CHAPTER III

EXPANSION OF THE AIR FORCE
The size and growth of India's airpower is by and large determined by her internal and external policy. The internal policy of independent India was conceived during the struggle for freedom itself from the thirties of the present century. The Indian National Congress which assembled at Karachi in March 1931 passed a resolution on the Social Economic policy for future India with the goal of gradual establishment of a secular, socialist and democratic state.\(^1\) Rapid industrialisation and social development became the prime objectives soon after independence. The Industrial policy resolution of April 6, 1948 formally enunciated a mixed economy reserving a sphere of operation for both public and private sectors. It was further emphasized in the second five year plan in clear terms, "The adoption of the Socialistic pattern of society as the national objective as well as the need for planned and rapid development required all industries of basic and strategic importance and of public utility services to be in the public sector."\(^2\) The private sector largely remained in consumer and small industries. Indian nation builders wanted to maintain a policy of Peace, Friendship and Co-operation with all countries. Similarly India's foreign policy and Strategic posture were based on peace and conflict resolution and not on deterrance. She accepted non-alignment as the strategy of her foreign policy with the aim of ensuring the security of the nation in a world dominated by two ideologically conflicting blocs led by

the United States and the Soviet Union respectively. But the
Politico-Strategic problems, which shrouded Free-India warranted
to step up the size and efficiency of the armed forces so that
the security of the nation would be guaranteed, aggression would
be deterred and friendship encouraged.

The Indian Airforce from its very inception assumed the
great task of evacuating nearly 30,000 refugees from the newly
created Pakistan to India and air lifting Indian soldiers to
Srinagar in defence of Jammu and Kashmir. Alongside necessary
measures were taken in the direction of strengthening the force
which consisted only of fighter and transport aircraft but lacked
bombers and air defence equipment. At this juncture, it was
decided to have a force of ten squadrons well balanced and having
the offensive and defensive capability. As a first step, a
fleet of hundred Spitfire and Tempest fighter aircraft was brought
to Bombay from the RAF Karachi base. Of these thirty three
aircraft were obtained as India's share and other sixty seven
were purchased from the British surplus. A sufficient number
of B-24 Liberator bombers left behind by the United States Air
Force (USAF) at Kanpur were skillfully commissioned into use.

Keeping in view of the existing threats to India Shri.
Baldev Singh, Minister of Defence informed the Parliament about
the need for a balanced armed forces meaning that the size and

3. Jayaramu. P.S. "India's National Security and Foreign Policy
during the Nehru era" IDESA Journal Vol. XIV. No.1. July Sept.
5. Singh Arjan. 'The Indian Airforce and its role in the country's
6. The Nucleus of Indian Airforce Headquarters was first located
at Karachi- 'India in 1932-33' Manager of Publication.
and efficiency of the three forces should be developed to a size that they could co-operate in support of each other to meet any emergency situation of national security and defence since India is physically so vast. He further stressed that the ultimate aim of development of the forces should end up in well balancing the forces taking into consideration the difficulties in the frontiers particularly in the North West facing Pakistan.  

In pursuance of the national policy of self-reliance with available resources in the country in the manufacture of the defence requirements, the Hindustan Aircraft Limited (HAL) was entrusted with the task of producing British Percival Prentice Trainer Aircraft under license. Fifty units were successfully assembled by 1950. Another batch of sixty two Indian designed UT-2 trainer Aircraft and one hundred and fifty DH-82 Tigermoth trainers of De Havilland Canada also came out successfully from the HAL. In addition to a fleet of fifty two Vampire jets and light transport aircraft procured from Britain, a beginning was made to start manufacturing of Vampire jets with associated engines in the HAL.  

A high powered Armed Forces Reorganisation Committee formed in 1952 recommended to raise the Airforce into a fifteen squadrons force consisting of eight fighter and bomber Squadrons;

one night fighter squadron; one photo reconnaissance squadron; 
two light bomber squadrons; one maritime reconnaissance squa-
dron and two transport squadrons.14

A Para-Medical flight was formed to rush medical aid to 
inaccessible areas at times of emergency. This newly formed 
team of flying doctors proved their worth by saving several 
lives in the thick forest regions of Assam.15 Moreover a fleet 
of Ouragon jet-fighters was obtained from France and the first 
batch of four such planes landed at Palam on 2nd October 1953.16

On the eve of her silver jubilee celebrationon 1 April 1958, the 
Indian Air Force was found having achieved a large measure of 
self-sufficiency in the field of training. For advanced and 
applied flying a jet training wing and a transport wing were set 
up at Hakimpet and Begumpet near Hyderabad. A Land-Air warfare 
school was also in the process of establishment. To train offi-
cers in Aero-medicine, a school of Aviation medicine was started 
in Bangalore.17 Efforts were also undertaken to design and develop 
indigenously two supersonic jet aircraft HF-24 Marut Fighter-
bomber and HJ 7-16 Kiran trainer in 1956 and 1961 respectively.18

The first HF-24 Marut designed by Dr.Kurttang, a leading German 
aircraft designer was successfully launched on 24th June 1961.19
Later as the Orpheus engine of the HF-24 Marut was found to be 
not powerful, the Indian Government made a search for suitable 
engine from abroad. The efforts to acquire British Orpheus-2 and

15. India 1954. Publications division, Govt. of India, New Delhi, 
P.90.
16. Ibid.
17. All India Congress Committee report. Eleventh year of freedom 
18. Jagjivan Ram. Progress of India in the field of Defence in 
1673.
Egyptian E-300 engines ended in vain. The Soviets besides supplying thirty AN-12 transport Aircraft promised to help India in establishing a Plant to manufacture RD-9 motors for HF-24 Marut.

After the Chinese aggression of 1962 an Aircraft requirement committee was formed under the chairmanship of Shri J.R. Tata. In its report the committee unequivocally recommended to build up the Airforce into a forty five squadrons force by 1970 and based withdrawal of obsolete aircraft like Vampire, Ouragons and Mysteres. The first Five year defence plan floated in early 1964, also stressed the need for forty-five squadrons Airforce through a programme of requirement and replacement of the outdated aircraft. Improvement of Air Defence radar and communication facilities were also emphasised in the plan. After the conclusion of his visit to the USA, USSR and UK, the Defence Minister Y.B. Chavan on 21st September 1964 informed that the USA was ready to offer air defence communication and transport supports and the Soviet Union to provide technical assistance to Indian personnel for establishing MTG factories by the end of 1965. It was decided to build the airframe of the MTGs at Nasik and engines at Korapet division of HAL.

On the eve of Indo-Pak war of 1965 the Indian Airforce had no supersonic version to her credit. As for the twelve

21. Ibid.
MIG-21s received directly from the Soviet Union, two met with air crash within few months time. the rest remained on an unsatisfactory condition. 25 During the Indo-Pak war of 1965 the Indian made tiny midjet Gnats had outwitted American made F-86 Sabres and F-104 Star fighters used by the Pakistan Airforce. It was the intelligent operation of the Indian Pilots that brought about the catastrophe of Pakistani aircraft. To neutralize the jets, it was decided to keep the air war at low altitude. The MIGs and HF-24 Maruts were not at all put into action. 26

In 1967 under former Food Minister Shri. C.Subramaniam a high level Aeronautics Committee was constituted to review the unsatisfactory condition prevailing in the Aircraft production units. The committee in its report suggested that more MIG-21s should be added to the prevailing squadrons, suitable engine for the HF-24 Marut be tried indigenously as far as possible and the use of aged aircraft like Vampires and Mysteres be withdrawn. 27

In another development after a spell of eleven years, the first squadron of HF-24 Marut was formed in April 1967. In addition to this, the HAL produced one hundred and ninety six MIG-21s with sixty percent of indigenous components. 28

The hostile nature and unfriendly attitude of Communist China and Pakistan towards India and the fallouts of super powers rivalry during the peak periods of cold war, made a significant impact on the expansion and modernisation of the Indian Airforce. The clinched-fist policy of Pakistan over Kashmir forced India to take appropriate steps to meet any offence on the part of Pakistan. When the election for Kashmir was announced in 1951, the Pakistan Government reacted vehemently and declared Jihad against India. Consequently the Indian Airforce was alerted and several emergency units were raised. Fortunately no direct war was carried out.  

Again on 6th Feb. 1954 when the Kashmir Government had ratified its accession to India, Pakistan made a wild protest. In her white paper she declared that negotiations with India had failed.  

Meanwhile she entered into the Northern Tier Alliance system of the USA along with Turkey. The Treaty referred to as the US-Pakistan Defence Assistance Agreement was signed on 19th May 1954. It resulted in reorganisation reequipment, training and modernisation of the Pakistan military forces to a level which she never achieved before. Shri. Jawaharlal Nehru, then Prime Minister of India reacted strongly by stating that it had created a grave situation for people of India and Asia. He further added that it caused tensions as the military aid given by the US to Pakistan was a form of intervention in the problems which were likely to have more far reaching results than the previous types of intervention.  

The entry of Pakistan as a regular member of both the US sponsored South East Asian Treaty Organisation (SEATO/Manila Pact) in 1954 and the Central Treaty Organisation (CENTO/Baghdad Pact) in 1955 enabled to re-equip her Airforce with sophisticated American aircraft to a considerable extent. In the next few years Pakistan received twenty supersonic F-104 star fighters, hundred and twenty sub-sonic F-86 Sabre jets and thirty B-57 bombers under the US Military Assistance Programme.

In fact Pakistan's quest for parity came at a time of the emerging American global strategy to contain communism. The South East Asian Treaty Organisation and the Central Treaty organisation were considered bulwarks against communist expansion. Nehru commented that it enabled Pakistan to deal with Indian Government on an equal basis as perceived by her, and the Pakistani leaders felt that they were able to stand militarily on par with India and negotiate political and economic disputes. He added that the aim was merely to use the aid as a whetstone to keep the cry of Jihad burning against India.

This kind of Airpower build-up by Pakistan necessitated the Indian Government to equip her Airforce with equally good air arms through foreign collaboration and co-operation in tune with her policy of self-reliance. Soon India purchased one hundred and ten French Mystere - IV. A. Interceptors, one hundred and

sixty British Hawker Hunters and seventy eight Britis. Electric B-1 Canberra Bombers. An agreement for the supply of twenty readymade Gnats light fighter aircraft and licensed production of one hundred such units in the Hindustan Aeronautic Limited was also concluded with Folland Company of Britain.  

A substantial increase in the strength of transport squadron was also carried out. A fleet of twenty six Canadian DHC-3, two British Viscount-730, two Soviet Ilyashin-II and four American Bell-7 Helicopters were procured between 1955 and 1957. To manufacture AVRO-748 (HS-748) Transport Aircraft under licensed production, an agreement with Hawker Siddley group of Britain was entered on 7th July 1958. The first AVRO-748 produced in India was launched on 26th November 1961.

The row over incorrect boundary line between India and China and the Tibetan uprising in 1959, led India to concentrate more on inducting transport planes and helicopters suitable for high altitude Himalayan ranges and for the construction of strategically important border roads near the Tibetan border.

For this purpose twenty nine Fairchild C-119, Six Sikorsky S-62, and twelve Bell helicopters were purchased from the USA between 1959 and 1962. A batch of twenty six Hi-4 helicopters, twenty four IL aircraft and sixteen AN-12 heavy transport aircraft were procured from the Soviet Union between 1960 and 1962.

36. Ibid.
As the world class supersonic fighter F-104 star fighter of the United States of America was introduced in Pakistan Air force, the Indian Government galvanised its effort to find out an equally powerful supersonic aircraft. Efforts to acquire British Lightening versions, American F-104 and French Mirage-III bore no fruitful result. However in August 1962 India concluded an agreement with the Soviet Union which offered twelve MIG-21 supersonics as well as Soviet technical assistance to establish production facilities for MIG-21 aircraft at Nasik and Korapet. Obviously the Soviet strategy during the coldwar era had been to win over the key anti American States in order to leapfrog the US sponsored Military pacts. This manifested itself further in the Soviet arms aid to Afghanistan in 1955 and later to India as both countries were being treated as traditional enemies of Pakistan, an ally of the USA. Towards India she began to play an increasingly vital role in certain major issues. Politically she supported India on Kashmir issue, economically helped India to construct heavy industries and supplied India the necessary defence equipment to strengthen her strategy. Unlike others, the Soviet Union prepared to receive payments in Indian currency or commodities and proposed to meet India's requirements in line with her economic policy.

India after fifteen years of Independence had to face a serious crisis of national security in the North Eastern Frontier

of 'Domino Theory' which meant to expand communism in the south west, south east and south Asia. The non-aligned stand and traditional ahimsa-moral stance of India did not affect the Western military aid programmes. Prime Minister Nehru justified his Government's decision in accepting arms aid from friendly countries by stating in the Parliament on 10th December 1962, "We have long followed a policy of non-alignment and I believe firmly that this was a right policy. It means our not joining any military bloc or military purpose. I think that policy should continue. But we must take all necessary measures to defend our motherland and take the help of our friendly countries who are willing to assist us in this sacred task." He further mentioned, "The Soviet Union raised no objection to the Western bloc nations providing military and other assistance to India."

An agreement regarding Peace Corps Volunteers coming to India was signed with the USA on 21st November 1962. The Joint US-Common Wealth Air Mission comprising Air Com. C.J. Mount (RAF), Brig. Gen. James P. Tipton (USAF) and Gr. Capt. C.B. Murray (RCAF) visited India on 30th January 1963 to inspect the existing air defence systems in India. As a result in addition to the mobile radars already supplied to India, the USA agreed to provide sets of powerful radar communication equipment and training facilities in this connection to Indian personnel in the USA.

Consequently a joint radar training agreement with the USA and UK

was entered on 22nd July 1963.\textsuperscript{55}

Shiksha - a joint air defence exercise along with the Air forces of UK, USA and Australia was undertaken both in the Eastern and Western sectors of India in November 1963.\textsuperscript{56} However India's request for acquiring certain sophisticated air arms was not complied with by the Western democracies.

The USA declined to supply data of the Hughes MH-55 air to air missile system and F-104 star fighter aircraft, albeit the Lockheed Company's willingness to setup a unit in India. Shri A.M. Thomas, Minister for Defence Productions reported in the Lok Sabha that the US Government had indicated that it would not be possible to accommodate within the Military Assistance Programme, the type of fighter aircraft requested by India.\textsuperscript{57} Neither the British nor French showed any interest in assisting India in producing supersonic jet planes under license agreement. But the French had agreed to help licensed manufacture of one hundred and fifty Alouette-VII helicopters in India.\textsuperscript{58}

The Soviets on the other hand supplied a fleet of MIG-21s and granted license for the production of the above units in India. On 17th August 1963 the Indian Government floated an entirely state-owned company called the Aeronautics India Limited with the prime aim of manufacturing MIG - Supersonics.\textsuperscript{59}

\textsuperscript{54} Keesings contemporary Archives 1963-64. vol.XIV London. P.19648 India, 1964. Publications Division, Govt. of India, New Delhi pp.464.
\textsuperscript{55} Ibid.
\textsuperscript{56} India - 1964 Publications Division, Govt. of India, New Delhi pp. 445 & 457.
The arms embargo imposed on both India and Pakistan on 8th September 1965 by the USA and the UK had in fact shaken confidence in Western reliability. However, it further enhanced the Indo-Soviet Military tie-ups.60 Pakistan in a desperate mood turned towards other suppliers to build her forces. From China, she acquired one hundred and twenty MIG-19s and two squadrons of IL-28 bombers along with spare parts.61 About eighty F-86 Sabres and four C-130 transport aircraft were obtained from Iran.62 Another fleet of thirty Mirage-IIIIs and ten Alouette helicopters for assembly under license from France also arrived in Pakistan.63

After the successful negotiations through the Tashkent agreement of 10th January 1966 between India and Pakistan, there were indications that the Soviet Union would be going to attempt a balance of power structure in the sub-continent. She came out with an offer of supplying military hardware to Pakistan. In return Pakistan stepped up its diplomatic efforts with the Soviets saying that she had no enmity with them and her relation with Western bloc was purely an outcome of her fear over India. The increasing dependence of India over the Western world after the Chinese aggression and the non-involvement of SEATO and CENTO in favour of Pakistan during the Indo-Pak war of 1965 induced Pakistan to drift towards the Soviet Union. Consequently

Soviet arms including twelve MI-85 and one hundred and fifty T 54/55 Armoured fighting vehicles worth of ten million dollars were supplied to Pakistan between 1968 and 1971. This move was resentfully opposed in India. In her diplomatic mission to Moscow Mrs. Indra Gandhi, Prime Minister of India, conveyed her concern about Soviet arms package to Pakistan. The Soviet leader Kosyglin publicly stated that they had not concluded any arms agreement with Pakistan. They also provided economic assistance to Pakistan through three trade agreements entered between the years 1966 and 1967. The Soviet Union maintained that her strategy was to improve her relationship with Pakistan while simultaneously extending arms assistance to India to soften her misgivings and opposition to the limited amount of arms supply to Pakistan.

Meanwhile the MIG-21 aircraft of Indian Airforce, which were lacking in sophistication, range, firepower and all weather capacity by modern standard were remedied to an extent by installing Soviet made MIG-21 PF aircraft and one hundred and thirty SU-7Bs (Sukoi) a swept wing fighter-bomber which could fly over a speed of thousand miles per hour. The Air Defence system of the Indian Air Force was strengthened further with a good number of surface-to-Air missiles (SAM) augmented from the Soviet Union. One hundred and two SA-2 missiles, five hundred and forty

64. Report 1969-70 Ministry of External Affairs, Govt. of India, New Delhi, P.30.
65. Indira Gandhi, 'The years of Challenge' - Selected speeches of Indira Gandhi. 1966-69. Publication Division, Govt. of India. PP.408-409.
K-13 Atoll air-to-air missiles for MIG-21 aircraft and one thousand and one hundred and twenty K-13 Atoll to be produced under license were procured and commissioned into the service of the Indian Airforce between 1965 and 1971.\textsuperscript{69} While the Soviet Union continued to be the principle supplier of arms to India, licenced productions of HS-748 and Gnat aircraft with Britain and SUD-Alouette-III Helicopters with France were underway in the HAL. Thus on the eve of Indo-Pak war of 1971 the Indian Airpower was composed of a balanced force consisting six hundred and twenty five aircraft of all kinds organised into forty five squadrons.\textsuperscript{70}

In typical big power fashion, modern India attaches much importance to allocating resources to the defence sector. The vast geographic and demographic size and the national security threat probabilities necessitate the need for a strong but well-equipped defence forces. It has also been understood that non-violence is not a virtue of the weak but a gesture of the strong towards the weak. As the defence expenditure stands unavoidable, additional care is always being taken in allocating fund to defence sector without affecting the socio-economic developments. Before the invasion of China in 1962, the defence expenditure was considered to be unproductive and a drain on the scarce national resources.\textsuperscript{71} It was in fact a result of the effects of centuries of feudal and colonial exploitation. In addition the Free-India

political executives who were pleased with success of their non-violence struggle in gaining independence, concentrated more on the social and economic upliftment of the people. Furthermore it was widely believed that the diversion of resources to defence would retard economic growth and development. This varying trends can be noticed from the following comprehensive description of India’s defence expenditure in general and towards Airforce in particular.

Prior to Second World War the average defence expenditure of British India was around forty five crore rupees per year. During the war years it was allotted as follows: Rs. 268 crores during 1942-43; Rs. 396 crores during 1943-44; Rs.458.32 crores during 1944-45 and Rs.395.32 crores during 1945-46.

After the war the interim Indian Government estimated that the annual outlay on defence might be fixed at about Rs.110 crores for a military programme involving a well-equipped and mobile army of about 2,00,000 men backed by reserve and a large territorial army, an airforce of twenty squadrons of all types and a small navy built around three light cruisers and two aircraft carriers. The Free Indian Armed forces in fact received a mere sum of Rs.92 crores in the 1947-48 financial year. During the general budget discussion on 9th March 1950 the Minister of Finance Dr.Mathai fixed the normal expenditure of defence of not

more than that of Rs. 12 crores.\(^7\)

Between the years 1949 and 1962 the defence expenditure had been maintained at an average of 1.9% of the GNP (Gross National Product). In other words a total amount not exceeding Rs. 3000 crores was spent on the defence forces until 1962.\(^7\)

This inadequate attention to the country's defence forces had been attributed to the Government's pre-occupation with the development programmes to alleviate poverty and illiteracy through successive Five year economic plans. The real impetus to build up the defence forces was given only after the Chinese invasion in 1962. The pre and post Chinese aggression years witnessed a steep hike in the defence allocation from Rs. 331 to 816 crores. The percentage of GNP reached its higher ever point of 4.5% in 1963.\(^7\)

Regarding fund allocation to the Indian Airforce, it was neither proportionate nor on par with when compared to the allocation made to Indian Army. Shri. Baldev Singh, the Minister of Defence made this imbalance in defence budgeting for the three forces clear in the Parliament on March 11, 1950.\(^7\)

He stated that the Government of India was spending comparatively a small amount on Air force and on Navy. He elaborated saying that as far as the Defence forces of India were concerned, the Army was the main fighting force. It had remained the main fighting

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78. Ibid.
force for the last one century and the Airforce and the Navy were young services and had been developed during the last fifteen or seventeen years. A greater part of Indian Defence budget went to the army and there were special circumstances for that distinction in defence budgetting. India had long land frontiers, and after independence the situation had also greatly changed. The Western frontier ever since the creation of Pakistan had added to India's difficulties. It was anticipated that the future battle grounds were in the deserts of Rajasthan or Punjab or Himalayas. Another factor to Army's merit was the relatively easy maintenance when compared to the capital oriented Airforce and Navy.

An average of Rs. 42.22 crores was allotted each year between the financial years of 1951-52 and 1962-63 for Airforce as against the Army's share of Rs. 180.11 crores. In the Inter war period between 1963 and 1972, the Air force had continued to grow modestly maintaining the budgetary share between Rs. 113.7 crores to Rs. 295 crores. The claim was always based on the strategic role played by the Airforce in National Defence and Security.

80. Ibid.