Chapter–II
Growth
and
Development of Civil Aviation
Air transport have important consequences for a nation's economy, air transport still exhibits some of the characteristics of an infant industry. It is still less than 90 years (in current nearby 30 years) since the first aeroplane flew. It plays a major role in the transportation of high value cargo. Air Transport is the quickest mode of transport. In India civil aviation started in 1920 with the construction of some aerodrome by the Govt. The air services is now mapping the world nearer and smaller day to day. These services has gone so deep rooted today that it is impossible to think a world without aeroplane.

The importance of air services are increasing day to day in modern life cannot be under estimated. Indeed, it is difficult to imagine our life today without aeroplanes. It is a mere truism to assert today that we are living in a small world getting increasingly smaller day to day. The fast means of communication and travel has already made the world too small. Air services has played a great role not only in joining in various parts of our large country, also in the development of several otherwise not easily accessible areas.

Today air services is an important aspect of modern life especially in the time of liberalization, globalisation and industrialization. It opens out new horizons for trade commerce as well as in defence sector. To analyse the growth and development of civil aviation the present chapters has been divided into eight stages they are:

1. Origin of air transport.
2. Growth and development of Air transport in India.
3. Impact of Globalization and Liberalization
4. Public plan expenditure on civil aviation.
5. Repeal & effect of air corporation Act.

I. Origin of Air Transport: In the absence of any authentic date on the subject it is almost impossible to trace out the exact data or exact history of civil aviation. We cannot estimate the exact data on which an aeroplane was flown in India for commercial purposes. Serious attempt has yet been made to fathom this mystery. From the available and accessible documentary however it can be fairly and accurately be established "That in 1911, a frenchman, Monseigneur piquet flew the first airplane on commercial errand, carrying postal mail from Allahabad to Naini Junction covering a total distance of 10 km. The historical flight took off on 17 Dec. 1903 at Killdavid Hills near Kitty Hawk North Caroline U.S.A. The historical flights had arrested the flight of imagination and captivated the appreciation of the people in India. Lord Lyod, a governor of Bombay has originated the first irregularly regular air mail services in 1927. A separate department of civil aviation came into being to regularise the national and international air services in 1927.

It was indeed, by an accident that scheduled commercial air
transport came in India in 1929-30. The three imperial powers of Europe—the British, the French and the Dutch extended their empire air routes to and across the Indian subcontinent. Govt. of India had of necessity to establish the first, although short-lived, Indian state air services as a link between Karachi and Delhi. The credit of operating a scheduled commercial air transport enterprise on the regular basis and on a progressive scale over the subcontinental of India rightly belongs to the aviation department of Tata Sons Limited—a leading commercial firm headed by Sir Dorab Tata.

On 13 October 1932 India's first airmail service took off to the skies. The route was Karachi/Ahmadabad/Bombay and then on to Bellary and finally to Madras. J.R.D. Tata was the pilot on the first sector and after flying the pussmoth down to Bombay, Nevil vinctent took over, from his for Madras.

II. development of air Transport:

Commercial aviation continued to expand during the 1930's but at a slow pace, passenger, carriage was still in its infancy, and aircraft development efforts were limited. During this period many carriers experienced financial difficulties and air safety deteriorated. These factors contributed to passage of the Civil Aeronautics Act of 1938, which created the Civil Aeronautics Board (CAB) and establish an extensive pattern of federal regulation of commercial air carriage to be administered by the board.
The real progress and development in civil aviation started in 1920. When the Govt. constructed a few aerodromes. The civil aviation department was set up in 1927 and number of flying clubs were founded. The progress however were very slow. It was during the second world war and later that considerable progress was achieved.

In international as well as domestic markets, air cargo has been the most rapidly expanding segment of air transportation. The combination carriers serving international market experienced a doubling of freight volume between 1965 & 1975. There has been a phenomenal increase in the volume of air traffic in the last two decades. Domestic air traffic has registered an average annual growth of 10% between 1960-85 while Indian Airlines and Air Indian grown at a rapid rate, infrastructure facilities have not kept pace since it's inception, however IAAI has taken up a number of schemes aimed at creating additional capacities.

III Impact of Globalisation & Liberalisation

Liberalisation the bold new approach towards a new dynamic economic order is an instrument of change. The core sector of India is undergoing a visible transformation as the policy prescriptive has shifted to liberalisation. Systematic implementation of the policy of liberalisation is bound to give the Indian economy a competitive edge in the global business environment. Transport sector would be playing a major role in the globalisation of Indian commerce and industry.
An efficient and profitable transport system plays an important role in economic growth of a country while there has been a considerable growth in India's transport network in the post liberalisation period, the same has not kept pace with the country's growing requirements. The success hinges on an efficient transport system to a significant extent. Air transport system is not exception to this changing scenario, liberalisation processes actually hasten the pace of privatisation process. Yes we live today in an age of liberalisation. That liberalisation is supposed to provide new opportunities for our economies. Currently, its changes are restricted in large industries and export-based sectors. If we were to open up more parts of our economy, it might even begin to empower our communities. But that very same liberalisation also impose certain limits and constraints us.

In the worlds of Mr. Christ Lyle, Director of studies of ICAO, the there key words typify recent developments in both the system of organisation and the structure of the airline industry. These are privatization and globalization and liberalization.

According to ICAO some sixty companies have either completed, initiated or announced their partial or total privatization. In Asia pacific following in the wake of Japan Airlines and Singapore airlines and atleast five other companies are privatizing; Air Lanka, China Airlines, Pakistan International Airlines, Quantas and Thai Airways International. The movement extends to certain airports and even at times to air traffic control.
The second aspect is globalization. The word global encompass various phenomena; acquisition, concentration, interchange of equity or simple share holding arrangements, technical or trading agreements and even franchising. The development of computer reservation systems exemplifies best this trend towards globalization. The third key element is the trend towards the liberalisation of air.

The Chicago Convention and the growth of Air Corporation in India

Ever since the end of the second world war, international aviation relations have been structured on the Chicago convention on International Civil Aviation. This convention was signed on 7 December 1944 and came into force on 4 May 1947.

It is important that in our study of aviation relations for the 1990's we highlight the pivotal role that the Chicago convention has played in the matter. The convention has provided stability by laying down the broad principles of law and relations.

There are three parts of the Chicago convention Part-I relates to air navigation; part-II describes the framework of the ICAO; and part-III deals with the operation of international air transport.

Part of the Chicago Convention (Article 1 to 42)

Part I, on air navigation, lays down in chapter-1 the general principles and applications of the convention.
Article 1 refers to sovereignty, territory is defined in 2 as follows: "for the purpose of this convention the territory of a state shall be deemed to be the land area and territorial water adjacent there to under the sovereignty, suzerainty, protection or mandate of such state. Article 4 states that member states agree not to misuse civil aviation for any purpose.

Article 5 provides for the right to undertake non-scheduled flights into or in transit across other countries. Article 6 governs the operation of scheduled air services by special permission of the countries concerned. Pilot less aircraft are prohibited under Article 8. Article 11 refers to the applicability of the air regulations of a member state to all aircraft entering that state. Rules of air safety are provided for under Articles 12. Article 17 states that "aircraft shall have the nationality of the status in which they are registered."

Article 37 contains the procedure laid down for the adoption of new air laws. Article 38, however obliges such a state notify the ICAO that it finds it impracticable to comply with international standards in once or more respects.

Part II of the Chicago Convention: The ICAO (Article 43 to 66)

In a highly creative and intellectual effort, the framers of the Chicago convention conceived of a world body in Part-II the ICAO. The objectives that this world body is to achieve and which are spelt
out in Article 44 reflect the significant role that civil aviation has played in the shaping of our civilization. These objectives are to develop the principles and techniques of international air navigation so as to (a) ensure the safe and orderly growth of international civil aviation (b) encourage the arts of aircrafts design and operation for peaceful purposes: (c) encourage the development of airways, airports and air navigation facilities for international civil aviation (d) meet the needs of the peoples of the world for safe, regular, efficient and economical air transport (e) prevent economic waste caused by unreasonable competition (f) ensure that the rights of the contracting states are fully respected and that every contracting state has a fair opportunity to operate international airlines (g) avoid discrimination between contracting states (h) promote safety of flight in international air navigation (i) promote generally the development of all aspects of international civil aeronautics.

Article 49 is concerned with the powers and duties of the Assembly of the ICAO. The permissive function set out under Article 55 include the conduct of research in air transport matters, the study of any matter affecting the organization and the operation of international air services, and at the request of any state.

Part-III: International Air Transport (Article 67 to 79)

There is a distinct attempt here by the convention to delineate the responsibilities of states for the promotion of global aviation. Article 67
refers to the duty of states to file reports with the ICAO on air traffic and financial affairs. Article 68 provides for the designation of air routes and airports to streamline flow of air traffic. Article 69 lays down that states must provide sea and economical air navigation facilities. Article 70 relates to the financing of air navigation facilities. Article 71 authorises the council to maintain air navigation facilities entirely if so requested by a state.

Article 77 envisages joint operation of an organization or an international operating agency by a group of states by pooling their air services on any route or in any region.

Three groups of states jointly operate international operating agencies in accordance with Article 77 of the convention. The first group consists of three states—Denmark, Norway, and Sweden. The second group is made up of four states Bahrain, Oman, Qatar and the United Arab Emirates. The third group comprises ten African states which are partners in multinational airline air Africa.

A compromise came about in the form of the Bermuda Agreement signed in 1946 between Britain and the United States on the major issues of control of capacity of aircraft, the number of services, air routes and airports on the basis of new principles. The Bermuda Agreement generally set the pattern for the regulation of world air transport after the second world war.

These included in particular the principle of fair and equal
opportunity, traffic needs of the two countries signing the agreement, traffic requirements through airlines operations, and requirements of the areas through which the airlines passed. In 1946 the companies like Air India, Indian national airways, Deccan Airways, Dalmia Jain Airways, Bharat Airways, Ambica & Jupiter Airlines got licensing policy prepared by the govt. of India.

In 1946 the Govt. of India laid down its aviation policy as being the encouragement and development of internal and external transport services through a limited number of sound and reliable private commercial concerns with necessary government help. In 1946 the govt. set up the Air Transport licensing board which gave 11 licences. This created over crowding in air transport, inflicted heavy losses on companies. In 1950, the Air Transport enquiry committee was appointed. The committee recommended the integration of all companies into four companies so as to remove cut-throat competition and secure scientific and zonal distribution of work.

**Birth of two companies:**

In 1953 the parliament passed the Air Transport Corporation Act under which the Indian Airlines Corporation was to run internal services and Air India was to run external services. The IAC came into existence in 1953 when eight scheduled air transport companies were nationalised, previously it provides air services to 57 destinations in the country and 10 destination in the neighbouring countries. The IAC is, of course, a dominant operator in the domestic market whose position has not yet been threatened by the private operators.
Civil aviation in India has two national airlines—internal operated by Indian Airlines and international operated by Air India. The former services over 70 stations, while the later services 47 cities in 42 countries although air transport is the fastest growing sector of passenger transport in the country, it's share of the total passenger traffic is only 1%. Clearly it is the most intensive mode of transport (and also the most energy intensive) Never the less it, has its own distinct advantages over surface forms of transport due to its superiority in speed and saving in travel times over long distances. There are a number of agencies which are involved in providing civil aviation services in India while Air India, Indian Airlines, Vayudoot provide air services. IAAI (International Airports Authority of India and DGCA Directorate General of Civil Aviation provide infrastructural facilities. IAAI looks after the development of the four international airports; DGCA is responsible for maintenance and development of civil aerodromes, civil enclaves and aeronautical communication stations.

(A) **Air India:** It is a legal off spring of the Tata sons (1932) which being the indigenous airline of India. Air India was established in 1953 under the Air corporations Act, to provide safe, efficient, adequate, economical and properly coordinated international air transport services. In 1948 at the initiative of JRD Tata which was also nationalised at the same time. The undertaking of Air India was transferred to and vested in Air India limited, a public limited company
registered under the companies Act, 1956 with effect from 1.03.94, after the Air Corporations (Transfer of Undertaking and Repeal) Act, 1994 came into effect with 26 aircraft and 18759 employees, Air India Limited presently operates to 45 destinations.

Air India continues to be the sole Indian operator in the International in seven neighbouring countries where IAC has been granted rights to provide services. Established as a statuary corporation after nationalisation in 1953, AI has been able to survive as an operator in the face of fierce competition from other international airlines by acquiring an up to date, fleet and rationalising it's route structure and management practices from time to time.

Table 2.1
Fleet strength of Air India Ltd. for the year 2004-05

<table>
<thead>
<tr>
<th>Type of Aircraft</th>
<th>No. of Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owned</td>
</tr>
<tr>
<td>B 747–200</td>
<td>2</td>
</tr>
<tr>
<td>B 747–300</td>
<td>2</td>
</tr>
<tr>
<td>B 744–400</td>
<td>6</td>
</tr>
<tr>
<td>A 310–300</td>
<td>8</td>
</tr>
<tr>
<td>B 777–222</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Annual report 2004-05.
Table 2.1 Shows the performance of fleet utilization of Air India in the year 2004-05. In addition to the above, the company has taken on dry lease the following aircraft.

a. Two A 310–300 aircraft and two B 747–400 aircraft were taken on dry lease from M/s Boeing Holding Co. USA.

b. Air India Ltd. had also inducted three B 777–200 ERs on dry lease from US Bank National Trust Association.

c. One B 747–400 combi aircraft dry leased from constitution Aircraft leasing for a period of three years joined the fleet on 25 April 2005.

d. Air India had signed an agreement with SIA for dry lease of three move & s/o aircraft.

e. There B 737–800s were leased by Air India Charters Ltd.

**Indian Airlines**

The Indian Airlines since it's nationalisation in the year 1953 through 1990 enjoyed a position of virtual monopoly over the domestic civil aviation services. This advantage, however, failed to capitalise on in terms of a good and consistent financial performance.

Indian Airlines is the major domestic air carrier of the country. It operates to 59 domestic stations (including two seasonal stations, i.e., Jaisalmer and Puttaparth), with it's wholly owned Airline Allied
Services Ltd. Indian Airlines also operates to 16 international stations, viz., Bangkok, Singapore, Kuala Lumpur, Yangon, Kathmandu, Colombo, Dhaka, Male, Kuwait, Sharjah, Dubai, Fujairah, Ras-al-Khaimah, Muscat, Doha and Bahrain.

After years of speculation and uncertainty, things seems to be looking up for national carriers Indian Airlines (IA). With the general liberalisation in the economy from the year 1991, the Indian Airlines came under further pressure when private airlines were also allowed to operate scheduled airlines services following the 'open sky policy'. With the advent of the 'open sky policy' many airlines joined the industry; but for one reason or other, most of them had to quit, leaving only jet airways, and the Sahara Airlines in the fray till date.

After the years of speculation and uncertainly, things seems to be looking up for national carriers (IA) Indian Airlines.

Table 2.2

The fleet of the Indian Airlines as on 31st March 05

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Number of Aircrafts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – 300</td>
<td>3</td>
</tr>
<tr>
<td>A – 320</td>
<td>47*</td>
</tr>
<tr>
<td>B – 737</td>
<td>11**</td>
</tr>
<tr>
<td>DO – 228</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
</tbody>
</table>

*Including 17 leased aircraft.
** Operated by Alliance Air, which is IA's wholly owned subsidiary.
According to sources, if everything goes as per plan then by the end of 2004 the fleet acquisition proposal of IA will have got all the requisite clearances. It's high time that these carrier got new aircraft in their ageing fleet also. Regarding fleet acquisition, present IA has taken 15 A320S on dry lease. Similarly, AI has also taken A 310S and B747S on lease to replenish their fleet and plans are on to lease B777 aircraft 100. 

Indian Airlines at present has 15A320S on lease. It's total strength is 65. Through it's fleet acquisition plan was cleared in 2002 by the board and now has even got a PIB clearance.

The year 2004 has been good for the aviation industry with carriage increasing by nearly 10 percent. Airlines have been seen expanding their base and trying more and more.
Table 2.3

Plan Expenditure on Civil Aviation

(Rs. in crores)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Period</th>
<th>Amount Rs.</th>
<th>Civil aviation as % of transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>1951-50</td>
<td>23</td>
<td>5.3</td>
</tr>
<tr>
<td>Second</td>
<td>1956-61</td>
<td>49</td>
<td>4.5</td>
</tr>
<tr>
<td>Third</td>
<td>1961-66</td>
<td>56</td>
<td>2.5</td>
</tr>
<tr>
<td>Fourth</td>
<td>1969-74</td>
<td>177</td>
<td>7.0</td>
</tr>
<tr>
<td>Fifth</td>
<td>1974-79</td>
<td>294</td>
<td>5.2</td>
</tr>
<tr>
<td>Sixth</td>
<td>1979-85</td>
<td>931</td>
<td>6.6</td>
</tr>
<tr>
<td>Seventh</td>
<td>1985-90</td>
<td>758</td>
<td>3.3</td>
</tr>
<tr>
<td>Eight</td>
<td>1992-99</td>
<td>3998</td>
<td>N.A.</td>
</tr>
<tr>
<td>Ninth</td>
<td>1992-99</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Tenth</td>
<td>2003-07</td>
<td>26613.9</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Source: Five year plan document.

Public plan expenditure on civil Aviation in first five year plan (1951-56) a sum of Rs. 22.90 crores was expensed on the development and expansion of civil aviation in India. In this time period the aerodromes were constructed and new aircrafts were brought for those air companies which was newly formed and for new offices,
modification of aircrafts, rennovation of the existing ones, development programmes are started. The actual expenditure incurred was Rs. 22.50 crores in this five year plan. In second five year plan it was decide to expense a lump sum of Rs. 43.00 crores for the development and expansion of civil aviation in India. In this time more attention is provided on the communication, aerodromes, equipment, accessories and training, education equipments etc. The actual expenditure incurred on these terms in this time period was Rs. 49.00 crores.

In the third five year plan period (1961-66) it is proposed to expense 56 crores on the expansion and development of civil aviation in India. In this time period the four international airports made at Bombay, Calcutta, Delhi and Madras for Jet aircrafts. A huge amount of capital investment is expensed on developing aerodromes, purchasing new aircraft construction of staff colonies and modernisation of equipments.

**Plan Holiday (1966-69):** The Govt. introduced a plan holiday for three years (1966-69) after the completion of the third year plan in 1966. Total amount spent on civil aviation in the first three annual plans were Rs. 66.00 crores but the main criteria taken up was on going jobs and major assignment. In the fourth plan (1969-74) the actual expenditure amounted to Rs. 177.00 crores. In this period some of the domestic aircrafts were also improved and modified for Jet flight. In this plan, run way, terminals and telecommunication facilities were installed
to ensure smooth operations of heavier and larger aircrafts. A major expenditure of the Air corporation of India was used on purchasing bigger aircrafts, workshop, housing facilities for their staff.

The fifth plan (1974-78) made a provision of Rs. 337.00 crores for aviation, but actual expenditure was 294.00 crores. In this period preferences was provided to modern equipment at the aerodromes to improve their services.

In the seventh plan the outlay had dropped to 3.32% of the transport sector. The total outlay of this plan was Rs. 758.00 crores. But in this plan great emphasis is accompanied on the civil aviation sector to find it's own findings, for developments. It has also been suggested that while improving utilization of it's assets the growth of civil aviation must be kept in check.

In the eight five year plan the total outlay is recommended by the planning commission of Rs. 4954.14 crores but actual expenditure was 6368.00 crores as plan outlay for the development of civil aviation top priority was given for expansion of fleet of both Air India & Indian Airlines and modern equipment for all major aerodromes in the country which has night landing equipments.

In the tenth five year plan the toal outlays recommended by the planning commission is Rs. 10.0 million but actual expenditure was Rs. 26613.9 million as play outlay for growth & development of civil aviation.
V Air corporation Act & its impact on Air India & Indian Airlines

An act to provide for the transfer & vesting of the undertaking of I.A. and A.I. respectively to and in the companies formed and registered as Indian Airlines limited and Air India Limited and for matters connected there with or incidental there to and also to repeal the Air corporation Act 1953.

This Act was passed on 1 August 1953 the purpose was to provide establishment of Air corporations, taking over the undertakings and providing air services in India. This Act is enacted by parliament in the forty fifth year of the Republic of India.

It shall be deemed to have come into forced on 29th day of January 1994.

On such date as the central Govt. may, by notification in the official Gazette, there shall be transferred to & vest in

(a) Indian Airlines Limited, the undertaking of Indian Airlines.

(b) Air India Limited the undertaking of Air India.

This Act provide two important developments first now both the companies Air India and Indian Airlines were registered under the companies Act, before this both the companies were 100% government owned second the operation of private airlines have been legitimized from January 29, 1994.
The new civil Aviation policy prepared by the govt. has been circulated for all concerns. The policy, among other lays emphasis on private sector participation in the aviation sector as a whole and particularly in the construction/ upgradation/operation of new as well as existing airports.

The objective is to promote private investment, improving quality and efficiency and increasing competition in this vital sector of economy creation of a conductive competitive regulatory frame work with minimum control.

The Government has ended the monopoly of Indian Airlines and Air India on the scheduled operations by repealing the Air corporation Act 1953. There are at present four private scheduled Airlines operating on the domestic network rendering the passenger a wide choice of flights.

A part from this at present 37 companies are holding non scheduled air taxi operators permit.

The policy on domestic air transport service was approved in April 1997 according to which barriers to entry and exit from this sector have been removed; choice of aircraft type and size has been left to the operator, entry of serious entrepreneurs only has been ensured, and equity from foreign airlines, directly or indirectly, in this sector has been prohibited.
The existing policy on air taxi services providing for a route dispersal plan to ensure a operation of a minimum number of services in the North Eastern Region, Andaman & Nicobar Islands, Lakshadweep and Jammu & Kashmir has been retained.

As on 31st May 2004 India has bilateral Air services agreement with 200 countries. During the period under reference, Private Domestic scheduled operators (PDSO) were permitted to commence operators to SAARC countries. Hence domestic and foreign private investors have been invited to participate in the development of new international airport and expansion of infrastructural support at the domestic level.

Recently private parties have shown interest in developing airports in India, Regarding the post liberalisation scenario of the domestic air industry.

It is due to hike to the price of (ATF) aviation turbine fuel which is commensurate to the price of crude in International as well as domestic market. ATF is the major cost for domestic carriers accounting for 30% of the total operating costs in India which is much higher than around to 10 - 15% for airlines worldwide.

The exorbitant sales tax on the ATF, which increase the price of ATF, is the major reason for the higher share in operating cost.

During the past four years the fuel cost of IA has been on the rise. During 1999-2000 it was Rs. 866 crores, this rose to Rs. 1164 crore in
2002-03, and Rs. 1297 crore is 2003-04 and Rs. 1445 crore by the end of 2004-05 financial year.

Merger of Air India Limited and Indian Airline Limited come with Mega problems & Mega advantages too. Taking note of the global trends in aviation industry towards mergers and consolidation of airlines and formation of global alliances, which enable airlines to optimize fleet acquisition to leverage the asset base, to strengthen network and to achieve economy of seats, the Government has decided "in principle" to work towards merger of Air India Limited and Indian Airlines Limited.

VI Privatization & Its Impact on Indian Airlines & Air India

New Industrial policy of the year 1991 that paved in turn, the way for privatisation in our country, along with other two pillars of economic reforms, i.e. liberalisation and globalisation. Privatisation policies are undertaken to promote efficiency in a public budget constraint environment and are other driven by disenchantment with public sector performance.

The Govt. is open to the two state owned airlines Air India and Indian Airlines examining various option for setting up separate cargo airlines including typing up with the private sector.

A limited open sky policy was adopted by the Government for the year 2005-06, under which designated foreign airlines were permitted
Foreign airlines have also been permitted to upgrade their equipment at their existing frequencies during the period 1 Nov. 2005 to March 31, 2006.

Policy initiatives have had a marked impact upon airlines traffic. The entry of low cost carriers (LCCs), which are 30 to 35 per cent cheaper than the regular flights, has changed the profile of the air passengers.

Domestic and international traffic grew by 24.2 percent and 18 percent in 2005. Private airlines now account for 68.9 percent of domestic traffic. In 2005 International and domestic cargo records a growth of 11.7 percent and 6.6 percent.

Private sector participation will be a major thrust area in the civil aviation sector for promoting investment, improve quality, efficiency and increasing competition.

The Airport infrastructure policy permits private equity participation in development of airports infrastructure to bridge the resource gap as well as to bring greater efficiency.

Today, Indian airlines have difficulty accessing hangars for maintenance. As a result private operators have to do some maintenance abroad. Airline maintenance and overall should be an area where India could develop a major international business, lever ageing its low labour
costs and world-class engineering to service aircraft for other countries as well as its own.

**Requirements for schedule Airlines**

To operate flights safely and regularly, broadly the Airlines should demonstrate it competence for that they have the necessary man power, infrastructure and aircraft of suitable type to conduct such operations. Among the guidelines laid down by civil aviation ministry are:-

**General Requirements**

1.1 The maximum certified passenger seating capacity excluding pilot seats shall not be more than nine in case of turbine engine aeroplane and four in case of piston engine aeroplane.

1.2 The piston engine aeroplanes shall be operated for charter operations during day-time and VFR weather conditions. The turbine engine aeroplanes may be operated during day/night and VFR/IFR weather conditions as specifically approved.

1.3 The operator shall lay down their own requirements, which shall not be lower than the requirements contained in this CAR, keeping in view the nature and area of their operations. The company requirements for such operations shall be specified in the company Operations Manual.

1.4 Deactivation of duplicate control shall be ensured if the Co-Pilot seat is occupied by passengers.
1.5 The operator shall comply with all the security requirements laid down by Bureau of Civil Aviation Security.

1.6 The operator shall not sell tickets for individual seats like an airline operator, only the entire aeroplane can be charted.

1.7 The operator shall be responsible for paying all taxes and charges including PSF, IATT, FTT as applicable to the concerned authorities.

2. Pilot Qualification & Experience Requirements

2.1 The pilot operating single-engined aeroplane under the provisions of this CAR shall meet the following minimum requirements:

2.11. For Piston Enginee Aeroplanes

The pilot shall have a minimum of:

a) Total flying experience - 500 hours
b) Total PIC flying experience - 200 hours
c) Total flying experience on type - 50 hours
d) Total PIC flying experience on type - 25 hours
e) PIC flying experience in the last six months on type - 10 hours

2.1.2 For Turbine Engineed Aeroplane

The pilot shall have current instrument rating and a minimum of:
a) Total flying experience - 700 hours
b) Total PIC flying experience - 300 hours
c) Total instrument flying experience as PIC - 100 hours
d) Total PIC flying experience on type - 50 hours
e) PIC flying experience in the Last six months on type - 10 hours
f) Total flying experience in night operations * - 10 hours

* For night operations only.

2.2. The pilot shall have valid endorsement in his/her licence of the type of aeroplane to be flown.

2.3 Initial and Recruitment Pilot Training.

Details of checks and training requirements for such operations about pilot competency, specifically in respect of, "engine inoperative or malfunctioning" during take-off, climb, cruise, descent, approach, landing and significant malfunctioning of other system, shall be specified in the company Operations Manual. An appropriate entry in the pilot logbook shall be made to confirm the compliance of this requirement.
3. Operational Requirements

3.1 The operator shall strictly adhere to FDTL specified by the DGCA.

3.2 The aeroplane shall be flown over hilly terrain, sea and thick forest provided safe forced landing can be executed in the event of engine failure. The operator shall identify suitable sites for forced landings for each route to cater for any possibility of engine failure during flight.

3.3 All flights shall be operated in accordance with the company Operations Manual.

3.4 The operations shall be to/from airports having air traffic control services and during the watch hours. The operators should adhere strictly to the approved flight plan. Any deviation there from shall be with the prior approval of the concerned ATC unit.

3.5 The minimum operating altitude shall not be less than 1000 feet above the highest obstacle located within a horizontal distance of 2000 feet from a point vertically below the aeroplane.

3.6 The operator shall ensure that minimum fuel carried on board the aeroplane shall be in accordance with the requirements specified in CAR Section 2, Series 'O', Part II.

3.7 Take-off Limitations
The company Operations Manual must specify procedures to cater for departure emergencies for each runway to be used in these operations.

3.8 Route Limitations

The routes must be such that the aeroplane remains within a distance equivalent to 15 minutes of cruise flight plus the gliding distance from cruise altitude, both in still air, of a suitable landing area.

4. Airworthiness and Maintenance Requirements

The requirements given hereunder in respect of instruments and equipment are in addition to those given in various Civil Aviation Requirements of Section 2 (Airworthiness).

4.1 The aeroplane should have been type certified to meet the design requirements of FAR 23 or JAR 23 or any other equivalent requirements acceptable to DGCA.

4.2 The aeroplane should be fitted with all instruments and equipment declared mandatory by DGCA as specified in CARs of Section 2 Airworthiness. The aeroplane shall also be equipped with suitable anti-icing or de-icing devices when operated in circumstances in which icing conditions are reported to exist or expected to be encountered.

4.3 For all operations in the event of engine failure, the aircraft shall
have sufficient battery capacity to maintain the operation of all essential flight instruments and navigation systems during a descent from cruising altitude whilst maintaining a glide range configuration capable of meeting suitable landing area route limitations.

4.4 Maintenance of airplane and the engine shall be carried out by DGCA approved organisation(s). The maintenance programme shall be strictly in accordance with that given by the manufacturer and approved by the DGCA. The approved organisation carrying out the maintenance of the aeroplane shall reflect the maintenance program in the Quality Control manual.

4.5 Additional Requirements for Turbine Engined Aeroplane:

4.5.1 The aeroplane shall be maintained in accordance with an approved system of maintenance by an approved organisation. Each operator shall have a program to continually monitor and analyse the airframe system and engine reliability. The engine reliability program shall incorporate a reporting procedure to the DGCA and manufacturer for significant events detrimental to the operations, such as an engine over-temperature, in addition to any other major defect.

New Priorities:

Air India & Indian Airlines are providing more concentration at
the future with renewed hope and confidence as the Indian economy is showing robust growth around 8% many, steps are taken for passenger comforts and better services.

1. Air India also offers a 55% discount to senior citizen aged 60 years and above on the domestic routes. With the increasing tendency towards opening of skills, permission has been grated to foreign airlines.

2. The Govt. of India has approved the company's project for the acquisition of 43 New A-320 facing aircraft on 29 September 2005.

3. To boost employees morale and to encourage them Air India has been awarded the prestigious mercury award by the International flight capturing Association at IPCA 2004 conference held at office in France.

4. The employees of Indian Airlines was also honoured with awards for it's over all performance, services offered and for excellence in special fields of activity in current Indian Airlines have been awarded the A-300 operational excellence Award for 2005 by Airbus, in recognition of its remarkable results in operating Airbus Aircraft. Both companies continued to provide various welfare facilities to its employees includes amongst other,
medical facilities, subsidized. Canteens, financial assistance for the part time course, educational scholarship towards of employees, holiday homes, sports club, staff house, loans, Pension scheme etc.

VII Strategic Alliances & Merger of Air India & Indian Airlines:

In keeping with global development and to maximise the utilisation of the resources of both Airlines, Air India and Indian Airlines have established and / or enhanced cooperation in some areas like:-

1. Hub & spoke flights and code share flights to extend market reach and provide seamless travel to foreign destinations from interior points in India and vice-versa.

2. Joints computersed reservation system named 'SITAR'.

3. Appointment of common GSAs.

4. Synergy created by rationalisation of routes, fares, space accommodation, advertising, marketing and promotional activities.

5. Joint venture flights to the Gulf from kozhikode.

Taking note of the global trends in aviation industry towards merger & consolidation of airlines and formation of global alliances, which enables airlines to optimize fleet acquisition to leverage the assets base, to strengthen network and to achieve economy of seats, the Government has decide "in principle" to work towards merger of Air India Ltd. and Indian Airlines Limited.
This merger will affect initial public offerings planned by both airlines are still being worked out and will be decided in next few months. The planned merger of Air India and Indian travels comes as both state control allied airlines struggle recent to move the number of international flights to India and allow private local carriers to fly abroad have thrown open India's skies and increased passenger volumes by about 20% a year.

Under the merger the two airlines would be able to mesh their marketing and ticket distribution, coordinate routes and save money sharing purchase of Aircraft.

Both state carriers are in throes of extensive fleet acquisition programers, with Air India having ordered 68 new aircraft for delivery after early 2012.

The merger aimed at optimising fleet acquisition and leverage the assets base of both carriers would figure high on the governments agenda with civil aviation. The most awaited development in 2007, would be the merger of both the national carriers Air India and Indian Airlines into a single entity. If all goes as planned, the country could get a unified carrier under a new brand name, a new identify.

Civil Aviation minister Mr. Praful Patel Said that while the name of the domestic carriers remains, Indian Airlines the brand name used for publicity/advertising has been changed to India.
He said "about Rs. 3.25 crore has been spent in civil aviation sector":

**Brief Profile of Air India and Indian Airlines**

**Air India**

(i) **New stations connected/operated by A.I.** = A.I. has started flights to Shanghai & Los Angeles & also introduced terminator flights from Ahmadabad to London. A.I. has identified need for non-stop operations to USA and is tailoring its fleet acquisition accordingly.

(ii) **leasing of Aircraft by A.I.** = Pending the aircraft acquisition plans, A.I. has embarked on a strategy of taking aircraft on dry lease to meet its capacity expansion requirements. A.I. & IA express presently have a fleet of 21 & 3 aircraft respectively on dry lease.

(iii) **Acquisition of Aircraft by A.I.** = In its meeting held on 13.10.05, the Public Investment board (PIB) has approved the proposal for acquisition of 50 aircrafts by A.I. and 18 aircrafts by AI charters Limited (AICL).

(iv) **Low cost operations by A.I.** = A.I. has operationalized "Air India Express", a new budget carriers under the banner of A.I. charters Limited AICL, a wholly subsidiary of A.I. by inducting 14 B-737-800 aircraft on dry lease over a period of one year from March, 2005 to April 2006. Flights to South East Asia & Gulf are being operated by this carriers at substantially reduced fares.
(v) **cargo operations:** AI is also planning to significantly expand its cargo operations in a phased manner over the next two years. For this purpose, Air India plans to dry lease 1 A310 dedicated freighter and the B747 dedicated freighter and convert to A310 aircraft into aircraft for freighter services. Through these measures A.I.'s revenue for cargo services increased from Rs. 4000 to 6000 crores in 2005 to 2006.

(vi) **Initial Public offerings (I Pos)** The Board of Air India in its 106th meeting held on 26th April 2005 has in principle, approved the initial public offering (IPOs) in order to strength then AI's equity base subject to the approval of Govt.

(IA) **Indian Airlines Limited:**

(i) **New International connector by IA=** I.A. has introduced a weekly guwahah- Bangkok flights from Jan, 2005. Besides New services has been Introduced on Delhi kabul, Delhi Singapore, Delhi Bangkok-Kualalampur & Mumbai_bangkok routes. A direct flights between Delhi-Singapore has also commenced.

(ii) **Leasing of Aircraft I.A.=** Indian Airlines has on going programme of having aircraft to increase its currently 17 Airbus A-320 & Air-42 aircraft are on lease with the airline. In addition, the airline has proposal to lease Aircraft as per details below.

(iii) **Acquisition of 43 Aircraft by I.A.=** The proposal to
acquire 43 Airbus aircraft consisting of 19 A-319 & A-320 & A-321 aircraft allowed 11 powered with CPM 56B engines has been approved by the Govt. as 29.9.05. The airline has been accordingly advised to proceed further and finalise the purchase agreement.

(iv) Cargo operations= IA is into the final stages of examining conversion of 5 B 737 into freighter aircraft to use them on a hub & spoke concept with Nagpur as a hub to offer express/retail courier services.

(v) Initial Public offerings (IPOs)= IA ltd. proposes to acquire 43 Airbus aircraft during 2006-07 to 2010-2011 at an estimated cost of approx Rs. 101000 crores. The Govt has approved infusion of Rs. 325 crores as equity in the IA Ltd. to be used as margin money for the acquisition further in order to partially support the financing of the acquisition.