reduction in operating profit in 1989-90 and 1992-93.

**3.6.4** The overall load factor obtained by Air India does not compare favourably with some of the competing world airline carriers as shown below :

Sl.No.	Carrier	Overall load factor (January to September, 1991)
1.	Singapore Airlines	70.0
2.	Malaysian Airlines	66.7
3.	Japan Airlines	65.1
4.	Thai International Airlines	62.1
5.	Cathay Pacific	61.1
6.	Saudi Airways	48.5
7.	Air India	60.8

### **3.6.5 Off-line stations**

As on 31 March, 1994, there were 60 off-line stations (as compared to 43 on-line stations) of Air India. Though the number of off-line stations has been marginally reduced over the years, the existing number is still large. Of the total 60 off-line stations, 45 stations were located abroad. Besides, there are as many as 23 resident sales representatives both in India and abroad (31 March, 1994). There are as many as 20 off-line stations on the network with a cost to revenue ratio exceeding 25 percent. Cost to revenue ratio in respect of Baghdad (closed down in 1992-93) was as much as 196.44 percent in 1987-88, 115.20 percent in 1988-89 and 161.50 percent in 1991-92 (the station was closed for traffic in 1989-90 and 1990-91). The cost-revenue ratios of off-line stations in India was generally within the reasonable limit except in respect of Western India and Southern India regions where it was far in excess of the commission (11.5 to 12 percent) paid to GSAs.

### **3.7 Pooling/ Joint ventures arrangements with other airlines**

**3.7.1** Commercial pooling arrangements are made between airlines for enhancing commercial cooperation by developing traffic between two countries with a view to achieving a balanced distribution of traffic between the two national carriers and effectively countering the activities of other carriers on the pooled routes. Pooling arrangements work perfectly only if each partner contributes its proper share of capacity and carries its share of business. All aspects of the pooling arrangements are incorporated in bilateral agreements entered into by the airlines. Air India also has joint venture with various carriers, where the foreign carriers operate with their aircraft, but under dual designation so that Air India can retain the presence in such markets without physically operating to these countries.

**3.7.2** The overall results of various types of arrangements like pools, commercial agreements and joint ventures from 1986-87 to 1993-94 as reflected in the accounts of Air India are shown below:

Sr. No.	Year	No. of pooling arrangements	Budgetted Net Revenue (Revised)	Actual Net Revenue earned	Increase/ (short-fall)
1	1986-87	29	27.53	30.35	2.82
2	1987-88	29	28.17	32.47	4.30
3.	1988-89	25	33.88	35.67	1.79
4.	1989-90	22	41.49	40.46	(1.03)
5.	1990-91	22	44.73	38.06	(6.67)
6.	1991-92	21	73.29	78.17	4.88
7.	1992-93	22	89.02	92.50	3.48
8.	1993-94	24	91.88	101.80	10.80

**3.7.3** Except for a marginal dip during the year 1990-91 because of the Gulf War, the net pool revenue showed an upward trend throughout. There was a quantum jump in the net pooled revenue from 1991-92 onwards. This was due mainly to higher receipts from Aeroflot, Swissair, Royal Jordan and Gulf Air on account of improved carriage by them as compared to Air India as also because of devaluation of the Indian rupee in July, 1991.

### **3.8 Inflight Services**

**3.8.1** The main functions of the Inflight Service Department are catering on board, finalisation of hotel accommodation contracts, selection of items for inflight sales on board, etc.

**3.8.2 (a)** The Corporation was having 28 meal uplift stations as on 31 March, 1994 through out its network. Catering expenditure on an average worked out to



Rs. 23.89 lakhs per day during 1993-94. Air India had twelve monopoly caterers, out of which seven caterers were without any formal contract. Air India had entrusted catering work in five stations without calling for tenders and without obtaining competitive rates; however, at the instance of audit, Air India floated tenders in all these stations and selected caterers at competitive rates. A comparison of the rates prevailing before calling for tenders and thereafter revealed that Air India had been incurring avoidable expenditure on catering in foreign exchange, by not taking advantage of competition locally available. The avoidable expenditure noticed in audit in Singapore alone worked out to Rs.365.88 lakhs for the years 1983-84 to 1989-90. Besides, Air India was able to save Rs.229.46 lakhs on catering expenditure (Singapore Rs.186.98 lakhs for the period from 1 October, 1989 to 31 March, 1991 and Rs.42.48 lakhs in Tokyo during 1991-92) due to substantial reduction in the meal rates charged by the existing caterers.

b) Air India was entitled to 5 percent volume discount on payment to the caterer at London in excess of gross turnover of 3.6 million pounds and 2.8 million pounds for the periods 1 December, 1989 to 31 March, 1991 and 1 April, 1991 to 31 March, 1992 respectively as per terms of the contract. On this provision being pointed out by audit, Air India lodged (November 1992) the claim with the caterer and recovered Pound Sterling 38,464 for the period 1 April, 1991 to 31 March, 1992 and Pound Sterling 23,544 pounds for the period 1 December, 1989 to 31 March, 1991.

## CHAPTER - 4

### AIRPORT SERVICES DEPARTMENT

**4.1.1** Airport Services Department (ASD) previously known as Ground Services Department is mainly responsible for planning, operation, control and maintenance of equipment for ground handling at airport, surface transport and other miscellaneous services.

**4.1.2** The gross receipts due to handling and the total number of flights handled for the period 1986-87 to 1993-94 are presented below:

Particulars	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
A) No. of flights handled:								
a) AI Flights	11992	13688	17818	14426	12252	13657	14510	13690
b) Other airline's flights	16058	18070	16245	15834	17952	17390	17541	18476
	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL:	28050	31758	34063	30260	30204	31047	32051	32166
	=====	=====	=====	=====	=====	=====	=====	=====
B) Revenue earned:								
in INR lakhs	841.60	802.60	926.80	1127.60	1333.40	1793.60	2476.00	3122.08
C) Revenue earned:								
in US\$ lakhs	266.54	248.77	263.70	274.42	302.32	296.15	331.68	397.59
D) Total Revenue:								
(in INR lakhs)	4208.00	4013.00	4634.00	5638.00	6667.00	8968.00	12380.00	15610.39
E) Average Revenue per flight (Rs.)	15001.78	12636.18	13604.20	18631.85	22073.23	28885.23	38625.93	48529.50
F) Gain due to currency fluctuations* (in INR lakhs)	43.76	69.90	331.22	762.96	391.36	2677.49	2303.60	666.88
G) Impact of currency fluctuation on the increase in total revenue over the previous year (as %)	-	-	53.34	75.99	38.03	116.36	67.50	20.64

**4.1.3** Increase in ground handling revenue during the period 1986-87 to 1993-94 was on account of devaluation of the Indian rupee and additional handling contracts of customer airlines after offsetting the loss in revenue due to discontinuation of the operations by some of the customer airlines.

## **4.2 Flight Handling Cost**

**4.2.1 a)** Most of the airlines handled by ASD availed comprehensive ground handling services which include technical, passenger, ramp, flight operational service etc. (Some of these services are rendered by other departments). The following table shows the expenditure vis-a-vis the flights handled by ASD alongwith holdings of Ramp Equipment. (Gross Block)

Particulars	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
1. No. of flights handled	28050	31758	34063	30260	30204	31047	32051	32166
2. Expenditure on ground handling (Rs. in lakhs)	1415.00	1538.00	1748.00	2057.00	2468.00	2736.00	3258.00	3910.00
3. Average cost per flight(Rs.)	5044.56	4842.87	5131.67	6797.75	8171.10	8812.45	10165.00	12155.69
4. Holding of Ramp Equipment(Rs.)	3615.78	4158.09	4680.62	4884.65	5037.67	5869.00	7810.00	9784.00

It would be seen that the average cost per flight handled has gone up by 140.96 percent during the period 1986-87 to 1993-94. In the same period, the average revenue per flight (as given in para 4.1.2) also increased by 223.49 percent.

Unlike the system followed in most of the foreign countries, the ground handling division has been set up as a department of Air India and the Management did not think of establishing an independent authority or subsidiary company to take charge of handling activities at Indian airports. As a result, even justified increases in the ground handling charges were viewed in the context of possible retaliation against Air India and hence not enforced fully.

It was only in May, 1989 that a comparison of existing handling charges with standard rates based on a 1983-84 study was made and it was found that some airlines viz. Sabena, Air France and CSA were being undercharged. The delay in charging the standard rates from these 3 airlines had resulted in a revenue loss of Rs.248.33 lakhs during the period from 1985-86 to 1990-91.

#### 4.2.2 Ground handling services availed at the online stations abroad

For handling of Air India flights at foreign airports, Air India enters into ground handling arrangements with agencies/airlines of those countries who control and provide such services in those countries.

4.2.3 Most of the foreign agencies/airlines had almost continuously increased their charges from year to year. Air India could neither resist such increases nor resort to corresponding increase in rates in India. The following table shows the expenditure incurred for getting AI flights handled at foreign stations:

Year	Expenditure on AI flight handling at foreign stations (Rs. in lakhs)	No. of total AI flights handled at foreign stations.	Average cost per AI flight handled at foreign stations. (Rs.)
1987-88	4865.00	8629	56,380
1988-89	5860.00	7607	77,034
1989-90	6152.00	7197	85,480
1990-91	7306.00	6385	1,14,424
1991-92	8091.00	6603	1,22,535
1992-93	9737.00	7805	1,24,753
1993-94	10631.00	8006	1,32,788

4.2.4 The average cost per flight handled at foreign stations has gone up by 117.34 percent during a span of seven years from 1987-88 to 1993-94, mainly due to devaluation of the rupee.

4.2.5 Air India constituted (Feb.1989) a 3 member Committee to review the expenditure being incurred at various online stations through out the network on account of handling charges.

4.2.6 The Committee identified Rome, Paris, Geneva, Frankfurt, Amsterdam and London as the six high cost stations; Frankfurt was selected for detailed review. As a result of the review, it was found out that out of Rs.721.69 lakhs of handling expenditure at Frankfurt, Rs.500 lakhs were for contractual services and the remaining Rs.221 lakhs for additional services on which there was no effective control exercised by Air India.

The Ministry stated (October, 1994) that the local Airport Managers had been advised to ensure that adequate controls were exercised in respect of additional services obtained and accordingly bills for additional services were certified for payment.

## CHAPTER - 5

### MATERIAL MANAGEMENT

5.1 The Materials Management Department is responsible for procurement and storage of all items required by Air India except items of a proprietary nature which are purchased on the advice of the Material Management Group (MMG) of the Engineering Department.

#### 5.2 Inventory holding of Air India

5.2.1 The inventories of Air India comprise of:

- i) Aircraft/engine spares and materials relating to B-747, A-300B4, A-310 and B-747 Combi.
- ii) Non-aircraft spares (equipment, spares and tools)
- iii) Cabin service stores, meal equipment, crockery, cutlery, food items, linen etc.
- iv) Printing and stationery items.
- v) Commercial items like uniform fabrics.

5.2.2 In addition to the classification of spares on the basis of unit price, the spares are classified nature-wise, viz:

- a) Rotables, which are the spares of high value and which can be replaced unit for unit basis on the aircraft;
- b) repairables, which are the high cost spares and which are economically repairable;

- c) insurables, which are high cost items not normally required for aircraft operations but which are stocked/held purely as an insurance should an accident or other contingency arise; and
- d) consumables, the spares of moderate/low cost which, when removed from the aircraft in an unserviceable condition, are considered scrap.

**5.2.3** Annexure III indicates the inventory holding at the end of each of the last eight years in respect of -

- i) 707 aircraft spares;
- ii) 747 aircraft spares;
- iii) Airbus spares; and
- iv) items other than aircraft spares.

**5.2.4** Consumption of materials for the last eight years ending 1993-94 (aircraft and non-aircraft) is shown in Annexure IV.

**5.2.5** The aircraft inventory maintained by the Air India was 38 months consumption in 1986-87. This inventory had been progressively increasing year after year till 1991-92 after which it showed a declining trend during 1992-93 and 1993-94. In view of the high incidence of obsolescence and chances of rejection of items due to efflux of time, the Corporation should have taken steps to keep the inventory, especially of high cost items, to the minimum level.

The Ministry stated (October, 1994) that there was a deficiency in the system of classification of spares on the basis of value which has been rectified during 1993-94 by resorting to naturewise categorisation. The Ministry further stated that the progressive rise in inventory was mainly due to induction of new aircraft, increase in price due to inflation and devaluation of rupee from time to time.

### 5.3 Surplus, obsolete and non-moving stores

5.3.1 The following table shows the value of surplus stores and obsolete stores for the last eight years ending 31.3.1994.

(Rs. in lakhs)

Period	Surplus	Obsolete
31.3.1987	411.57	0.07
31.3.1988	411.57	33.99
31.3.1989	411.57	27.29
31.3.1990	411.57	27.96
31.3.1991	411.57	15.49
31.3.1992	411.57	27.30
31.3.1993	411.57	22.50
31.3.1994	411.57	16.94

Surplus stores pertaining to Boeing 707 aircraft were lying idle for eight years ending 31 March, 1994 despite the fact that the aircraft had been phased out in 1987.

The Ministry stated (October, 1994) that the redundant and obsolete spares of Boeing 707 aircraft had been removed from the inventory by adjustment against obsolescence reserve and these items had been offered for sale through global tenders recently and the offers were under review.

5.3.2 Annexure V details the value of non-moving items of Boeing 747, A300 and A310 aircraft for the last seven years. The value and number of items of non-moving category had been increasing year after year. The value of non moving items of Boeing 747, which amounted to Rs.427.59 lakhs in 1987-88, increased to Rs. 847.75 lakhs in 1993-94 registering an increase of 98.26 percent over 1987-88. The value of non-moving items of A-300, which was Rs.52.48 lakhs in 1987-88, increased to Rs. 351.70 lakhs in 1993-94. Similarly, the value of non-moving items of A310, which stood at Rs. 11.62 lakhs in 1989-90, increased to Rs. 319.32 lakhs in 1993-94.

The Ministry stated (October, 1994) that the increase in the value of non-moving items arose mainly due to the initial procurement of spares alongwith induction



of a new aircraft and as such spares remained unused for a long period of time. The Ministry, conceded that the non-moving items were required to be disposed off from time to time for which a global tender had been issued recently.

## CHAPTER - 6

### FUEL

6.1.1 Fuel constitutes a major item of the total cost of operation. The following table gives the total expenditure on fuel and oil vis-a-vis the total operating expenses during the last eight years ending 1993-94.

Year	Fuel cost	Total operating expenses	(Rs. in crores)	
			Percentage of fuel cost to operating cost	Cost of fuel per RTKM (Rs.)
1986-87	171.46	843.79	20.3	1.42
1987-88	206.57	1001.90	20.6	1.49
1988-89	198.72	1084.26	18.3	1.45
1989-90	235.7	1241.15	19.0	1.63
1990-91	347.44	1553.70	22.4	2.52
1991-92	346.14	1802.11	19.2	3.01
1992-93	420.03	2146.28	19.6	3.84
1993-94	420.85	2459.96	17.1	3.85

It would be observed that the fuel cost per RTKM, which was Rs.1.63 in 1989-90, had increased to Rs.3.85 in 1993-94. The reduction in capacity utilisation (RTKMs), Gulf War in August, 1990, and devaluation of the Rupee were the main reasons for the more than two fold increase in fuel cost per RTKM.

6.1.2 Air India procures its fuel from India and abroad. About 45 percent of its fuel is procured in India. Government of India had introduced a system of 30 percent discount in September, 1988, as there was a substantial difference between the Indian and international prices. The withdrawal of this discount from September, 1992, has had a significant impact on Air India's fuel bill.

6.1.3 As regards purchase of fuel abroad, Air India had originally been entering into two-year contracts with foreign suppliers on the basis of rates obtained after floating tenders, which were subject to variations. Considering the market price fluctuations

during the period April 1989 to March 1991, it was decided by the Management to go in for formula pricing at major locations instead of market pricing. Under the formula pricing, the ATF price charged by the supplier will vary according to mean average of the jet fuel price for the preceding fortnight as per Platts European Market Scan plus the accepted fixed differential, based on the lowest quotation. The differentials finally agreed by Management for the contract period May, 1991 to March, 1993 were considerably lower than the differentials Air India paid during the contract period April, 1989 to March, 1991 at London, Frankfurt and New York. This, as estimated by the Management, would result in a saving of Rs.12.18 crores over the contract period.

## CHAPTER - 7

### HUMAN RESOURCES DEVELOPMENT DEPARTMENT

7.1.1 HRD Department is organised into various divisions such as manpower planning, industrial relations, establishment section, recruitment cell, welfare section and sports section. The total number of employees, the total staff cost and percentage of staff cost to total cost during the last eight years ending 31 March 1994 were as follows:

Year	Actual No. of		Total	Rs. in crores	
	Officers	Workmen		Total Staff cost*	Percentage of staff cost to total cost
1986-87	2121	15322	17443	168.98	20.0
1987-88	2288	15040	17328	196.88	19.7
1988-89	2253	15018	17271	225.18	20.8
1989-90	2331	15112	17443	254.92	20.5
1990-91	2402	15054	17456	292.57	18.8
1991-92	2503	14922	17425	365.15	20.3
1992-93	2753	14964	17717	475.03	22.2
1993-94	2701	15366	18067	511.20	20.8

\* including crew layover expenses.

7.1.2 Though there had been a marginal decrease in the number of workmen from 1986-87 to 1991-92, the number of officers had increased during the same period. The total number of employees, which more or less remained constant during the period 1986-87 to 1991-92, increased during 1992-93 and 1993-94.

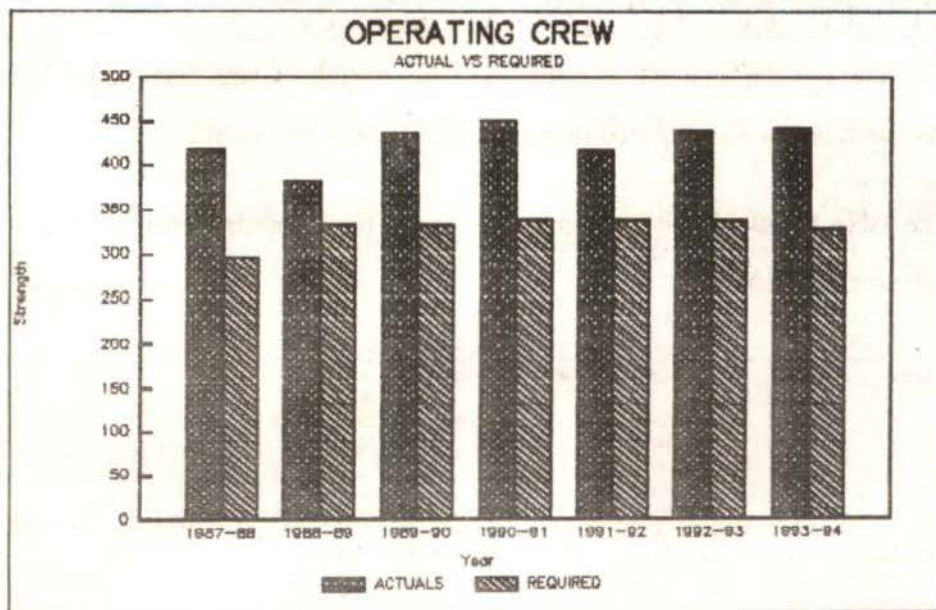
The Ministry stated (October, 1994) that the increase in staff strength was due to the induction of Boeing 747-400 aircraft.

## 7.2 Flying crew and cabin crew

7.2.1 The flying operations of Air India are carried out by operating and cabin crew. Recruitment, training and positioning of flying crew viz., Commander, First Officers and Flight Engineers are organised by Operations Department.

### Operating Crew

7.2.2 The following chart shows the actual strength of operating crew and the required strength as per the recommendations of the Planning Group on Civil Aviation.



	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Actual	418.0	382.0	438.0	451.0	417.0	441.0	444.0
Required	297.0	333.0	333.0	339.0	339.0	330.0	330.0
Excess(%)	40.7	14.7	31.5	33.0	23.0	30.3	34.5

The Ministry stated (October, 1994) that the determination of operating crew requirements depended on operating pattern on each type of aircraft, agreements with the flight crew unions and training/ licensing requirements.

It was, however, noticed that the Planning Group had taken all these factors into account except the compulsions of agreements with the unions.

7.2.3 The table below indicates the average deployment of operating crew (in hours) per month for the seven years from 1986-87 onwards.

Year	Boeing 747			Airbus 300 B-4			Airbus 310	
	Comma- nder	First Offi- cer	Flight Engi- neer	Comma- nder	First Offi- cer	Flight Engi- neer	Comma- nder	First Officer
1	2	3	4	5	6	7	8	9
1986-87	46.16	41.93	40.31	50.76	37.32	36.74	31.50	23.33
1987-88	64.28	63.28	55.33	41.23	36.10	44.82	39.57	33.35
1988-89	43.40	50.59	43.40	44.14	46.43	42.06	39.31	33.35
1989-90	42.75	51.71	46.78	39.17	38.27	38.27	38.58	34.27
1990-91	37.06	42.18	39.67	35.10	43.09	32.53	38.18	33.61
1991-92	44.06	34.66	35.84	34.34	17.18	31.68	45.08	24.64
1992-93	39.00	40.00	36.00	31.00	40.00	31.00	45.00	42.00
1993-94	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A

7.2.4. The average deployment of operating crew members was less than 40 hours which was much below the required minimum of 50 hours per month.

7.2.5 The table below shows the hours put in by the operating crew during three months selected at random.

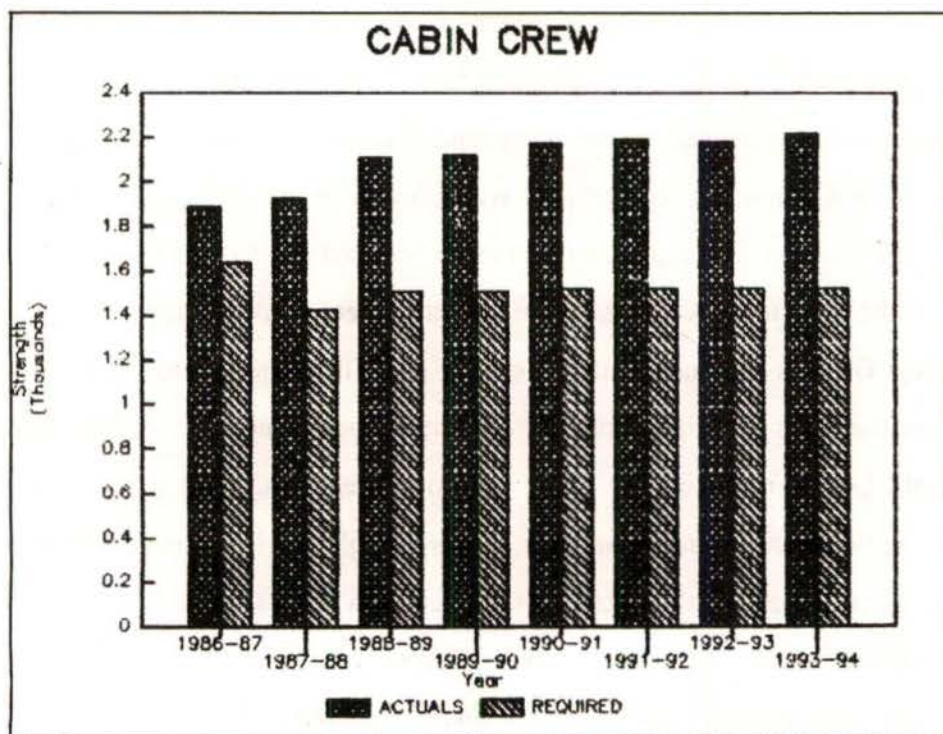
Month	Crew Type of aircraft	Total No. of crew	Number of Crew who put in				Average No. of hours per crew
			More than 50 hrs.	More than 40 hrs. but less than 50 hrs.	More than 30 hrs. but less than 40 hrs.	Less than 30 hrs.	
June '91 B-747	Commander	77	22	34	11	10	38.90
	First Offr	74	7	14	25	28	32.49
	Flt.Engr.	79	8	25	21	25	34.47
July '91 A-300	Commander	13	-	1	4	8	26.35
	First Offr	14	-	-	3	11	24.31
	Flt.Engr.	14	-	-	5	9	24.46
Aug. '91 A-310	Commander	45	28	9	6	2	50.05
	First Offr	60	15	17	8	20	35.24
	Flt.Engr.	Not required on A-310					

7.2.6 Air India's inability to utilise the crew at least to the minimum agreed extent of 50 hours per month has resulted in under-utilisation of crew. The Management in their reply stated (November, 1993) that the average deployment of operating crew at stipulated minimum of 50 hours per month may be applicable in the ideal conditions

where composition of aircraft remains constant. Since Air India's fleet consists of different types of aircraft, continuous process of training operating crew from one type to other, conversion programme, technical/ground training, simulator training and other mandatory DGCA training requirements will reduce average deployment of crew considerably. The ideal average deployment is further reduced due to time off provided as stipulated in the agreement with the union. This argument does not appear tenable as the Planning Group's recommendations clearly state that the norms have been worked out on the basis of existing pattern of routes, route lengths, schedules and agreements with Unions regarding lay overs and norms regarding their flying hours. However, during the Audit Board discussions, it was brought out by Management that they preferred to have a cushion of extra operating crew in order to avoid the risk of cancellations of flights due to lack of crew. Further, Air India maintained that expenditure on excess operating crew was very small compared to the overall business of the airline. The Ministry endorsed the Management's reply and added that as a result of the industrial action by the Indian Pilots Guild, the number of flights operated during June, 1991 was considerably less.

#### **7.2.7 Cabin Crew**

The cabin crew strength of Air India and the standard strength recommended by the Planning Group on Civil Aviation is given in the chart below:



	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Actual	1887	1923	2110	2117	2169	2191	2176	2212
Required	1635	1425	1510	1510	1520	1520	1520	1520
Excess(%)	15.4	34.9	39.7	40.2	42.7	44.1	43.1	45.5

**7.2.8** The Planning Group had worked out the norms for cabin crew based on a minimum of 720 flying hours per annum and also taking into account 20 percent for leave reserve and training. However, the average actual flying hours per annum for each crew worked out to 328 hours as against the 720 hours proposed. It was also observed that during 1986-87 to 1993-94, the crew strength had gone up by 17.22 percent without corresponding increase in the size of fleet.

The Management in their reply (November, 1993) stated that the premise on which the crew strength had been assessed by the Planning Group was unrealistic as it did not take into consideration the pattern of operation etc. The deployment of crew at present is far lower than the standard force calculated on the basis of various



agreements with the AICCA and practices in vogue. The Management felt that it was advisable to have a cushion in the strength than have the flights cancelled/delayed for want of crew.

The Ministry endorsed (October, 1994) the reply of the Management.

### 7.3 Excess staff at some stations

7.3.1 The number of staff posted at a few selected stations vis-a-vis the number of flights operated at such stations as given below would indicate the need for a proper evaluation and rationalisation of the staff requirement at such stations.

Name of the station	No. of flights operated per week	No. of foreign carriers handled	Total no. of staff					
			1986-87	87-88	88-89	89-90	90-91	1991-92
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Osaka	2		17	19	17	17	18	17
2. Bangkok	4		25	25	26	24	18	16
3. Dubai	17		27	26	25	25	24	23
4. New York	7		166	167	155	141	130	115
5. London	20		133	140	99	110	131	99
6. Frankfurt	6		37	36	33	37	40	36
7. Singapore	10		28	29	27	25	25	27
8. Tokyo	4		35	34	32	36	35	33
<u>Indian Stations:</u>								
1. Calcutta	6	25	207	200	189	195	195	197
2. Madras	18	15	246	245	258	279	275	274
3. Trivandrum	18	4	49	50	60	59	59	84

7.3.2 As may be seen, there was little correlation between the number of flights handled and the staff strength at stations. The staff strength at Calcutta and Madras were far in excess when compared to Trivandrum. Similarly, Tokyo and Frankfurt appeared to have excessive staff when compared to Singapore. The staff strength at New York, even after a gradual reduction of 52 percent from 1987-88 to 1991-92, seemed excessive.

7.3.3. The Air India regional office at New York, during March, 1988 projected a saving of expenditure amounting to US \$1.76 millions per annum by abolishing 100 posts by suitably engaging outside agencies on contract basis for the functions of Import Cargo, Export Cargo and passenger handling. In 1992, Management carried out a review and finally abolished 57 posts after a delay of four years. The delay was mainly in negotiating with the labour unions for abolition of excess posts. This delay has resulted in avoidable expenditure of Rs.14.15 crores for the years 1988-89 to 1991-92.

#### 7.4 Comparison with other airlines and overall productivity

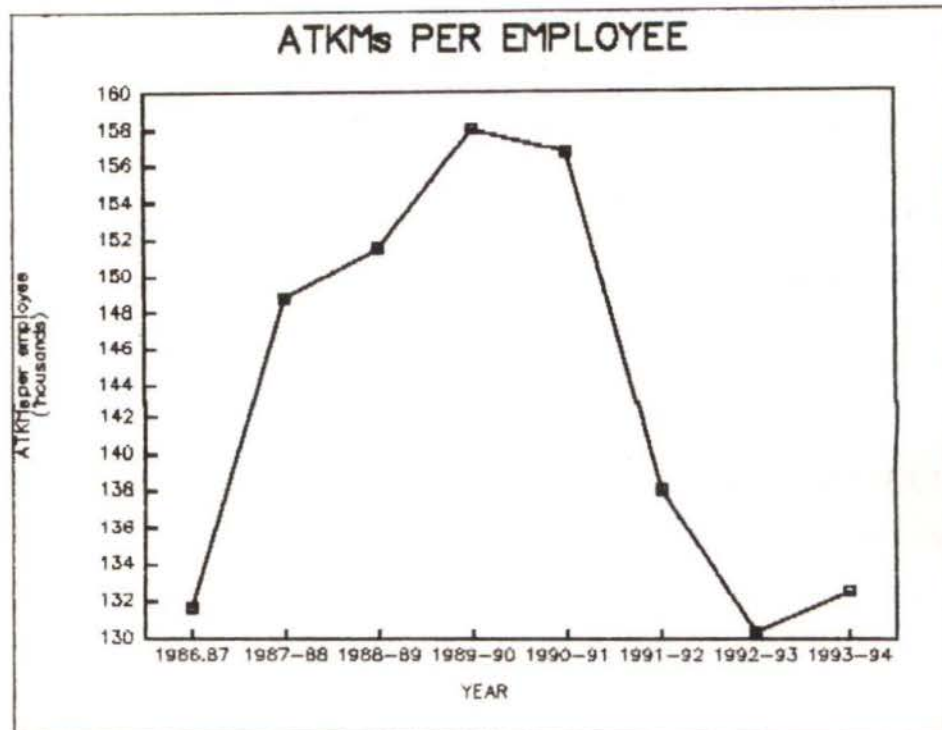
7.4.1 While it is not always possible to make a like to like comparison between the staffing patterns of international airlines because of inherent differences in their methods and styles of operations including passenger handling, ground support systems and engineering checks and repairs, the following table, giving the fleet size and the number of employees of various international airlines, would indicate that Air India was certainly over-staffed.

Sl.No.	Name of the Airlines	As on 31.12.1992		
		Number of Employees	No. of Aircraft	No of employees per aircraft
1.	Singapore Airlines	12499	54	231
2.	Australian Airlines	6750	34	199
3.	Swiss Airlines	20882	60	348
4.	KLM	25907	63	411
5.	SAS	18813	132	143
6.	Air India	17425	22	792

[Source: World Air Transport Statistics (June, 1993)]

The Ministry stated (October, 1994) that the fleet size of Air India is smaller when compared to other major world airlines. Air India provides staffing for all functions like traffic, cargo, security, cabin crew etc. for which other airlines have subsidiaries or engage people on contract basis.

7.5.2 Further the ATKM per employee declined during the last three years 1990-91 to 1992-93.



There was, however, a marginal improvement during 1993-94 on account of the induction of 3 Boeing 747-400.

A comparison of Air India's actual staff strength with the staff requirement as worked out by the Planning Group on Civil Aviation in their report on manpower development and productivity is given below:-

Sl. No.	Year	Staff in position*	Staff as per the Planning Group's norms.
1.	1985-86	16184	16184
2.	1986-87	16169	
3.	1987-88	16093	
4.	1988-89	16252	
5.	1989-90	16419	
6.	1990-91	16504	15399
7.	1991-92	16482	
8.	1992-93	16840	
9.	1993-94	17176	

\*. The figures are of staff/officers in India and India based officers/staff posted abroad. It excludes local staff employed at foreign stations.

7.5.3 The Planning Group's recommendations were made for the first year of the Plan periods and not on an annual basis. It is pertinent that the Planning Group for arriving at their recommendations regarding the staff requirements, had taken the men-in-position at the time of their recommendations (i.e. 1986) and had proposed a lower strength for the subsequent period even though they had assumed a growth rate of 7.1 percent for passenger and 16 percent for cargo traffic. Thus, the Planning Group had concluded that there was surplus staff in Air India even at the time of their recommendations (1986).

The Ministry stated (October, 1994) that the staff strength was based on the existing agreements with the unions and norms and work practices followed in Air India.

## CHAPTER - 8

### FINANCIAL POSITION AND WORKING RESULTS

#### 8.1 Financial Position

8.1.1 The financial position of Air-India for the eight year period from 1986-87 to 1993-94 is tabulated below :

Sr. No.	Particulars	(Rs.in Crores)							
		1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
1.	Equity Capital provided by Government.	74.36	74.36	76.79	79.24	79.24	79.24	79.47	79.47
2.	Loan Capital provided by Government.	74.36	74.36	74.36	74.36	74.36	74.36	74.36	74.36
3.	Long term foreign exchange loans for purchase of aircraft.	735.39	754.35	1113.42	1140.22	1234.55	1804.81	2097.10	2769.68
4.	Total loan (2 + 3)	809.75	828.72	1187.78	1214.59	1308.91	1879.17	2171.46	2844.04
5.	Reserves & Surplus	400.01	360.67	399.91	450.47	584.37	740.18	1085.99	1272.50
6.	Ratio of total loan to equity capital plus Reserves & Surplus.	1.71:1	1.90:1	2.49:1	2.29:1	1.97:1	2.29:1	1.86:1	2.1:1
7.	Net worth								
	i. Indian rupee	542.32	498.15	527.95	572.29	691.37	842.02	1195.42	1310.01
	ii. US Dollar (in million)	N.A	384.47	341.94	334.76	359.71	297.01	379.16	417.07
8.	Capital employed.	1230.36	1208.54	1596.37	1655.12	1880.09	2596.68	3215.71	4053.47

**Note :** (i) Net worth represents equity capital plus reserves and surplus less intangible assets.  
(ii) Capital employed represents net fixed assets excluding capital work-in-progress plus working capital.  
(iii) Debt Equity Ratio calculated by Air India is different from the figures given against Sl.No.6 above as the loan capital given by the Government is added to the 'Equity' by them.

8.1.2 Net worth expressed in Rupees has shown a gradual increase bringing it to Rs.1310.01 crores in 1993-94 (139.97 percent over the year 1987-88). However, in US dollar terms the net worth varied between from 334.76 million (1989-90) to 417.07 million (1993-94) excepting during 1991-92. The adverse changes in debt-equity ratio and net worth, in US dollar terms, during 1991-92 was mainly due to the devaluation of the Rupee.

## 8.2 Working Results

8.2.1 The table below indicates the operational results of Air India for the eight years ending 1993-94.

Sr. No.	Particulars	1986-87 (1)	1987-88 (2)	1988-89 (3)	1989-90 (4)	1990-91 (5)	1991-92 (6)	1992-93 (7)	1993-94 (8)
<b>A) FINANCIAL RESULTS</b>		(Rs. in crores)							
<b>I. Revenue</b>									
i)	Operating	890.32	995.87	1150.84	1368.17	1626.88	1965.18	2435.86	2581.77
ii)	Non-operating	16.39	26.61	40.03	36.92	85.35	90.34	128.52	119.22
iii)	Adjustment relating (Net) to previous year	18.75	1.47	14.23	23.28	35.74	17.27	18.81	66.97
iv)	Total Revenue	925.46	1023.95	1205.10	1428.37	1747.97	2072.79	2583.19	2767.96
<b>II Expenses</b>									
i)	Operating	843.79	1001.90	1084.26	1241.15	1553.70	1802.11	2146.28	2459.96
ii)	Non-operating	51.52	65.46	77.54	116.34	113.03	124.78	103.77	106.10
iii)	Total expenses	895.31	1067.36	1161.80	1357.49	1666.73	1926.89	2250.05	2566.06

III. Profit

i) Net operating profit/(loss) (I(i)-II(i))	46.54	(6.03)	66.58	127.07	73.18	163.06	289.57	121.81
ii) Net non operating profit/(loss) (I(ii)+I(iii)-II(ii))	(16.38)	(37.38)	(23.27)	(56.14)	(8.05)	(17.17)	43.56	80.09
iii) Net profit (deficit) (before tax(I-II))	30.16	(43.41)	43.31	70.89	81.23	145.89	333.14	201.90
iv) Investment Allowance Reserve	67.75	--	37.44	3.44	--	--	--	---
v) Percentage of -								
a) Operating profit to Operating Revenue	5.23	(0.60)	5.79	9.28	4.50	8.30	11.89	4.72
b) Net profit to capital employed	2.45	(3.59)	2.71	4.28	4.32	5.62	10.36	4.98
B) <u>OPERATIONAL</u> <u>Per RTKM</u>								
i) Operating Revenue	7.38	7.18	8.39	9.49	11.78	17.11	22.25	23.60
	(3.39)*	(-)(2.78)*	(16.85)*	(13.11)*	(24.13)*	(45.25)*	(30.04)*	(6.07)*
ii) Operating cost	6.99	7.23	7.90	8.61	11.25	15.69	19.60	22.49
	(1.86)*	(3.43)*	(9.27)*	(8.99)*	(30.66)*	(39.47)	(24.92)*	(14.74)*

Note: \*Figures in brackets indicate the percentage increase/decrease over the previous year.

## 8.2.2 Return on Government investment

The table below indicates the return on the investment (capital and loan) made by the Government during the thirteen years from 1981-82 to 1993-94:

Year	Interest on loan capital	Net profit/(Loss)	Dividend on equity capital	Total capital (equity + loan)	(Rs. in crores)
					Percentage return on total capital provided
1981-82	5.60	10.36	--	140.73	3.98
1982-83	7.01	38.04	7.24	148.73	10.00
1983-84	7.26	57.39	-	148.73	4.87
1984-85	7.26	44.69	-	148.73	4.87
1985-86	7.26	66.00	-	148.73	4.87
1986-87	7.26	30.16	-	148.73	4.87
1987-88	7.26	(43.41)	-	148.73	4.87
1988-89	7.26	43.31	-	151.15	4.80
1989-90	7.26	70.89	7.44	153.60	9.57
1990-91	7.26	81.23	-	153.60	4.72
1991-92	7.26	145.89	15.84	153.60	15.04
1992-93	7.26	333.14	15.89	153.84	15.05
1993-94	7.25	201.90	7.95	153.84	9.88

**8.2.3** Air India paid a sum of Rs.39.17 crores in February, 1994 towards dividend at the rate of 10 percent for 1989-90 and 20 percent for 1991-92 and 1992-93 on the share capital owned by the Government. A dividend of 10 percent (Rs. 7.95 crores) for the year 1993-94 has also been declared. Air India earned profit through out the



period under consideration except during 1987-88. However, dividend was declared only during the years 1982-83, 1989-90, 1991-92, 1992-93 and 1993-94.

**8.2.4** Air India had contributed an amount of Rs.1,821 lakhs to Vayudoot towards equity participation (Rs.1310.00 lakhs from its own funds and Rs.511 lakhs initially paid by the Government and subsequently treated as Air India's equity in Vayudoot). The losses suffered by Vayudoot Limited completely eroded its 'networth', and the entire investment in the capital of Vayudoot Limited had been written off by Air India during 1990-91 and 1993-94. During the year 1991-92, Air India, under the instructions of the Ministry of Civil Aviation, advanced a sum of Rs.15 crores as temporary loan to Vayudoot Limited at the rate of 10 percent interest. Although an amount of Rs.5 crores was due for repayment on 31 December, 1992, the amount has not been received back so far (January, 1995). Further, no interest has been received by Air India till January, 1995. It is pertinent to note that, so far, Vayudoot Limited has not signed any loan agreement in regard to the loan given by Air India.

The Ministry stated (October, 1994) that the draft agreement forwarded (10 April, 1992) to Vayudoot Ltd. for their execution had remained unsigned till date and the loan of Rs. 15 crores was now payable by Indian Airlines in ten annual instalments after a moratorium of five years

**8.2.5** Air India promoted a wholly owned subsidiary company viz. Hotel Corporation of India Limited (HCI) in July, 1971. The paid up capital of the Company was fully contributed by Air India and stood at Rs.40.60 crores as on 31st March, 1994. The net worth of the Company had fallen from (-) Rs.7.02 crores in 1988-89 to (-) Rs. 43.94 crores at the end of March, 1994. Air India's investment Rs.40.60 crores had, thus, been fully wiped out by the accumulated losses of HCI of Rs.83.51 crores as on 31 March, 1994.

### 8.3 Profitability Analysis

8.3.1 Financial results achieved during the eight year period ending 1993-94 are summarised below:

(Rs. in crores)

Year	Operating Revenue	Operating expenses	Operating profit/(loss)	Non-operating Revenue	Non-operating expenses (Incl. tax)	Net Surplus/ (Deficit) after tax	Increase over previous year	Year end exchange rate (Dollar to rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1986-87	890.32	843.78	46.54	35.14	51.52	30.16	(-)35.84	12.91
1987-88	995.87	1001.90	(6.03)	28.08	65.46	(43.41)	(-)73.57	12.96
1988-89	1150.85	1084.26	66.59	54.26	77.54	43.31	86.72	15.44
1989-90	1368.17	1241.15	127.02	60.21	116.34	70.89	27.58	17.10
1990-91	1626.88	1553.70	73.18	121.08	113.03	81.23	10.34	19.22
1991-92	1965.18	1802.11	163.06	107.61	124.78	145.89	64.66	28.35
1992-93	2435.86	2146.28	289.57	147.34	103.77	333.14	187.25	31.53
1993-94	2581.77	2459.96	121.81	186.19	106.10	201.90	(-)131.24	31.41

8.3.2 Though Air India made a profit of Rs.30.16 crores in 1986-87, it was Rs.35.84 crores less than the profit of the previous year. In 1987-88, there was a loss of Rs. 43.41 crores. However, there was a turn around in 1988-89 when Air India was able to make a profit of Rs.43.31 crores. But the same trend could not be continued in 1989-90 mainly because of a substantial increase (50.04 percent) in non-operating expenses during this year. Again during 1990-91, Air India earned a profit of Rs.81.23 crores despite a sharp increase in operating expenses (25.18 percent over 1989-90) as compared to the increase in operating revenue (18.9 percent over 1989-90).

**8.3.3** During the years 1990-93, the international aviation industry was in the red and IATA airlines suffered combined net losses of US \$ 2.7 billion in 1990, US \$ 4 billion in 1991 and US \$ 4.8 billion approximately in the year 1992. Against this dismal backdrop, Air India turned in excellent financial results with a net profit of Rs. 333.14 crores in 1992-93, as compared to Rs. 145.89 crores in the previous year (1991-92), a growth of 128.4 percent. The main reasons were - (i) increase in Rupee fares and devaluation of rupee leading to improved yields (29.8 percent); (ii) increase in handling and service charges (Rs.41.70 crores); (iii) increase in interest earnings (Rs.39.23 crores) and reduction in interest charges on foreign loans; (iv) improvement in passenger load factor (from 61.5 percent to 64.6 percent); (v) improvement in yield (29.8 percent) being far higher than inflation in unit cost (21.5 percent).

However, the profit decreased to Rs. 201.90 crores during the year 1993-94, which was mainly due to:

- i) increased depreciation (Rs. 42.97 crores) due to induction of three Boeing 747-400 aircraft during 1993-94 and adopting the depreciation rate as per schedule -XIV of the Companies Act for the month of March, 1994 (Rs. 17.74 crores);
- ii) increase in material consumption by Rs. 43.80 crores;
- iii) increase in aircraft hiring charges by Rs. 40.10 crores;
- iv) increase in aircraft insurance premium by Rs. 12.27 crores;
- v) significant increase in publicity expenses (Rs. 8.32 crores); and
- vi) decrease in passenger load factor by 5 percent.

**8.3.4** The total profit before tax during the Seventh Plan period (1985-86 to 1989-90) was targeted at Rs.407.04 crores while the actual profit earned was only Rs.166.94 crores. The reduction in profit was mainly due to reduction in the RTKMs and a substantial drop in the actual yield per RTKM as compared to projections made for the Plan. Air India had not made any analysis of the variance between the Plan targets and the actual performance.

## CHAPTER - 9

### INTERNAL AUDIT

9.1.1 Air India introduced the system of Internal audit as part of the Finance and Accounts Department in July, 1962. However, effective August 1979, internal audit came under the administrative control of Deputy Managing Director (Headquarters). Again, in October, 1981 internal audit was placed under the administrative control of Director (Finance).

9.2. A review of the functioning of internal audit revealed the following deficiencies:-

(a) The quantum of audit and periodicity for auditing various on-line stations and departments have not been determined by the Management. The Management, however, stated that a check list, which was finalised in December, 1982, was being used for guidance at the time of audit. The checklist was not updated even after a lapse of ten years.

(b) The internal audit section did not have any internal audit manual. The Management stated that the Finance & Accounts Department had prepared a Accounts Manual on the working of each section in the Central office and Accounts Managers Hand Book for the guidance of the Accounts Managers' working at outstations.

(c) In the absence of a properly planned periodical audit programme, there was no system to ensure that internal audit of various on-line and off-line stations was conducted at reasonable intervals. During the last six years ending March, 1992, only 43 audits were carried out. This was not sufficient to cover the audit of 40 on-line stations, 62 off-line stations, 14 departments and 4 regional offices of Air India even once in six years. However, the Management stated (December, 1993) that as Internal Audit had been made a part of the Finance & Accounts Department, they were able to

use the officers of the Department and had carried out 16 audits during the financial year 1991-92.

9.3 The actual deployment of personnel in internal audit was much less than the sanctioned strength of 16, which itself was decided way back in 1981. The actual strength operated from time to time during the last eight years ending March, 1994 ranged from 11 to 4.

This indicated that Air India did not lay due emphasis on developing an effective system of internal control.

9.4 Air India employs firms of Chartered Accountants, called 'Examiners', for checking their annual accounts before the accounts are adopted by the Board. In fact, the augmentation of internal audit staff strength to 16 during the year 1981 was done with the object of dispensing with Examiners, but the practice of checking of annual accounts by Examiners continued upto 28 February, 1994.

9.5 The Committee on Public Undertakings in their 15th Report on Financial Management had suggested that the functions of internal audit department should include a critical review of systems, procedures and operations as a whole, rather than merely accounting work. The Internal Audit Department of Air India with its meagre strength of 9 employees as on 31 March, 1994, could not be expected to perform these functions effectively.

A firm of Chartered Accountants has been appointed from October, 1994 as Internal Auditors at an annual fee of Rs. 20 lakhs plus out of pocket expenses. As a sequel, the Internal Audit Department has been wound up.


## CHAPTER - 10

### OTHER TOPICS OF INTEREST

#### Loss in lease of property

Air India took on lease an accommodation measuring 8900 sq.ft. to house its ticketing office and district sales office in New York. Since the requirement of the ticketing office was only 1500 sq.ft. and the district sales office was shifted to space available in New York Regional office, the remaining area of 7400 sq.ft. in the ticketing office was found to be surplus from early 1989. The New York office proposed to surrender the excess area only in January, 1992, but no decision was taken by Air India headquarters till March, 1993. In the mean time, Air India had already incurred an avoidable expenditure of US \$ 721,352 (Rs.1.71 crores) towards rent upto March, 1993.

New Delhi  
The

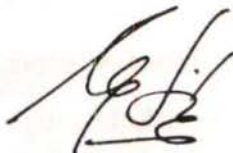
  
(RAMESH CHANDRA)  
Deputy Comptroller and Auditor General-  
cum-Chairman, Audit Board

-5 मई 1995  
MAY 1995

Countersigned

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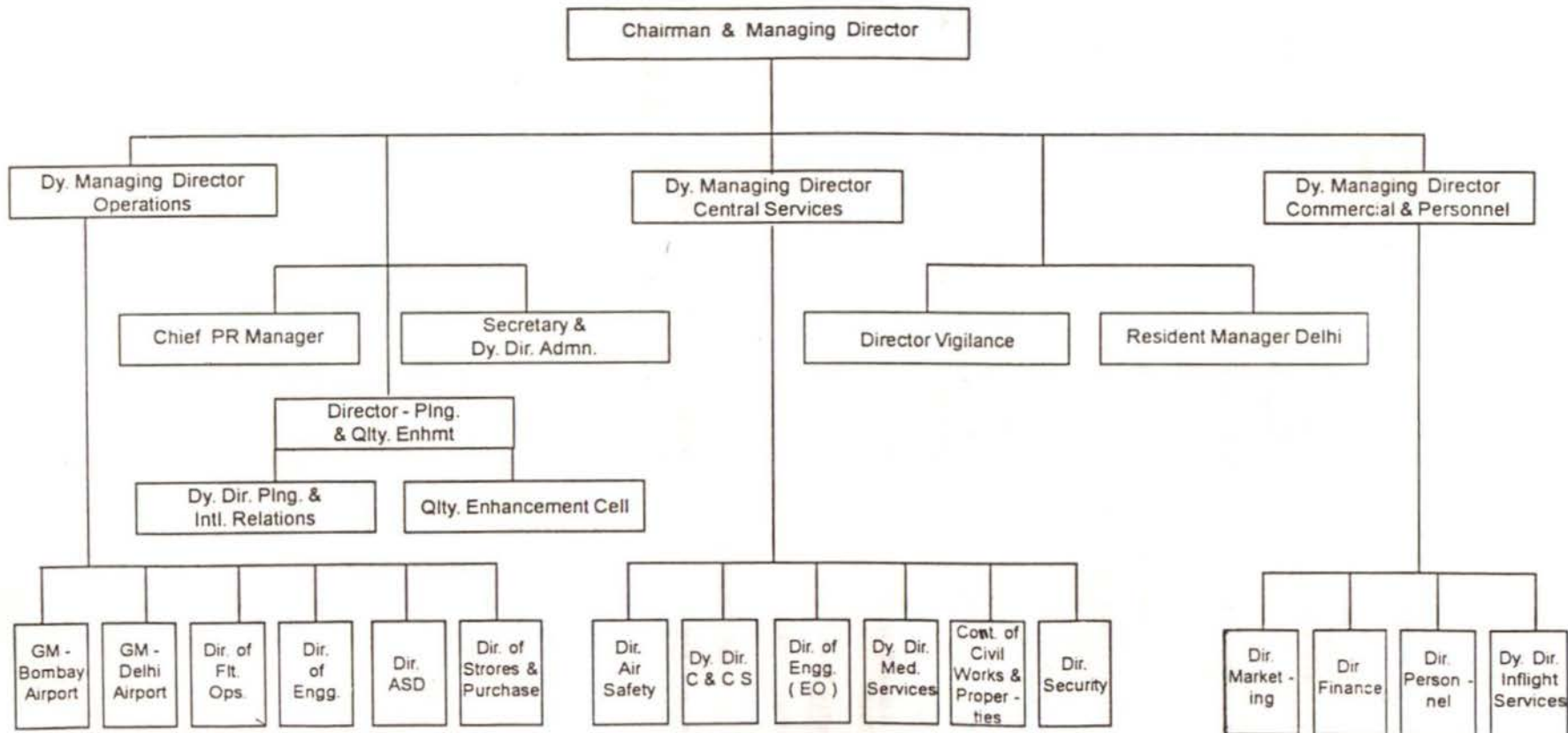
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(C.G. SOMIAH)  
Comptroller and Auditor General of India

**AIR - INDIA**  
**ORGANISATION CHART**  
**( SENIOR MANAGEMENT )**

Annexure - I

(Refer para 1.5.1)



## Annexure II

(Refer Para 3-5.6)

Few cases of defaults by GSAs are illustrated below:

S.No.	Name of agent and business location	Reasons for default	Amount defaulted (Rs. in lakhs)	Remarks
1	2	3	4	5
1.	Ajanta travels & tours New York	Unaccounted sales revenue not noticed in time.	32.4	Written off in 1991-92
2.	Aristo Travels, New York	Inadequate Bank Guarantee	7.83	Provided as bad debts.
3.	Eden Travels, New York	-do-	7.52	-do-
4.	AP Tours & Travels, New York	Mis-use of credit card facilities		-do-
5.	OITT, Paris	System failure and procedural lapses on the part of AI.	32.70	Written off in 1991-92
6.	M/s.ILG Travel Ltd. London	Inadequate Bank Guarantee	40.04	Provided as bad debt
7.	R.K. Tours & Travels, New Delhi	Placement of excessive ticket stock	33.28	-do-
8.	Novvelle Travel	-do-	51.43	-do-
9.	Trawing Travels, Trivandrum	Inadequate Bank Guarantee	56.91	-do-
10.	Trawing Travels, Hyderabad	-do-	33.90	-do-
11.	Polarise travels, Baroda	Acceptance of outstaion cheque which was finally dishonoured	25.76	Written off in 1991-92



ANNEXURE III  
(Refer Para 5.2.3)

	1986-87		1987-88		1988-89		1989-90		1990-91		1991-92		1992-93		1993-94		
	Inventory	% to fleet cost	Inventory	% to fleet cost	Inventory	% to fleet cost	Inventory	% to fleet cost	Inventory	% to fleet cost	Inventory	% to fleet cost	Inventory	% to fleet cost	Inventory	% to Fleet cost	
1) 707 spares	1409.40	42.73	759.67	-	748.80	-	1743.60	-	736.22	-	735.75	-	Nil	Nil	Nil	Nil	
2) 747spares	9667.49	23.64	10350.89	25.32	12353.58	30.23	13578.87	29.95	15671.46	34.57	16509.02	36.42	18824.36	41.53	19828.71	43.74	
3) Airbus 300 Spares	3296.68	16.23	3557.04	17.51	3691.81	18.18	8998.88	15.92	3826.65	15.53	3952.20	16.04	4098.09	16.63	3660.91	14.86	
4) Airbus 310	3849.92	9.88	4902.56	12.59	6697.95	17.2	7919.46	14.75	9417.69	15.82	10325.97	17.35	11408.85	19.17	8320.08	13.98	
5) 747 Combi spares	-	-	-	-	1509.68	9.85	2988.76	10.50	2200.64	11.19	2452.80	12.47	2635.74	13.40	2338.86	11.89	
6) 747-400	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
A/c spares total	18223.49		19569.66		25001.82		28274.57		31852.66		33975.84		35967.04		36575.06		
6) Items other than A/c spares	1963.18	1.89	2366.18	2.29	2492.85	2.16	2433.81	1.69	3175.48	2.12	3340.89	2.24	4237.30	2.84	4635.25	3.11	
Grand Total	20186.67		21935.84		27494.67		30658.38		35028.14		37316.73		41204.34		41210.31		
Inventory in terms of No. of Monthly Average Consumption.	-----		1986-87	-----	1987-88	-----	1988-89	-----	1989-90	-----	1990-91	-----	1991-92	-----	1992-93	-----	1993-94
a) A/c Inventory			38.0		42.5		48.6		48.9		48.7		49.9		39.7		31.89
b) Non-A/c Inventory			11.4		10.7		9.6		7.2		9.5		9.2		10.7		8.41
c) Total Inventory			30.9		32.2		35.5		35.5		35.4		35.7		31.0		24.27

## Annexure IV

(Refer para 5.2.4)

Categorywise value of Annual consumption and percentage to Annual consumption.

Category of	1986-87		1987-88		1988-89		1989-90		1990-91		1991-92		1992-93		1993-94	
	Annual consumption	% to Annual consumption	Annual consumption	% to Annual consumption	Annual consumption	% to Annual consumption	Annual consumption	% to Annual consumption	Annual consumption	% to Annual consumption	Annual consumption	% to Annual consumption	Annual consumption	% to Annual consumption	Annual consumption	% to Annual consumption
'A'	4412.33	56.42	4212.07	51.46	4874.95	52.46	5535.15	50.35	6345.04	53.45	3477.07	51.63	9388.55	58.77	11231.85	55.12
'B'	1329.20	16.99	1299.84	15.88	1285.09	13.86	1377.76	12.63	1485.21	12.51	1032.61	13.31	1818.00	11.38%	2529.39	12.41
'C'	12.92	0.17	11.68	0.14	13.84	0.15	18.48	0.17	20.35	0.17	26.35	0.21				
*	2066.26	26.42	2662.03	32.52	3117.98	33.56	4056.52	36.95	4021.14	33.87	4371.87	34.85	4768.88	29.85%	6614.89	32.47
	7820.71	1100.00	8185.62	100.00	9281.86	100.00	10993.91	100.00	11871.74	100.00	12546.54	100.00			20376.13	100.00

\* Non-aircraft items which do not fall in A.B.C analysis which are as follows :

- |  |                                      |
|--|--------------------------------------|
| 1. Tools & Equipment spares              | 15. Non-consumable canteen equipment |
| 2. Cabin service stores                  | 16. Commercial stores                |
| 3. Printing and stationery               | 17. CCS Computer spares              |
| 4. Stock in works canteen                | 18. Stock of bar sale items          |
| 5. Motor transport spares & tools        | 19. Stock of perfumes                |
| 6. A.S.D spares repairable               | 20. Clothing & Uniforms.             |
| 7. Overnight bags & suitcases            |                                      |
| 8. 707 simulator spares                  |                                      |
| 9. 747 simulator spares                  |                                      |
| 10. Workshop equipment spares repairable |                                      |
| 11. Boeing 707 A/c chairs                |                                      |
| 12. Boeing 747 A/c chairs                |                                      |
| 13. Airbus A300 chairs                   |                                      |
| 14. Boeing 707 A/c footrest              |                                      |

Statement showing the non-moving items of 747 ~~As on~~ A 310

Annexure-V  
(Refer para 5.3.2)

Period	_ 747 items		A 300 items		A 310 items	
	No. of items	Value (Rs. in lakhs)	No. of items	Value (Rs. in lakhs)	No. of items	Value (Rs. in lakhs)
31.3.88	38605	427.59	5731	52.48-	-	-
31.3.89	39447	465.16	7563	135.70	-	-
31.3.90	41648	570.92	9266	170.90	742	11.62
31.3.91	43536	580.22	8557	175.18	4395	42.04
31.3.92	45993	639.92	0803	182.86	6351	71.74
31.3.93	47699	801.60	12032	335.91	9516	256.83
31.3.94	49674	847.75	12204	351.70	13723	319.32

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