

POST-WAR AIRLINES OF INDIA



The fifties saw further development of India's airline system, with fleets of Dakotas, Skymasters, Dragon Rapides and Vikings eventually giving way to more modern types. MAURICE WICKSTEAD spotlights the formation of Indian Airlines Corporation which brought together eight of the country's major companies, thereby amassing a huge fleet of Dakotas and sundry other types

PART TWO - Nationalisation and beyond

The first part of 'Post-war airlines of India' featured in the 2019 edition of the "Propliner" Annual, and covered the operations of the early scheduled carriers together with the background to each company's history. Maurice Wickstead now concludes the story, moving on to the post-nationalisation era and finally the period after deregulation.

NATIONALISATION

As early as 1946 consideration had been given to the nationalisation of domestic air transport in India, and this movement gained greater momentum in the early fifties. Only three of the independent companies were making any money, but the sums were hardly eye-watering, with Indian National Airways at the bottom of the heap with just £300. The outcome was the Air Corporations Act, which received presidential assent in May 1953, combining the eight surviving carriers into a single entity, the **Indian Airlines Corporation (IAC)**. Thus, the services of Air Services of India, Airways (India), Bharat Airways, Deccan Airways, Himalayan Aviation, Indian National Airways and Kalinga Air Lines were brought under the nationalised umbrella of IAC. Compensation was paid to all airlines, with 4.7 million rupees (about £350,000) spread amongst the carriers as a one-tenth payment in advance of nationalisation. The balance was settled by means of a bond issue at an interest rate of 3.5% and redeemable after a period of five years.

The new carrier inherited 154 assorted aircraft, in varying states of airworthiness, including 74 Dakotas, 12 Vikings (only two of which were airworthy), three Skymasters, a Dove, Proctor, Anson, Beech 18, Beech 17, a Saab Safir and five Stinson Sentinels, and a vast route network covering fifty or more destinations stretching from Kabul, Kathmandu and Assam in the north to Colombo in the south. Despite being handicapped by strung-out maintenance facilities, a lack of spares and vast overstaffing, within two years a fully co-ordinated network was achieved, though at a cost of six Dakotas written off with 29 fatalities.

After nationalisation, Indian Airlines Corporation established seven divisions, each covering the operations of the previously privately-run airlines. Line Number 1 covered Airways India routes and aircraft based in Calcutta; Line Number 2 Bharat Airways, Calcutta; Line Number 3 Himalayan Aviation and Kalinga Airlines, Calcutta; Line Number 4 Indian National Airways, New Delhi; Line Number 5 Deccan Airways, Hyderabad; Line Number 6 Air-India, Bombay; and Line Number 7 Air Services of India, Bombay.

A significant responsibility for the new airline was the operation of the Night Mail Service centred on Nagpur, where mail from four main cities was exchanged, permitting letters posted early evening to be delivered by late the following morning. Development of India's air services desperately needed new equipment, and in 1955 Indian Airlines placed orders for five Vickers 768D Viscounts and eight de Havilland Herons. The first Viscount (VT-DIO) was handed over to the Indian High Commissioner to London in a ceremony at Wisley on August 15 1957, followed by delivery four days later. A second aircraft was delivered in

HEADING PHOTOGRAPH: Dalmia Jain Airways was an early operator of the Bristol 170, with VT-CHL (c/n 12742) and VT-CID (c/n 12781) both delivered new to the airline in November 1946. Later transferred to Indian National Airways, the aircraft were returned to the manufacturer in the UK in the spring of 1949.

(Ed Coates Collection)

LEFT: An estimated fleet of 74 Dakotas was taken on charge by Indian Airlines Corporation when it came into existence in August 1953, including VT-CML (c/n 19868) which was inherited from Bharat Airways.

(Peter R. Keating)





Indian Airlines Corporation Vickers 768D Viscount VT-DJA (c/n 294) "Andra Pradesh" taxiing at Bournemouth (Hurn) Airport during her test flying programme in April 1958. (R.A. Woodcock via Bournemouth Aviation Museum)

September, with the last of the initial batch of five aircraft being handed over on November 21, by which time the airline had placed a follow-on order for another five Viscounts.

Fitted out in a 44-seat configuration, the Viscounts helped to transform the Indian Airlines network, being both the first turboprop and first pressurised type to serve with the carrier. Following crew training, the Viscount entered Indian Airlines service on October 10 1957 when it was placed on to the Delhi-Calcutta-Rangoon service. Introduced on to the trunk route linking Bombay and Delhi on November 22, this route was entirely Viscount operated within a fortnight. Viscount services to Karachi began on December 10, followed by the Bombay-Madras-Colombo route on December 21 1957. Delivery of the second batch of five aircraft began with VT-DIX on March 3 1958, and by early June Indian Airlines could boast a ten-strong Viscount fleet.

The problem of replacing the huge Dakota fleet was finally addressed a decade later when Indian Airlines began taking delivery of Avro 748s built under licence by Hindustan Aircraft. As a stop-gap, a modest fleet of Fokker Friendships was purchased, with the first of five Friendship 100s (VT-DMA) being handed over to the airline on April 5 1961, and another five following late in 1962. In 1962 Indian Airlines' entire fleet was sequestered to provide logistical military support on the Assam/China border, after incursions by Chinese forces into Indian territory, during which several Dakotas were lost during hazardous low-level supply drop missions. The last Dakotas were withdrawn in February 1974, which also saw the elimination of sixteen remote destinations from the network map, to which the Dakota was the only aircraft capable of operating. Around that time, Indian Airlines began introducing jet equipment, and in February 2011 was eventually combined with Air India to form a single state-owned carrier.

The 1953 Air Corporations Act effectively restricted private commercial aviation largely to non-scheduled operations. One specific exception, however, was **Vayudoot**, which took to the skies in January 1981. This new carrier had been specially created to relieve Indian Airlines of much of its public service obligation remit at a time when it was struggling to find sufficient jet capacity to cope with growing passenger numbers on inter-city trunk routes. Devised as a 50-50 partnership between Indian Airlines and Air India with an initial \$1 million investment, Vayudoot started modestly with two Fokker Friendships and two Hindustan 748s operating third-level services in India's remote northeast region, principally Assam, Manipur and Tripura. Two years on, and still



Indian Airlines Douglas DC-3 VT-AXB (c/n 20172) was originally flown by Air Services of India in March 1946. (Paul Morton Collection)

with just four aircraft, 1985 saw the young airline flying to twenty destinations, with a target of serving 47 stations within another ten years, and ultimately some 50 to 60. To fulfil these goals, Vayudoot was allocated some \$10.5 million for development over five years. With a commitment to bring third-level air services to isolated communities throughout the country, a smaller more rugged machine, capable of operating into rough airstrips, was needed. This requirement was met after Hindustan Aircraft signed an agreement with Dornier in November 1983 to licence-build the Do228 feederliner, ten of which were ultimately delivered to Vayudoot.

Another former Bharat Airways aircraft which joined Indian Airlines was C-54A Skymaster VT-CZT (c/n 10419), only to be lost in a hangar fire at Dum Dum Airport, Calcutta, in May 1962.

Tragic scene at Saffardjung on December 5 1970 following the crash of Jamair Douglas DC-3 VT-CZC (c/n 12103). Failure of the starboard engine due to fuel starvation shortly after take-off led to the pilot losing control of the aircraft. Of the 12 passengers and four crew members on board, five people lost their lives. (Statesman via Janet Muff Ryba)

starting in February 1985. Passenger figures rose from 19,000 in 1981 to 227,000 in 1992, at which time 45 stations were being served, though only around eight routes were financially viable. Despite being described by "Flight" as, "one of the most remarkable airline projects undertaken in modern history", in reality Vayudoot was never wholly profitable, and was subsequently incorporated into Indian Airlines in 1995, following its collapse two years earlier with debts of around £37 million.

THE NON-SKEDS

A dozen or so charter companies existed between 1945 and the late-seventies in India, primarily engaged in supply dropping for the military and servicing isolated communities, particularly to the remoter areas of northern India. But from first-hand accounts of the early post-war years, when paper currency was largely distrusted, gold smuggling and movement of 'black' money by air to the Middle East was not unknown, though officially such activities have always been denied. Accidents were numerous, the result of sparse and rudimentary navigation aids, lack of reliable meteorological information, poor maintenance and an unregulated 'gung-ho' attitude towards crew training and duty time. Despite these hazards, the early charter airlines played a vital part in the development of India's post-war civil aviation scene.

The earliest non-scheduled carriers, dating from 1946 were Dalmia-Jain and Jamair. **Dalmia-Jain Airways** was founded with a subscribed capital of 35 million rupees (approximately £260,000) as a joint venture between the pre-war Dalmia and Jain industrial groups. Offices were set up in Calcutta and Delhi, and in July 1946 they obtained control of Indian National Airways through their acquisition of the parent body, Govan Brothers. Dakotas VT-CDY, VT-CDZ, VT-CEA, VT-CEB, VT-CEN and VT-CEO were bought in March and April 1946, while several new Bristol 170 Wayfarers were delivered towards the end of 1946 (comprising VT-CGV, VT-CGW, VT-CHK, VT-CHL and VT-CID), all but one of which were seconded to Indian National Airways, which continued to operate as a separate entity. The company also gradually amassed a significant fleet of Dakotas, plus a handful of smaller aircraft, and in July 1947 began flying a daily scheduled service between Delhi, Amritsar and Srinagar, alongside general charter activities. The airline closed down around June 1952 when the business interests of the Dalmia and Jain families diverged. However, the airline's name cropped up again as late as 1968 when several of the Dalmia-Jain principals were arrested following a long-running government enquiry in connection with fraud charges relating to the misappropriation of funds from the carrier.



Bristol 170 Wayfarer Mk.IIC VT-CGW (c/n 12745) departed the UK on delivery to Indian National Airways on February 18 1947. In December 1948, the aircraft was repurchased by the Bristol Aircraft Company and returned to Filton. (Ed Coates Collection)

Former CNAC pilot Eddie Quin and chief engineer James B. Muff, together with several other CNAC personnel, remained in Calcutta after flying "The Hump" supply route to China during World War Two. Here they teamed up with the Maharajah Jam Sahib of Nawanagar, who ran his own Dakota aircraft (VT-CEI) based at Jamnagar, Gujarat, and who subsequently backed Muff and Quin in the formation of **Jamair**. The Maharajah had bought a number of lighter types early in 1946 comprising a Texan, a Stinson Sentinel and three Noorduyt Norseman. A small fleet of Dakotas - VT-COU in October 1947, VT-CQL and VT-CTR - was also acquired and deployed on charters and local scheduled routes until 1948, when the principals bought out the Maharajah's interest and moved base to Calcutta. A scheduled Calcutta to Bombay service was flown until it was taken over by Indian Airlines in 1953. Thereafter, Jamair continued operations as a non-scheduled carrier serving mainly the West Bengal and



Assam regions, with regular runs over the routes Agartala-Purnea-Jalpaiguri and Jalpaiguri-Telepura-Gassmore-Newlands, and to other points in eastern India including Silchar. Douglas DC-3 VT-CZC was lost in a fatal accident at Saffardjung in December 1970, the year after two Douglas Skymasters (VT-CZW & VT-DAW) were added to the fleet. The company remained in business until Quin died in 1977, at which time his partner was also seriously ill with cancer.

Next on the scene was the **Indamer Company**, formed in 1947 as an offshoot of the similarly named U.S. corporation, based at Lafayette, Indiana and New York. An accredited Beech agent, Indamer was also responsible for ferrying large numbers of surplus Lend-Lease aircraft, principally Lockheed Lodestars, back to the United States. Based in Bombay, the Indian subsidiary began amassing a large fleet of Dakotas with which to undertake passenger and freight charters. Managing Director was Peter Baldwin, and co-directors included Richard T. Adams and J.P. Koszarek. Varied work included a fortnightly service from Bombay to Lagos in Nigeria, whilst regular Hadj flights were made between Afghanistan, Africa and various points in the Middle East. A life-line service was also provided to remote locations in Nepal and Assam, from where consignments of tea were brought out on the return legs. In 1950 Indamer bought out the Asiatic Aviation Corporation, a small charter company based at Allahabad with Fairchild Argus and Stinson Sentinel light aircraft. In January 1955 Peter Baldwin was instrumental in the establishment of Ariana Afghan Airlines, with Indamer supplying a number of Dakota aircraft to the new carrier. Indamer maintained a 49 per cent interest in Ariana, until it was acquired by Pan American in 1957. A military supply-dropping contract along the North-East Frontier region was also undertaken, and this latter work continued until 1960, when it passed to Kalinga Air Lines, with whom Indamer had been closely associated. The company remains in existence as an agent and service facility for Embraer, Bombardier, Agusta/Westland and Rockwell Collins, and provides comprehensive general aviation sales, service, training and fleet management services facilities.

Jamair founders Captain Eddie Quin and Jimmy Muff alongside one of the airline's Dakotas. (Janet Muff Ryba)





Jamair Douglas DC-3 VT-COU (c/n 13570) during a rare visit to Blackbushe Airport in June 1957.

(Eric Wagner)

Kalinga Air Lines was founded by Bijayanada 'Biju' Patnaik, who had learned to fly with the Delhi Flying Club in the thirties. His varied and distinguished career covered an association with Gandhi's 'Quit India' movement, wartime service as a pilot/navigator, head of IAF Air Command 1940-42, post-war Chief Pilot for Dalmia-Jain Airways, industrialist, philanthropist and Member of Parliament. Based at a suite in the Grand Hotel in Calcutta, the airline established a base at Dum Dum Airport, Calcutta and later at Cuttack.

With a modest fleet of four Dakotas (including VT-CNZ, VT-COA & VT-CYF), Kalinga launched operations in 1947, deriving its title from the ancient name for Patnaik's home state of Orissa. In July, Patnaik became involved in Indonesia's struggle for independence by flying a Dakota to aid the escape of the country's Prime Minister from Java, where he had been effectively isolated by Dutch military control of air and sea lanes. It is also suggested that Kalinga carried out a number of charters carrying arms and other necessities for Indonesian revolutionaries. For these acts, Patnaik was exceptionally awarded Indonesia's highest decoration. Two further Dakotas (VT-DAY & VT-DAZ) were added to the fleet in March 1949, and another in May 1950 (VT-DDR), with the fleet often being seen outside India. Kalinga's Dakotas became frequent visitors to the Middle East and were noted at Masirah on a number of occasions. Subsequently, some aircraft were leased to Aden Airways for Hadj flights, one of which was lost near Wadi Halfa in the Sudan due to a navigational error. A scheduled service linking Calcutta with Agartala (Tripura) was commenced in 1949. In common with most other Indian carriers, Kalinga suffered a number of accidents during the course of these operations. One aircraft crashed with the loss of three lives in 1951, and on April 10 1952 DC-3 VT-DFN crashed shortly after taking off from Agartala on a freight flight to Calcutta. Sadly, all four crew members died in the disaster.

Kalinga Air Lines was incorporated into IAC in 1953, and pending full integration, the airline was combined with Himalayan Aviation to service Line No.1, which covered flights to the Assam and Nepal region. The airline resurfaced five years later as a privately-owned charter company, much of whose later business involved military contracts for air supply drops to isolated outposts. For a period of three months around the turn of 1957/58, Kalinga was treated to a demonstration of the Nord Noratlas freighter (VT-DKA c/n 04), with a view to purchasing up to six aircraft for operating a service to Lhasa (which had been approved by the Indian Government), but this was precluded by China's subsequent invasion of Tibet. However, the airline was instrumental in supporting Indian troops against Chinese incursions on the North-East Frontier with logistical operations. Patnaik also liaised with the CIA and offered the airline's support for guerrilla and para-military resistance in Tibet, but in the end covert US aircraft were employed. Kalinga ceased operations around February 1972.

Nalanda Airways was controlled by the regional government of Bihar State, and began flying early in 1948. Chairman of the company was Dr. Anugrah Narain Sinha, who was also Finance Minister of the Bihar Government. Based at Patna, the company took over responsibility for the operation of the Bihar Flying Club, which had been formed in 1940. Several Fox Moths (VT-CLS, VT-CLT, VT-CLU & VT-CLV) launched operations, and with the addition of a Ryan Navion 4 (VT-DBQ) and two Stinson 108 Station Wagons (VT-CSM & VT-CSN) Nalanda began local services in the Patna region early in 1949 serving around a dozen small communities. The Fox Moths also undertook pleasure flights and were used by the associated flying club. Four former Indian Overseas Dakotas were registered to Nalanda Airways in January 1951, comprising VT-AUH, VT-AUI, VT-AUJ and VT-AZY, but two of these aircraft were

Air Works India Douglas C-54B Skymaster VT-DAW (c/n 27234) taxiing at Abu Dhabi in 1976.

(Dennis Goodwin/Aviation Photo News)





One of a handful of Viscounts flown by Huns Air from their base at Santa Cruz Airport, Bombay, series 779D VT-DOE (c/n 250) had earlier served with Fred Olsen, Austrian Airlines, BEA and Indian Airlines. High import duties on spare parts led to her premature retirement in 1983. (Jacques Guillem)

sold on later in the year. Two further Ryan Navions (VT-DFA & VT-DFB) were bought by the Government of Bihar in November 1952, and were probably flown by Nalanda, which suffered the loss of one Fox Moth in 1951 (VT-CLT) followed by the loss of VH-CLU on November 27 1953, when it was badly damaged whilst pleasure flying at Forbesganj, Purnea. Thereafter, Nalanda Airways continued its charter activities until 1956 when operations were suspended.

Another small company was **Darbhanga Aviation**, a department of Raj Darbhanga, the princely state headed by Maharadhiraj Dr. Sir Kameshwar Singh, who had hosted the 1933 Houston Everest air team. Based at Calcutta, operations began in March 1950 with a small fleet of Dakotas and Beech Bonanzas employed on VIP transport duties and charters both within India, and to Afghanistan, Ceylon, Nepal, the Persian Gulf and Saudi Arabia. There were a number of incidents during the course of these operations, the most serious of which was the loss of DC-3 VT-DEM on April 30 1954. Operating a passenger and freight charter from Dum Dum Airport, Calcutta, to Balurghat, the aircraft suffered engine failure shortly after take-off. Delay in feathering the propeller of the dead engine and low airspeed led to the aircraft crashing two miles from the airport with five of the occupants losing their lives. Less serious was the damage sustained by DC-3 VT-AYG on July 27 1955 when a water-logged runway led to the aircraft crashing on take-off from Cooch Behar Aerodrome, Bengal, fortunately without loss of life. The company is believed to have ceased flying around 1957.

Air Works (India) Ltd., was established in 1951 by the Menon family as a maintenance, repair and overhaul facility based at Bombay. Charter services began in the early-seventies with two Dakotas flying aerial photography, spraying, supply-dropping, cloud seeding and infra-red scanning sorties. The operation moved up a gear in 1974 when two Douglas DC-4s were acquired to run nightly cargo services to the Gulf carrying fruit, meat products, vegetables and livestock, primarily for the benefit of Indian contracted labour. In 1977, Air Works attempted to replace the increasingly expensive DC-4s with an IAC Caravelle, but the plan fell through, and instead Bristol Britannias were leased from Air Faisal to maintain the service until August 1978. In May 1977, former Aer Turas DC-4 EI-ARS arrived in the Middle East on lease to Air Works, but this aircraft was only used briefly before being flown to Malta and parked. By 1982, the main source of revenue came from oil companies, and one Dakota was placed on exclusive long-term contract to the Oil & Gas Commission. Air Works remains in business offering engineering facilities, airline and business MRO and asset management services.

Named after the old British India administrative area that covered much of Southern India, **Madras Presidency Airways** came into being in the mid-fifties and was based at Trichinopoly in the state of Tamil Nadu. It was founded by local entrepreneur L.R.G. Naidu, who had already established a number of bus and road transport businesses. Two de Havilland Dragon Rapides (VT-ARL & VT-CBY) were used on charters to destinations including Bangalore, Belgaum, Bombay-Juhu, Coimbatore, Pune and Madras. A 1958 report stated that the company was

licensed to carry out pleasure flying from an airfield at Tripur in the Coimbatore district, with a Fairchild Argus now added to the fleet. Rapide VT-CBY was damaged in a gale at Calcutta on June 14 1960, and it would appear that operations ceased around this time. The company's aircraft had previously been registered to **Varadaraja Airways** of Madras from late 1949, and it seems likely that it was a continuation under a new name.

Safari Airways commenced operations in November 1971 as an offshoot of the JK industrial group, owned by the Singhanian family. Based at Bombay, two Dakotas (VT-CYG and one other) were initially employed on passenger and cargo charters, but the airline subsequently took over the scheduled service previously flown by Indian Airlines between Delhi, Jaipur and Kota. In 1972, Safari announced its intention of opening regular services between Bombay, Surat, Bhavnagar and Ahmedabad, to which had been added, Keshod, Porbandar and Indore on an alternating daily basis by November 1975, again flown on behalf of Indian Airlines. Safari Airways ceased flying around 1978.

Trans Sharjah Airways was founded by J.R. Mody, a Bombay businessman associated with the Shapoorji Pallonji Construction consortium. Operations began midway through 1973 with a single DC-3 (VT-CCC) hauling fresh meat and vegetables to the Persian Gulf, primarily to Sharjah, but also occasionally to Dubai. Passengers were also sometimes carried on return trips, otherwise the aircraft returned empty. The company was short-lived, and by late 1977 the DC-3 was being stripped as a source of spares at Bombay's Santa Cruz Airport.

Huns Air was created in 1974 by Suresh Kilachand of the Kilachand industrial group, based at Bombay. The airline took to the skies in November 1974 with a former Indian Airlines Viscount, flying fresh fruit and vegetables to Sharjah in the Persian Gulf. Guest workers were carried on the return legs at rates approximately fifty per cent lower than the regular fare. Services were expanded in mid-1976 with the lease of a Boeing 720, and a year or so later, a Douglas DC-7CF was leased, enabling additional flights to Ras-al-Khaimah in the United Arab Emirates. On occasions, both aircraft were used for the transportation of livestock, but this aspect of Huns Air's operations soon ran into problems and was discontinued. A small compensation was the appointment of the company as General Sales Agent for TWA. Early in 1978, Indian Airlines released its two remaining Viscounts to Huns Air, but swingeing import



Douglas DC-3 VT-CYG (c/n 13019) was one of a pair of aircraft flown on charters from Bombay by Safari Airways. (Aviation Photo News)



Goa Way had intended to fly two Hawker Siddeley 748s on lease from Independent Airways, but the deal fell through before the aircraft were delivered. G-HDBC (c/n 1786) "Mandovi" would have become VT-GOA, and is seen here at Southend in September 1995 two years after the collapse of the airline. (Jim Brazier)

taxes on replacement parts caused one of these aircraft to be withdrawn as a source of spares. Spiralling fuel costs and competition from other carriers took their toll, and the crash of Viscount VT-DJC landing at Vijayawada on August 28 1980 at the end of a passenger charter from Bombay did little to help the airline's reputation. The accident was attributed to "the late and insufficient" flare out by the pilot.

Last of the seventies start-ups was **Goldensun Aviation** founded in December 1977. Flying began with two Beech E18S aircraft on regular passenger feeder services to Bhavnagar from late December. Around 1980, Goldensun launched passenger and cargo services to Ratnagiri and Kolhapur in Maharashtra state. Operations ceased in 1982, and although it was hoped to resume later that year, Goldensun remained grounded.

DEREGULATION ATTRACTS NEW ENTREPRENEURS

A change in Indian Government policy starting in 1986 eventually led to deregulation and the abolition of the Air Corporations Act in March 1994. This encouraged a plethora of new 'start-ups' eager for a slice of the action, but mirroring the early post-war situation only a few lasted beyond a year or two, most succumbing to high fuel costs and a swingeing 15 per cent government passenger tax. Of these enterprising companies, several are worthy of mention as 'propliner' airlines.

Goa Way was created in 1992 as the self-styled 'India's Holiday Airline' by Wilson P. Fernandes, principal of UVI Holidays, which itself was founded in 1986. Fernandes was hailed in some quarters as the man who helped to elevate Goa as a holiday destination for European tourists. The airline's first service took place in October 1992 using a single Fokker F.27 Friendship (VT-ROY) leased from Continental Aviation. Initially, charters were flown from Bombay to such destinations as Agra in the north, and Kerala in the south of India. Plans were in hand to obtain two further Friendships along with two Hawker Siddeley 748s (respectively VT-GOA c/n 1786, and VT-WAY c/n 1785) leased from Independent Airways in the UK, but before this expansion could take place the airline ceased operations early in 1993.

UP Air came into being in 1994 as a joint venture between NCM (Singapore) and the provincial government of Uttar Pradesh. Under the direction of Managing Director Subash Gholati and Chief Executive



Three Fokker Friendship series 200 aircraft were sold to Elbee Airlines in August 1995. They became VT-SSA (c/n 10670), VT-SSB (c/n 10674) and VT-SSC (c/n 10673), with 'SA' being lost on July 3 1997 when it crashed into the sea shortly after taking off from Bombay. Shortly afterwards the airline ceased all operations when legal difficulties were encountered.

Captain V P S Sindhu, the company began flying charters and local services early in 1995 with two Fokker Friendships. Operating from Lucknow, the airline's prime objective was to develop tourist and Buddhist pilgrim traffic to the region. At its peak, UP Air was flying to Agra, Bhopal, Delhi, Kanpur, Patna and other centres of religious interest. Around March 1998 the airline's name was changed to SGS, but it closed down altogether in 2001/2002.

Elbee Airlines was a subsidiary of Elbee Services, which had been trading since 1956. Elbee's core business involved courier and small package distribution services. Prior to 1994, transportation was handled by road and rail, but with increasing volumes of time-sensitive traffic, Elbee began looking at air transportation. Land was obtained at Mumbai Airport for the building of a road/air hub, and in 1994 Elbee Airways was formed and a public share offering grossed circa £4.75 million to help with start-up costs. Operations began in June 1995 with three Fokker Friendship freighters, connecting all of India's strategic cities. In the same month, Elbee entered into a 50/50 partnership with United Parcel Service (UPS) to handle the distribution within India, while in the following year a further tie-up was made with CSLB Aviation Holdings of Mauritius. A strategic alliance was also forged with Emery Worldwide in 1998, but shortly afterwards Elbee Airlines ceased operations. This had come about over lengthy litigation surrounding the acquisition of land for the planned fully-automated airport hub, resulting in the company writing off approximately £3.8 million from its airline venture. Elbee had hoped to defray losses by sale of the two surviving Friendships, but there were no takers and they languished at Mumbai and Chennai before being broken up.

Although heavy piston-engined aircraft had all but vanished from Indian skies by the late seventies, the throaty roar of Pratt & Whitney was once again heard in 2018. On April 25, a veteran Dakota resplendent in wartime Indian Air Force camouflage as VP905 touched down at Jamnagar Air Force Base after an eight-day ferry flight from the UK. Having languished at Weston Airport in Ireland for five years, the former G-AMSV underwent a lengthy restoration for the IAF Memorial Flight, gifted by an Indian MP, whose father had been a Dakota pilot with the Indian Air Force. Surely a fitting tribute to the type's illustrious service in Indian aviation.

MAJOR POST-WAR INDIAN AIRLINES

FLEET DETAILS

Air Services of India Ltd., Juhu Airport, Bombay	
DH.83 Fox Moth: VT-AJW c/n 4083 regd. 38, cancelled 07.10.46.	
DH.89/89A Dragon Rapide: VT-AHB c/n 6308 regd.06.05.37, written off Kanpur 30.12.45; VT-ALO c/n 6454 regd.06.39, impressed as HX791 20.01.42; VT-ARM c/n 6650 regd.09.04.47, sold 19.10.49; VT-AVW c/n 6947 regd.09.03.46 named "Gagenratna", cancelled 1947; VT-AVX c/n 6953 regd.09.03.46 named "Gagenraj", written off during storm at Juhu 11.48; VT-AXG c/n 6957 regd.09.03.46 named "Gagenrup", sold as F-OAHL 19.01.51; VT-CBY c/n 6869 regd.08.05.47 named "Gaganrekh", sold 19.10.49; VT-CHZ c/n 6724 regd.16.04.47, sold as F-OAIL 15.02.51.	
DH.90 Dragonfly: VT-AKC c/n 7595 regd.04.38, sold to Air Dispatch as G-AECX 09.08.39.	
Percival P.10 Vega Gull: VT-AIV c/n K.73 regd.09.10.37, impressed as MA942 23.08.42; VT-AIW c/n K.74 regd.09.10.37, written off Poona 30.09.38.	
Stinson L-5/L-5B Sentinel: VT-AIW c/n 76-1666 regd.12.45, to IAC date unknown; VT-ATX c/n 3526 regd.12.45, cancelled 16.05.52; VT-CMY c/n 2718 regd.04.08.48, written off Juhu 24.11.48.	
Douglas DC-3: VT-AUC c/n 19431 regd.18.12.45, to IAC 01.08.53; VT-AUR c/n 13686 regd.18.12.45, to Air India 12.05.49; VT-AUS c/n 20289 regd.18.12.45, to IAC 01.08.53; VT-AUT c/n 13720 regd.18.12.45, seriously damaged after landing too fast on west runway at Pasighat on freight flight 19.06.52, repaired and to IAC 01.08.53; VT-AUU c/n 13687 regd.18.12.45 named "Gagan Darp", to IAC 01.08.53; VT-AXA c/n 19874 regd.05.03.46, sold to Major General Mahabir Rana 18.01.50; VT-AXB c/n 20172 regd.05.03.46, sold to Himalayan Aviation 24.05.50; VT-AXC c/n 20303 regd.05.03.46, to IAC 01.08.53; VT-AXD c/n 13294 regd.05.03.46 named "Gagan Kunj", written off after premature undercarriage retraction taking off at Juhu Airport, Bombay, 09.05.53; VT-AXE c/n 13259 regd.05.03.46, sold to Indamer 12.57; VT-AYH c/n 19072 regd.09.12.49, to IAC 01.08.53; VT-CHJ c/n 25274 regd. 04.47, fate unknown; VT-COF c/n 10051 regd.28.12.49, to IAC 01.08.53; VT-CPQ c/n 13558 regd.23.10.47, written off Gauhati, Assam, 25.01.50.	
S.O. 95 Corsair II: VT-DBW c/n 28 delivered 13.06.49 for evaluation, sold as F-DAAX 31.08.51; VT-DDI c/n 45 regd.03.50, returned to France 31.08.51.	
Airways (India) Ltd., Dum Dum Airport, Calcutta	
Airspeed AS.65 Consul: VT-CJA c/n 910 regd.03.47, written off Pandu, Assam, 05.05.47; VT-CJB c/n 5108 regd.03.47, sold 17.12.48.	



Air Services of India Douglas DC-3 VT-CHJ (c/n 25274) pictured circa 1947.
(Charles Holland Collection)



Douglas DC-3 VT-CGB (c/n 9945) served with Ambica Airlines at Bombay between 1946 and 1949.
(Charles Holland Collection)

Douglas DC-3: VT-AUI c/n 13231 regd.05.11.56, damaged in gale at Calcutta 14.06.60. Repaired, sold 02.09.71; VT-AVR c/n 20311 regd.01.46, sold as 9N-AAB 01.07.58; VT-AVS c/n 13696 regd.01.46, transferred to IAF 25.06.63; VT-AVT c/n 13295 regd.01.46, transferred to IAF 25.04.62; VT-AZW c/n 13684 regd.29.01.51, sold to Survey Company 24.05.73; VT-CGI c/n 20176 regd.26.03.47, to IAC 01.08.53; VT-CGZ c/n 13581 regd.02.02.50, to IAC 01.08.53; VT-CHB c/n 13023 acquired from Jupiter Airways unknown date, written off Balurghat 17.05.50; VT-CJH c/n 12477 regd.10.03.47, to IAC 01.08.53; VT-CKU c/n 25302 regd.10.07.50, written off Gauhati, Assam, 14.11.51; VT-CMD c/n 12491 regd.19.06.47, to IAC 01.08.53; VT-CSB c/n 13290 regd.02.48, to IAC 01.08.53; VT-CUZ c/n 13029 regd.24.07.48, to IAC 01.08.53; VT-CZO c/n 20725 dates unknown, but damaged in gale at Calcutta 14.06.60; VT-DBA c/n 13165 regd.03.49, to IAC 01.08.53; VT-DDW c/n 9949 regd.06.50, to IAC 01.08.53.

Cessna UC-78 Bobcat: VT-AYZ c/n 5766 regd.03.46, wfu in 1950, instructional airframe; VT-CAO c/n 5772 regd.03.46, wfu in 1950, instructional airframe. DH.104 Dove: VT-COW c/n 04065 delivered 12.12.47, sold as G-AOYC 07.12.56; VT-CQA c/n 04077 handed over 07.01.48, but written off during delivery flight after crashing into Mt. Urbanu, near Rome, 17.01.48; VT-CQY c/n 04104 handed over 04.02.48, sold to Airlines (W.A.) Ltd., as VH-AWA .03.53. Consolidated PBY-5A Catalina: VT-DID c/n CV-519 regd. .55, damaged beyond repair in gale at Calcutta 14.06.60.

Air Works India Ltd., Santa Cruz Airport, Bombay

Douglas DC-3: VT-AUR c/n 13686 in operation 1980; VT-AUU c/n 13687 in operation 1978-1980; VT-CGA c/n 25467 bought 30.08.71 named "Varuna I"; VT-DFM c/n 20269 bought 1977 named "Varuna III".

Douglas C-54A Skymaster: VT-CZW c/n 10353 bought .11.74, retired 1978; VT-DAW c/n 27234 bought 1976, retired 1982.

Ambica Airlines Ltd., Juhu Airport, Bombay

Noorduyn UC-64A Norseman 6: VT-AYD c/n 784 regd.09.46, cancelled after 1950; VT-AYE c/n 737 regd.09.46, sold to Captain Quin 13.01.48; VT-AYF c/n 762 regd.09.46, written off Juhu 20.11.48; VT-CBW c/n 792 regd.09.46, written off Juhu 21.11.48; VT-CBX c/n 761 regd.09.46, cancelled date unknown.

Douglas DC-3: VT-AYG c/n 12848 regd.09.46, sold to Air Lift 09.05.50; VT-AYH c/n 19072 regd.09.46, sold to Air Services of India 09.12.49; VT-CGA c/n 25467 regd.09.46, sold to Bharat Airways 28.06.49; VT-CGB c/n 9945 regd.09.46, sold to Indamer 03.08.49; VT-CLE c/n 4653 regd.01.05.47, sold Bharat Airways 28.06.49; VT-CXN c/n 2209 regd.07.48, cancelled date unknown.

Beech C.18S: VT-AYI c/n 5888 regd.09.46, cancelled 13.02.53; VT-CLJ c/n 6120 regd.05.47, sold Metcaero 05.04.52; VT-CLK c/n 6032 regd.05.47, cancelled date unknown; VT-CLL c/n 6118 regd.05.47, sold date unknown; VT-CLM c/n 5976 regd.05.47, sold 02.03.50; VT-CNX c/n 8210 regd.08.47, sold Metcaero 05.04.52.

Stinson L-5 Sentinel: VT-CAE c/n 1394 regd.09.46, sold to Indamer 09.12.49; VT-CAF c/n 1395 regd.09.46, cancelled date unknown; VT-CAG c/n 1631 regd.09.46, written off Juhu 21.11.48; VT-CAH c/n 1800 regd.09.46, sold 06.08.49; VT-CAI c/n 1802 regd.09.46, cancelled date unknown; VT-CAJ c/n 1803 regd.09.46, cancelled date unknown.

Bharat Airways Ltd., Dum Dum Airport, Calcutta

Stinson L-5 Sentinel: VT-CBC c/n 1476 regd.15.01.47, sold 24.12.63.

Douglas DC-3: VT-CGA c/n 25467 regd.28.06.49, to IAC 01.08.53; VT-CGG c/n 12821 regd.24.09.46, to IAC 01.08.53; VT-CGL c/n 10031 regd.02.10.46 named "Meghdoot", to IAC 01.08.53; VT-CGM c/n 9320 regd.02.10.46 named "Sarang", damaged by fire at Dum Dum Airport 18.04.50; VT-CGN c/n 12989 regd.03.10.46 named "Pawan", to IAC 01.08.53; VT-CGO c/n 13542 regd.03.10.46 named "Supavn", to IAC 01.08.53; VT-CGP c/n 12928 regd.03.10.46 named "Pushpak", to IAC 01.08.53; VT-CGQ c/n 13573 regd.03.10.46 named "Gagan Vihan", damaged when port undercarriage collapsed taking off at Dum Dum Airport 26.02.53. Repaired. To IAC 01.08.53; VT-CGR c/n 13579 regd.03.10.46 named "Vihang", to IAC 01.08.53; VT-CLE c/n 4653 regd.28.06.49, written off landing at Agartala 12.11.52; VT-CML c/n 19868 regd.07.07.47 named "Pawandoot", to IAC 01.08.53; VT-CRE c/n 13081 regd.21.01.48, cancelled 1951; VT-DBD c/n and dates unknown; VT-DDK c/n 25483 regd.06.04.50 named "Garud", sold to Eastern Aircraft Sales as N9973F .02.52.

Douglas C-54A Skymaster: VT-CYK c/n 9089 regd.08.48, written off after making forced landing following on-board fire at Comillah, Pakistan, 30.12.49; VT-CZT c/n 10419 regd.10.01.49 named "Gromvihara", to IAC 01.08.53; VT-CZW c/n 10353 regd.10.01.49 named "Pubva Doot", to IAC 01.08.53.

Bristol 170 Wayfarer IIA: VT-CGX c/n 12746 delivered 05.12.46, sold to Bristol 07.50.

Avro XIX series 2: VT-CJZ c/n 1384 regd.26.03.47, written off Srinagar, Kashmir, 01.12.47; VT-CKA c/n 1383 regd.26.03.47, to IAC 01.08.53.

Dalmia Jain Airways Ltd., New Delhi

DH.85 Leopard Moth: VT-AHG c/n 7121 regd.01.36, cancelled 13.05.36.

Percival P.44 Proctor V: VT-CRQ c/n Ac.32 regd.07.12.46, cancelled date unknown.

Beech C.18S: VT-CPZ c/n 8253 regd.11.47, sold 10.02.51.

Douglas DC-3: VT-ARI c/n 4851 regd.24.07.51, sold 17.06.54; VT-ATT c/n 20363 regd.12.07.47, sold 04.06.49; VT-CDY c/n 26505 regd.18.04.46, to IAC 01.08.53; VT-CDZ c/n 25590 regd.18.04.46, written off Banihat Pass 16.01.49; VT-CEA c/n 32973 regd.18.04.46, to IAC 01.08.53; VT-CEB c/n 26491 regd.18.04.46, to IAC 01.08.53; VT-CEN c/n 26710 regd.07.05.46, sold 03.05.52; VT-CEO c/n 26485 regd.07.05.46, sold 02.05.52; VT-CYG c/n 13019 regd.08.48, sold to INA 21.05.51; VT-CYH c/n 12493 regd.08.48, to IAC 01.08.53.

Bristol 170 Wayfarer: VT-CHK c/n 12741 regd.31.10.46, seriously damaged during crew training incident at Delhi circa 01.47. Repaired and sold to Bristol as G-AHJI 06.01.50; VT-CHL c/n 12742 regd.19.11.46, returned to Filton 21.07.49 and sold to Bristol as G-AHJJ 28.02.50; VT-CID c/n 12781 regd.04.12.46, sold to INA 27.10.47.

Deccan Airways, Begumpet Airport, Hyderabad

DH.89A Dragon Rapide: VT-CBY c/n 6869 purchased 25.04.46, sold to Air Services of India 08.05.47.

Fairchild F.24R Argus: VT-CJG c/n 934 regd.03.47, cancelled .05.53.

Douglas DC-3: VT-AUM c/n 18905 regd.19.01.52, to IAC 01.08.53; VT-AUN c/n 13265 regd.12.45, written off near Safdarjung 30.04.52 while en-route Madras-Delhi 9 killed; VT-AUO c/n 13405 regd.12.45, written off near Dum Dum 21.11.51; VT-AUP c/n 19151 regd.12.45, to IAC 01.08.53; VT-AXE c/n 19169 regd.04.46, written off Nagpur 19.02.52 while en-route Madras-Delhi 3 killed; VT-CEN c/n 26710 regd.03.5.52, to IAC 01.08.53; VT-CEO c/n 26485 regd.02.05.52, to IAC 01.08.53; VT-CGC c/n 12500 regd.10.46, to IAC 01.08.53; VT-CHF c/n 11810 regd.10.06.49 named "Sarasvathi", to IAC 01.08.53; VT-CIC c/n 13025 regd.22.02.47 named "Chaud Bibi", to IAC 01.08.53; VT-CJD c/n 12826 regd.22.02.47, written off Hatiara 05.04.50; VT-CLR c/n 25475 leased from Air Ceylon .05.47 to .11.47 named "Begumpet". VT-CNC c/n 12382 regd.29.07.47 named "Razia Begum", to IAC 01.08.53; VT-CYX c/n 13543 regd.05.49, to IAC 01.08.53; VT-DDD c/n 13584 regd.01.50, to IAC 01.08.53.

Beech C.18S: VT-CER c/n 6399 regd to Hyderabad Government for operation by Deccan Airways 12.04.48, fate unknown.



Indian Airlines Corporation Douglas DC-3 VT-CYX (c/n 13543) takes on fuel at Porbandar in the mid-fifties. (via Maurice Wickstead)



The Viscount was the first modern airliner bought by Indian Airlines, with VT-DIZ (c/n 293) delivered in March 1958. (R.A. Woodcock via BAM)

Himalayan Aviation Ltd., Dum Dum Airport, Calcutta

Douglas DC-3 VT-AXB c/n 20172 regd.24.05.50, to IAC 01.08.53; VT-CHE c/n 12193 regd.14.02.50, to IAC 01.08.53; VT-COZ c/n 13569 regd.28.10.47, to IAC 01.08.53; VT-CYM c/n 19317 regd.08.48, badly damaged landing at Gaucher Airport, Kathmandu in gusty conditions 26.05.53, repaired and to IAC 01.08.53; VT-CYN c/n 19988 regd.09.48, to IAC 01.08.53; VT-DDR c/n 12070 regd.05.50, to IAC 01.08.53.

Huns Air Ltd., Santa Cruz Airport, Bombay

Vickers Viscount 768D/779D: VT-DJC c/n 296 delivered 1979; VT-DOE c/n 250 purchased 16.11.74; VT-DOH c/n 251 purchased 09.12.78.

Indian Airlines Corporation, New Delhi

Avro XIX series 2: VT-CKA c/n 1383 sold 29.10.62.

Douglas DC-3: VT-ATR c/n 20259 badly damaged after overrunning runway and dropping in to ravine landing at Safdarjung Airport, New Delhi, 13.08.57. Repaired, to Indian Air Force as BJ497 11.12.61; VT-ATT c/n 20363 sold to Jamair 07.10.64; VT-ATU c/n 20358 written off near Delhi on test flight 25.02.54, 3 killed; VT-ATV c/n 4182 withdrawn from use at Delhi 08.69; VT-ATZ c/n 13689 sold 1972; VT-AUA c/n 13245 written off Calcutta following Hermes G-AKFP striking it on landing Calcutta 01.09.57; VT-AUB c/n 13278 to Indian Air Force as BJ923 25.04.63; VT-AUE c/n 19519 to Indian Air Force as BJ498 11.12.61; VT-AUH c/n 18906 to Indian Air Force as BJ620 24.03.62; VT-AUL c/n 20265 damaged when starboard undercarriage collapsed landing at Safdarjung Airport 19.10.55. Repaired, but written off after catching fire and crashing at Sama 03.06.63, 29 killed; VT-AUM c/n 18905 sold 28.08.62; VT-AUP c/n 19151 to Indian Air Force as BJ499 11.10.62; VT-AUQ c/n 19431 sold to Kalinga Airlines 18.05.65; VT-AUR c/n 13686 sold 17.05.67; VT-AUS c/n 20289 damaged following undercarriage collapse landing at Bhubaneswar Aerodrome 23.09.58. Repaired, to Indian Air Force as J-975 03.68; VT-AUT c/n 13720 withdrawn from use Delhi 06.69; VT-AUU c/n 13687 sold 17.05.67; VT-AUV c/n 20318 written off near Santoshpur during thunderstorm while en-route Kumbhirgram to Calcutta with freight 05.05.57, one killed; VT-AVR c/n 20311 sold to Royal Nepal Airlines as 9N-AAB 04.07.58; VT-AVS c/n 13696 to Indian Air Force as BJ920 26.04.63; VT-AVT c/n 13295 to Indian Air Force as BJ618 24.03.62; VT-AXA c/n 19874 written off after striking bird on take-off and catching fire Calcutta on freight flight 26.08.61; VT-AXB c/n 20172 fate unknown; VT-AXC c/n 20303 withdrawn from use Delhi 06.69; VT-AYH c/n 19072 withdrawn from use date unknown; VT-AZX c/n 13285 written off after catching fire on take-off at Simra Airport, Nepal, 30.08.55, 2 killed; VT-CCC c/n 25299 damaged after running through fence after landing at Coimbatore Airport, Madras, 23.04.54. Repaired, and sold 24.05.73; VT-CCD c/n 25468 written off after landing short at Ahmedabad inbound from Bombay 18.05.56, no casualties; VT-CDY c/n 26505 fate unknown; VT-CEA c/n 32973 sold 09.09.67; VT-CEB c/n 26491 sold 18.03.72; VT-CEI c/n 20355 sold to Kalinga Airlines 18.05.65; VT-CEN c/n 26710 to Indian Air Force as BJ921 26.04.63; VT-CFB c/n 13626 written off after entering a spin and crashing into huts near Old Delhi on training flight 13.05.57, 5 killed; VT-CFG c/n 4888 withdrawn from use at Safdarjung 08.69; VT-CGA c/n 25467 sold 30.08.71; VT-CGC c/n 12590 sold to Garuda as PK-GDQ 16.03.62; VT-CGG c/n 12821 badly damaged in crash-landing at Pokhara Airport 07.05.58. Repaired, but written off after stalling while supply-dropping near Takseng 03.01.60, 8 killed; VT-CGI c/n 20176 written off after crashing near Hailakandi 29.03.59, 24 killed; VT-CGL c/n 10031 withdrawn from use at Safdarjung 1969; VT-CGN c/n 12989 written off after bouncing and swerving off runway landing at Tezpur, Assam, while en-route Calcutta to Mohanbari 21.03.56, 2 killed; VT-CGO c/n 13542 sold 29.02.58; VT-CGP c/n 12928 sold to Air India 15.11.54; VT-CGQ c/n 13573 sold 14.04.71; VT-CGR c/n 13579 badly damaged taking off from Jamshedpur 14.02.64. Repaired, and sold 26.02.71; VT-CGZ c/n 13581 fate unknown; VT-CHF c/n 12193 badly damaged after tyre burst landing at Katmandu 28.05.58. Repaired, to Indian Air Force as BJ621 24.03.62; VT-CHF c/n 11810 written off following engine failure taking off from Sonagaon Airport, Nagpur, on a flight to Madras 12.12.53, 13 killed; VT-CHH c/n 13380 badly damaged after overrunning runway at Jamshedpur 24.08.62. Repaired, to Indian Air Force as J-978 03.68; VT-CJC c/n 13025 fate unknown; VT-CJH c/n 12477 fate unknown; VT-CMD c/n 12491 sold to Kalinga Airlines date unknown; VT-CML c/n 19868 fate unknown; VT-CNC c/n 12382 badly damaged when undercarriage failed landing at Santa Cruz Airport, Bombay, 01.08.55. Repaired, sold to Indian Air Force as BJ619 24.03.62; VT-COJ c/n 10051 written off near Dibrugarh, Assam, 25.06.58, 5 killed; VT-COZ c/n 13569 written off after striking trees while landing in fog at Gauhati Airport, Assam, 21.01.55, 3 killed; VT-COL c/n 20792 sold to Kalinga Airlines 05.07.58; VT-CSB c/n 13290 to Indian Air Force as BJ617 24.03.62; VT-CTZ c/n 13061 fate unknown; VT-CUA c/n 6078 to Indian Air Force as BJ922 24.04.63; VT-CUZ c/n 13029 written off after running into ditch after landing at Khowai Aerodrome, Tripura, 29.03.55; VT-CVB c/n 13037 written off after stalling taking off from Sonagaon Airport, Nagpur, bound for Delhi 02.02.55, 10 killed; VT-CVC c/n 25471 sold to King of Nepal as 9N-RF2 in 1957; VT-CYF c/n 25842 damaged making belly landing at Dum Dum Airport, Calcutta, 04.07.56. Repaired, to Indian Air Force as BJ622 24.03.62; VT-CYG c/n 13019 sold 20.04.71; VT-CYH c/n 12493 written off near Tobu, Assam, 12.03.59, 5 killed; VT-CYM c/n 19317 damaged after nosing over at end of landing run at Bhairawa Aerodrome, West Nepal, 07.08.55. Repaired, but damaged after making forced landing at Agartala Airport 13.09.57. Repaired, but written off near Dacca on freight flight 09.07.58, 3 killed; VT-CYN c/n 19988 written off after stalling and catching fire 15 miles north-east of Khatmandu on flight from Simra 24.03.58 while operated by Kalinga Airlines, 20 killed; VT-CYX c/n 13543 sold 1979; VT-DBA c/n 13165 written off after bouncing and overrunning runway landing at Katmandu inbound from Simra 15.05.56, 15 killed; VT-DDD c/n 13584 sold 06.05.71; VT-DDR c/n 12070 written off Nagpur 25.04.66; VT-DDW c/n 9949 sold 16.03.72; VT-DEV c/n 9950 sold to Royal Nepal Airlines as 9N-AAQ in 1964; VT-DFM c/n 20269 badly damaged after striking obstruction on runway landing at Agartala 12.09.60. Repaired, and sold 03.77; VT-DGN rebuild c/n quoted as INA D-499; VT-DGO c/n 32934 written off West Bengal 15.05.54 whilst operated by Jamair; VT-DGQ c/n 9072 to Indian Air Force in 1956.

Note: VT-ATT, VT-AUL, VT-AXA, VT-AXB, VT-CDY, VT-CGL, VT-CGQ, VT-CMD & VT-CYG all damaged by gale at Calcutta Airport 14.06.60.

Douglas C-54A/B Skymaster: VT-CZT c/n 10419 written off after catching fire during maintenance at Calcutta 03.05.62; VT-CZW c/n 10353 sold to Jamair 31.10.69; VT-DAW c/n 27234 sold 1974; VT-DIA c/n 3094 written off after overrunning runway landing at Madras 08.09.58; VT-DIB c/n 10375 sold to Jamair 1976; VT-DIC c/n 10376 damaged after catching fire on ground at Calcutta 13.01.58. Repaired, but damaged when nosewheel collapsed taking off from Calcutta 04.03.58. Repaired, but written off after force landing near Haveri 07.05.62, no casualties.

Vickers 604/627/632 Viking 1B: VT-AZA c/n 120; VT-AZB c/n 126; VT-CEK c/n 154; VT-CEM c/n 186; VT-CIY c/n 201; VT-CKW c/n 203; VT-CKX c/n 204 damaged after swerving off runway during training flight at Santa Cruz Airport, Bombay, 12.04.54; VT-CLZ c/n 206; VT-CRB c/n 251; VT-CRC c/n 253; VT-CSP c/n 254; VT-DAP c/n 235. The entire Viking fleet withdrawn at Safdarjung in 1959, offered for sale, and scrapped circa 1962.

De Havilland DH.114 Heron 2: VT-DHD c/n 14065 delivered 13.04.55, sold 05.61; VT-DHE c/n 14067 delivered 19.06.55, badly damaged after making forced landing shortly after taking off from Jaipur 05.03.56. Repaired, and sold 05.61; VT-DHF c/n 14068 delivered 17.04.55, sold 05.61; VT-DHG c/n 14069 delivered 04.55, sold 04.61; VT-DHH c/n 14070 delivered 09.06.55, sold 05.61; VT-DHI c/n 14071 delivered 15.07.55, badly damaged in belly landing at Santa Cruz Airport, Bombay, 22.11.55. Repaired, and sold 05.61; VT-DHJ c/n 14075 delivered 08.55, sold 1958; VT-DHK c/n 14073 delivered 15.07.55, sold 05.61.



Line-up of various members of the Indian National Airways fleet circa 1937 including de Havilland Dragons and Fox Moths, and an Avro Ten.

Vickers Viscount 768D/779D/723: VT-DIF c/n 193 delivered 26.09.57 named "Madhya Pradesh", later "Assam", withdrawn from use 29.08.70: VT-DIG c/n 194 delivered 23.10.57 named "Maharashtra", later "Bengal", withdrawn from use 09.02.71; VT-DIH c/n 195 delivered 09.11.57. Written off landing Colombo 15.11.61, no casualties; VT-DII c/n 196 delivered 21.11.57 named "Assam", later "Madhya Pradesh". Sold to Lane Xang Airlines as XW-PNG 31.12.74; VT-DIO c/n 192 delivered 19.08.57. Written off near Lalitpur while operating night mail flight Nagpur to Delhi 11.09.63, 18 killed; VT-DJA c/n 294 delivered 21.04.58 named "Andhra Pradesh", later "Punjab". Sold to Lane Xang Airlines as XW-IFK 11.74; VT-DJB c/n 295 delivered 22.05.58 named "Bihar", later "Uttar Pradesh". Sold to Air Lao as XW-PNJ date unknown; VT-DJC c/n 296 delivered 06.06.58 named "Kashmir", later "Bihar". Sold to Huns Air in 1979; VT-DOD c/n 247 formerly LN-FOM delivered 28.01.62 named "Madras", later "Mysore", withdrawn from use 12.07.71; VT-DOE c/n 250 formerly LN-FOH delivered 29.01.62 named "Uttar Pradesh", later "Andhra Pradesh". Sold to Huns Air 16.11.74; VT-DOH c/n 251 formerly LN-FOI delivered 21.01.62 named "Andhra Pradesh", later "Mysore". Sold to Huns Air 09.12.78; VT-DOI c/n 252 formerly LN-FOK delivered 23.01.62 named "Madras", later "Punjab", withdrawn from use 09.03.71; VT-DWI c/n 79 formerly IU-683 bought 27.01.67 and probably never operated; VT-DWJ c/n 80 formerly IU-684 bought 30.01.67 and named "Kerala", withdrawn from use 13.10.73 although no confirmation that aircraft entered service.

Fokker Friendship 100/200/400: VT-DMA c/n 10171 delivered 05.04.61 named "Ganga", written off by hi-jackers at Lahore 02.02.71; VT-DMB c/n 10172 delivered 07.04.61 named "Jamuna", damaged when undercarriage collapsed landing at Delhi 08.06.62. Repaired, but written off taxiing at Calcutta 23.09.88; VT-DMC c/n 10173 delivered 24.04.61 named "Sutlej", written off on approach to Gauhati 19.10.88; VT-DMD c/n 10174 delivered 28.04.61 named "Brahmaputra", written off in heavy landing at Bhuwaneswar 24.07.76; VT-DME c/n 10175 delivered 04.05.61 named "Narbada", written off after striking high ground on approach to Palam Airport 11.08.72; VT-DOJ c/n 10214 delivered 14.12.62 named "Tapti", written off in poor weather near Doulatpore, East Pakistan, 21.04.69, 44 killed; VT-DOK c/n 10215 delivered 28.12.62 named "Mahanadi", transferred to Vayudoot 09.86; VT-DOL c/n 10219 delivered 22.02.63 named "Godavari", badly damaged in crash landing at Madras 15.10.64. Repaired, and transferred to Vayudoot 09.86; VT-DOM c/n 10220 delivered 08.03.63 named "Krishna", transferred to Vayudoot 09.87; VT-DON c/n 10221 delivered 25.03.63 named "Kaveri", transferred to Indian Coast Guard as CG711 07.84; VT-DUT c/n 10302 delivered 01.07.66 named "Ravi", sold to Bangladesh Biman as S2-ABF 03.03.72; VT-DVF c/n 10308 delivered 10.10.66 named "Beas", sold to Bangladesh Biman as A2-ABG 07.03.72; VT-DVG c/n 10309 delivered 19.10.66 named "Sarju", written off landing at Agartala 07.06.70; VT-DWT c/n 10336 delivered 28.08.67 named "Sabarmati", written off after crashing near Silcher, Assam, 29.08.70; VT-DWU c/n 10337 delivered 06.09.67 named "Jehlum", stored Calcutta 09.94; VT-EBJ c/n 10335 delivered on lease from Fokker 19.02.71 named "Tista", bought 01.07.71, withdrawn from use 09.94; PH-SAB c/n 10271 leased from Schreiner Airways 04.01.66, written off after crashing in to high ground at Srinagar, Kashmir, 07.02.66, 37 killed.

Hindustan Aeronautics 748 series 224: VT-DUO c/n 506 handed over 28.06.67 following initial lease 22.06.67, named "Taj Mahal", written off Hyderabad during training flight 05.03.84, no casualties; VT-DXF c/n 511 delivered 25.11.67 named "Ajanta", written off landing at Mangalore 19.08.81, no casualties; VT-DXG c/n 512 delivered 19.01.68 named "Sauchi", written off 50 miles south west of Madurai 09.12.71, 21 killed; VT-DXH c/n 513 delivered 22.03.68 named "Somnath", to Vayudoot 15.04.89; VT-DXI c/n 514 delivered 30.05.68 named "Amber", written off taking off in heavy rain at Tirupati 16.06.81, no casualties; VT-DXJ c/n 515 delivered 17.07.68 named "Rameshwaram", written off on approach to Bombay after striking high ground 04.04.79, 45 killed; VT-DXK c/n 518 delivered 22.01.69 named "Ellora", leased to Vayudoot 17.04.83, and transferred to them 07.07.86; VT-DXL c/n 519 delivered 29.03.69 named "Konark", to Vayudoot 07.07.86; VT-DXM c/n 520 delivered 28.04.69 named "Khajuraho", to Vayudoot 21.12.86; VT-DXN c/n 521 delivered 17.06.69 named "Sarnath", to Vayudoot 31.03.88; VT-DXO c/n 522 delivered 09.08.69 named "Martand", damaged in heavy landing at Trivandrum 17.12.71. Repaired, and transferred to Vayudoot 31.12.88; VT-DXP c/n 523 delivered 03.12.69 named "Pratapgarh", to Vayudoot 21.12.86; VT-DXQ c/n 524 delivered 12.02.70 named "Pushkar", to Vayudoot 01.04.89 after earlier lease in 1982; VT-DXR c/n 525 delivered 26.02.70 named "Mahabali Puram", to Vayudoot 03.12.88; VT-EAT c/n 540 delivered 21.04.72 named "Lalgila", damaged landing at Cochin 12.05.72. Repaired, and leased to Vayudoot prior to sale to Indian Border Security Force 29.05.91; VT-EAJ c/n 541 delivered 30.05.72 named "Quth Minar", written off on training flight at Hyderabad 15.03.73, three killed; VT-EAV c/n 542 delivered 15.06.72 named "Armanath", to Vayudoot 15.04.89; VT-EAW c/n 543, VT-EAX c/n 544, VT-EAY c/n 545, VT-EAZ c/n 546, VT-EBA c/n 547, VT-EBB c/n 548 & VT-EBC c/n 549 all built for Indian Airlines, but not delivered.

Indian National Airways Ltd., New Delhi

Avro 618 Ten: VT-AFX c/n 526 regd.10.34, cancelled 26.04.38.

DH.83 Fox Moth: VT-AEM c/n 4078 regd.12.33, cancelled 26.03.41; VT-AFB c/n 4086 regd.05.34, cancelled 22.07.43.

DH.84 Dragon: VT-AEK c/n 6050 regd.29.03.34 named "Ruby", cancelled 06.03.37; VT-AEL c/n 6048 regd.29.01.34 named "Emerald", written off near Lahore on mail flight 26.08.39, 2 killed; VT-AES c/n 6065 regd.05.34 named "Sapphire", sold to QANTAS as VH-UZF 19.07.40.

DH.89A Dragon Rapide: VT-ARV c/n 6657 regd.01.07.46, sold 05.06.47; VT-ARW c/n 6661 regd.20.05.46, cancelled 16.05.47.

Percival P.1B/C Gull Four: VT-AFU c/n D.35 regd.11.34, cancelled 11.02.35; VT-AFV c/n D.27 regd.11.34, cancelled 07.06.38; VT-AGO c/n D.40 regd.04.35, written off Jacobabad 26.01.37, one killed.

Percival P.3 Vega Gull: VT-AJD c/n K.72 regd.12.07.37, written off after aerial collision near Karachi 23.02.39, one killed.

Percival Q.6: VT-AKR c/n Q.38 regd.11.41, cancelled 01.09.44.

Beech E-17B: VT-AKJ c/n 232 regd.07.38, cancelled 22.02.39; VT-AKK c/n 233 regd.07.38, to IAC 01.08.53; VT-AKL c/n 234 regd.07.38, cancelled 12.09.39; VT-ALA c/n 274 regd.03.39, cancelled 03.03.47; VT-ALV c/n 336 regd.12.39, written off Multan 02.09.47.

Beech E-18S: VT-ANJ c/n 269 regd.26.09.40, to IAC 01.08.53.

Douglas DC-2: VT-ARA c/n 1239 regd.25.09.42, broken up 1945; VT-ARB c/n 1313 regd.25.09.42, broken up March 1945.

Douglas DC-3: VT-ARH c/n 4851 regd.11.08.43, sold to Dalmia Jain Airways 24.07.51; VT-ARI c/n 4118 regd.20.08.43, cancelled 26.05.54; VT-ATR c/n 20259 regd.27.11.45, to IAC 01.08.53; VT-ATS c/n 20359 regd.27.11.45, written off near Pathan Kot 17.07.50; VT-ATT c/n 20363 regd.27.11.45, to IAC 01.08.53; VT-ATU c/n 20358 regd.27.11.45, to IAC 01.08.53; VT-CFB c/n 13626 regd.17.06.46, to IAC 01.08.53; VT-COH c/n 13387 regd.22.08.47, sold to Union of Burma Airways as XY-ACH in 1950; VT-COK c/n 12095 regd.04.06.49, written off following engine failure and subsequent fire on take-off from Baghdogra Airfield, Silguri, 08.02.52; VT-CVB c/n 13037 regd.07.48, to IAC 01.08.53; VT-CVC c/n 25471 regd.07.48, to IAC 01.08.53; VT-CYG c/n 13019 regd.21.05.51, to IAC 01.08.53;

Vickers 604 Viking 1B: VT-AZA c/n 120 delivered 30.09.46 named "Jumna", to IAC 01.08.53; VT-AZB c/n 126 delivered 28.10.46 named "Indus", damaged at Calcutta 25.10.52. Repaired, and transferred to IAC 01.08.53; VT-CEJ c/n 143 delivered 18.11.46 named "Ganges", written off Palem Airport, New Delhi, 08.10.48; VT-CEK c/n 154 delivered 09.01.47 named "Tista", badly damaged after running into ditch after landing at Safdarjung Airport, New Delhi, 22.08.52. Repaired, and transferred to IAC 01.08.53; VT-CEL c/n 166 delivered 03.04.47 named "Jhelum", written off at Monte Cardo, Corsica, 27.03.48 en-route Delhi to London, 19 killed; VT-CEM c/n 186 delivered 04.06.47 named "Sutlej", to IAC 01.08.53; VT-DAP c/n 235 series 627 Viking purchased from Airwork as G-AJFP 22.12.48, damaged while making forced landing near Delhi 18.05.50 after engine failure. Repaired, and transferred to IAC 01.08.53. Bristol 170 Wayfarer IIA: VT-CGV c/n 12744 delivered 21.01.47, sold to Bristol as G-AHJL 30.03.49; VT-CGW c/n 12745 delivered 18.02.47, sold via Bristol to Airwork as G-AHJM 24.03.49.

Indian Overseas Airlines Ltd., Juhu Airport, Bombay

Noorduyn UC-64A Norseman 6: VT-AZD c/n 692 regd.03.46, cancelled date unknown; VT-AZE c/n 722 regd.03.46, written off 21.11.48; VT-AZF c/n 787 regd.03.46, written off Tirupur 10.04.47; VT-AZG c/n 745 regd.03.46, sold to Indo China 05.53; VT-AZH c/n 788 regd.03.46, cancelled date unknown; VT-AZI c/n 790 regd.03.46, sold 15.09.50; VT-AZJ c/n 796 regd.03.46, sold 15.09.50; VT-AZK c/n 803 regd.03.46, written off Birkaner 12.05.47; VT-AZL c/n 690 regd.03.46, sold 24.05.51; VT-AZM c/n 499 regd.03.46, sold 24.05.51; VT-AZN c/n 694 regd.03.46, sold to Indo China 05.53; VT-AZO c/n 733 regd.03.46, sold to Ethiopia date unknown; VT-AZP c/n 701 regd.03.46, sold to Indo China 05.53; VT-AZQ c/n 703 regd.03.46, cancelled 09.06.48; VT-AZR c/n 191 regd.03.46, cancelled 09.06.48; VT-AZS c/n 700 regd.03.46, cancelled date unknown; VT-AZT c/n 802 regd.03.46, cancelled date unknown; VT-CAV c/n 702 regd.03.46, sold to Ethiopia date unknown.

Percival P.44 Proctor V: VT-CEP c/n Ae.28 purchased circa 1947, sold 21.04.47; VT-CFP c/n Ae.31 purchased circa 1947, sold to Metcaero 24.05.51; VT-CIO c/n Ae.30 purchased circa 1947, damaged by cyclone at Bombay 21.11.48, sold to Metcaero 24.05.51; VT-CIP c/n Ae.34 purchased circa 1947, damaged by cyclone at Bombay 21.11.48, sold to Metcaero 24.05.51.

Douglas DC-3: VT-CTV c/n 10178 regd.07.05.48 named "Star of Allahabad", sold to Metcaero 24.05.51; VT-CTZ c/n 13061 regd.27.04.48 named "Star of Bangalore", sold to Metcaero 24.05.51; VT-CUA c/n 6078 regd.10.05.48 named "Hanumanje", sold to Metcaero 24.05.51. VT-CXP c/n 19275 regd.15.06.48 named "Star of Jeddah", sold 21.05.52.

Douglas C-54B Skymaster: VT-DAW c/n 27234 regd.02.49, sold to Air India 04.01.51.

Jamair Company Ltd., Dum Dum Airport, Calcutta

Douglas DC-3: VT-ATT c/n 20363 regd.07.10.64, written off near Ganhati 26.03.71; VT-ATZ c/n 13689 regd. ??; VT-AZV c/n 13253 regd.27.04.51, written off landing at Barrackpore in bad weather 08.07.53; VT-COU c/n 13570 regd.06.08.49, written off after crash-landing at Gouripur 02.04.64 while operating cargo flight; VT-CQL c/n 20792 regd.12.47 badly damaged attempting a landing at Newlands Aerodrome, West Bengal, 24.10.53, and aircraft diverted to Dum Dum Airport, Calcutta, where a belly landing was carried out. Repaired and sold to IAC 05.07.58; VT-CTR c/n 9003 regd.14.05.48, in store Calcutta by early 1977; VT-DGO c/n 32934 leased from Hindustan Aircraft until written off making single-engine approach to Saugaon Airport, West Bengal, while inbound from Calcutta with freight 15.05.54.

Douglas C-54A Skymaster: VT-CZW c/n 10353 regd.30.10.69, sold to Airworks India 11.74.

Noorduyn UC-64A Norseman 6: VT-AYE c/n 737 regd.06.08.49, cancelled after 1950.

Jupiter Airways Ltd., Madras

Douglas DC-3: VT-CHA c/n 12915 regd.29.10.46, sold to Union of Burma Airways as XY-ACI in 1950; VT-CHB c/n 13023 regd.21.01.47, sold to Airways (India) date unknown; VT-CHC c/n 12320 regd.01.01.47, not taken up and cancelled 1951; VT-CHD c/n 12346 regd.21.01.47, not taken up and cancelled 1951; VT-CHE c/n 12193 regd.21.01.47, sold to Himalayan Aviation 14.02.50; VT-CHF c/n 11810 regd.29.10.46, sold to Deccan Airways 10.06.49; VT-CHG c/n 25297 regd.29.10.46, damaged date unknown, cancelled 26.02.53; VT-CHH c/n 13380 regd.29.10.46, sold to Air India 01.06.49; VT-CHI c/n 13555 regd.29.10.46, sold to Indian Air Force 12.47; VT-CHJ c/n 25274 regd.04.47, fate unknown.

Kalinga Air Lines Private Ltd., Dum Dum Airport, Calcutta

Douglas DC-3: VT-AUQ c/n 19431 regd.18.05.65, written off near Moham Bari, Assam, 17.10.65; VT-AXF c/n 13259 regd.16.12.60, wfu date unknown; VT-AZU c/n 13232 regd.16.12.60, stored 01.69 and sold to Indian Air Survey 1978; VT-CEI c/n 20355 regd.18.05.65, fate unknown; VT-CMD c/n 12491 damaged beyond repair Along 07.04.64; VT-CNZ c/n 12163 regd.20.07.49, cancelled 16.06.52; VT-COA c/n 25304 regd.09.08.47, written off Dum Dum Airport, Calcutta, 31.12.51; VT-CQL c/n 20792 regd.05.07.58, to Indian Air Force as J-973 03.68; VT-CRA c/n 12505 regd.24.01.58, badly damaged at Pokhra Airport, Nepal, after overrunning runway 13.06.58. Repaired, and badly damaged landing at Daporijo 24.10.61. Repaired and stored Dum Dum 01.69; VT-CXR c/n 11846 leased from Indamer and regd.03.08.48. Damaged landing at Borangajuli, Assam, while en-route Paneri to Cooch Behar 04.08.58. Repaired, and badly damaged during supply drop mission at Gulab Bakri 21.04.62. Repaired, and damaged again near Dibrugarh 16.10.62, stored 03.77; VT-CYF c/n 25842 regd.08.48, to IAC 01.08.53; VT-CYN c/n 19988 leased from IAC, written off after crashing 15 miles south-east of Kathmandu 24.03.58, 20 killed; VT-DAY c/n 12085 regd.30.01.49, sold to Union of Burma Airways as XY-ACG 18.07.50; VT-DAZ c/n 11916 regd.03.49, cancelled 30.01.53; VT-DDT c/n 20170 dates unknown; VT-DFM c/n 20269 regd.02.51, to IAC 01.08.53; VT-DFN c/n 13628 regd.27.02.51, written off after catching fire shortly after take-off from Agartala 10.04.52 on freight flight to Calcutta, four killed; VT-DFZ c/n 4647 written off after crashing during supply drop mission in Nagaland, Assam, 16.07.62, 9 killed; VT-DGK unknown identity, regd.01.53, damaged after collision on ground with VT-CYF whilst taxiing at Calcutta 09.01.54. Repaired, but written off after striking trees and crashing while attempting to land in fog at Agartala 19.10.56, 3 killed; VT-DGP c/n 9549 leased from Hindustan Aircraft, written off after crashing into mountain at Sagong 03.08.59, 6 killed; VT-DGR c/n 4457 leased from Hindustan Aircraft and damaged after becoming bogged

First Vickers Viking acquired by Indian National Airways, series 604 VT-AZA (c/n 120), pictured prior to delivery.

(Vickers-Armstrongs)



down when taxiing at Kolapani 21.07.59. Repaired; VT-DGS c/n 4273 leased from Indamer 24.09.59, written off between Doha and Sharjah 10.07.60, 16 killed; VT-DGX c/n 12142 leased from Hindustan Aeronautics until written off at Sela on freight flight 21.09.62, 8 killed. Consolidated PBY-5A Catalina: VT-DEX c/n CV-593 regd.12.50, sold as SE-XAD.

Madras Presidency Airways Ltd., Tripur, Coimbatore

DH.89A Dragon Rapide: VT-ARM c/n 6650 regd.27.08.57; VT-CBY c/n 6869 regd.21.03.55, damaged in gales at Calcutta 14.06.60.

Mistri Airways Ltd., Juhu Airport, Bombay

Douglas DC-3: VT-AUH c/n 18906 regd.01.46, sold to Indian Overseas Airlines 11.09.46; VT-AUI c/n 13231 regd.09.46, sold to Indian Overseas Airlines .09.46; VT-AUJ c/n 19149 regd. 01.46, sold to Indian Overseas Airlines 05.09.46; VT-AZC c/n 4331 regd.03.46, cancelled 21.06.47. Percival P.44 Proctor V: VT-CEP c/n Ae.28 regd.05.46, sold 21.04.47; VT-CFP c/n Ae.31 regd.13.08.46, sold Metcaero 24.05.51; VT-CFQ c/n Ae.32 regd.08.46, sold to Dalmia Jain 07.12.46; VT-CGH c/n Ae.29 regd.09.46, sold Metcaero 24.05.51; VT-CIO c/n Ae.30 regd.01.47, sold to Indian Overseas Airlines date unknown; VT-CIP c/n Ae.34 regd.01.47, sold to Indian Overseas Airlines date unknown.

Nalanda Airways Ltd., Patna Civil Aerodrome, Bihar

DH.83 Fox Moth: VT-CLS c/n FM.18 regd.02.48; VT-CLT c/n FM.39 regd.02.48, cancelled 1951; VT-CLU c/n FM.51 regd.02.48, badly damaged after nosing over during pleasure flight at Forbesganj 27.11.53, not returned to service; VT-CLV c/n FM.52 regd.02.48.

Ryan Navion 4: VT-DBQ c/n 916 regd.10.49; VT-DFA c/n 1018 regd.03.12.52 to Gov't of Bihar on behalf of Nalanda Airways; VT-DFB c/n 1019 regd.20.11.52 to Gov't of Bihar on behalf of Nalanda Airways.

Stinson 108 Station Wagon: VT-CSM c/n 4029 regd.06.48; VT-CSN c/n 4025 regd.06.48.

Douglas DC-3: VT-AUH c/n 18906 regd.29.01.51, sold 08.12.51; VT-AUI c/n 13231 regd.29.01.51, sold 25.02.54; VT-AUJ c/n 19149 regd.29.01.51, sold 20.09.51; VT-AZY c/n 19154 regd.29.01.51, sold as PK-GDR 16.03.62.

Orient Airways Ltd., Dum Dum Airport, Calcutta, later Karachi

Douglas DC-3: VT-CGE c/n 11982 (also recorded as c/n 11881) regd.11.46, re-registered as AP-AAK 01.10.47, sold to SABENA as OO-CBY 27.05.53; VT-CIC c/n 9543 regd.16.12.46, re-registered as AP-AAC 01.10.47, to Pakistan International Airways (PIA) 01.04.55; VT-CIE c/n 9143 regd.13.02.47, re-registered AP-AAD 01.10.47, written off after crashing shortly after take-off from Sharjah 02.08.53 while en-route Karachi to Jeddah, one killed; VT-CIF c/n 19032 regd.13.02.47, re-registered AP-AAE 01.10.47, sold to William Wold as N1501V .05.51; VT-CIG c/n 4562 regd.24.02.47, re-registered AP-AAF 01.10.47, written off after making forced landing following engine failure five miles from Skardu while en-route from Skardu to Rawalpindi 13.10.54; VT-CIH c/n 4356 regd.13.02.47, re-registered AP-AAG 01.10.47, to PIA 01.04.55; VT-CIJ c/n 12089 regd.13.02.47, re-registered AP-AAH 01.10.47, to PIA 01.04.55; VT-CJU c/n 9546 regd.03.47, re-registered AP-AAJ 01.10.47, cancelled 20.04.50; VT-CJT c/n 12501 regd.03.47, re-registered AP-AAI 01.10.47, to PIA 01.04.55; VT-CJU c/n 9546 regd.03.47, re-registered AP-AAJ 01.10.47, cancelled 20.04.50.

Stinson L-5 Sentinel: VT-CLD c/n 1471 regd.04.47, re-registered AP-AAL 01.10.47, fate unknown.

Tata Air Lines Ltd./Air India Ltd., Juhu Airport, Bombay

DH.80A Puss Moth: VT-ADN c/n 2176 regd.07.32, cancelled 10.09.35.

DH.83 Fox Moth: VT-ADZ c/n 4032 regd.03.33, sold .05.39; VT-AFI c/n 4088 regd. .34, cancelled 04.08.43.

DH.85 Leopard Moth: VT-AHA c/n 7119 regd.11.35, sold date unknown.

DH.86A: VT-AKM c/n 2306 purchased from QANTAS as VH-UUA and regd.17.09.38, impressed as HX789 13.01.42; VT-AKZ c/n 2308 purchased from QANTAS as VH-USD and regd.17.03.39, impressed as AX800 21.06.40, but restored to Tata 01.09.43, cancelled 20.11.44.

DH.89A Dragon Rapide: VT-AIZ c/n 6378 regd.15.07.37, impressed as AX806 21.04.42; VT-AJA c/n 6379 regd.15.07.37, written off Juhu 20.11.38; VT-AJB c/n 6381 regd.15.07.37, impressed as HX790 21.01.42; VT-ARK c/n 6652 regd.13.10.43, impressed as MA963 31.12.43; VT-ARL c/n 6649 regd.13.10.43, impressed as MA964 03.12.43; VT-ARM c/n 6650 regd.13.10.43, impressed as MA965 03.12.43, restored as VT-ARM .04.46, sold 09.04.47; VT-ARN c/n 6651 regd.13.10.43, impressed as MA966 01.12.43, restored as VT-ARN 01.01.47, fate unknown.

Miles M.4A Merlin: VT-AGP c/n 141 regd.27.04.35, cancelled 01.04.40; VT-AHC c/n 274 regd.06.12.35, cancelled 16.05.41.

Percival Q-6: VT-AKU c/n Q.36 regd.05.39, written off in accident at Juhu Airport 29.10.39, one killed.

Waco YQC-6: VT-AHZ c/n 4484 regd. .37, cancelled 06.44; VT-AIB c/n 4476 regd. .37, sold to INA .02.42; VT-AII c/n 4491 regd.10.36, fate unknown;

VT-AIN c/n 4542 regd.04.37, cancelled 03.07.52; VT-AIX c/n 4644 regd.07.37, cancelled 12.06.45; VT-AIY c/n 4645 regd.07.37, cancelled 11.01.39; VT-AJI c/n 4647 regd.09.37, cancelled 04.03.38; VT-AJJ c/n 4642 regd.11.37, cancelled 13.06.45; VT-AJK c/n 4649 regd.11.37, cancelled 11.11.42; VT-AJL c/n 4648 regd.09.37, cancelled date unknown.

Waco ZGC-6: VT-AKD c/n 5060 regd.05.38, cancelled 10.09.49.

Stinson Model A4: VT-AQV c/n 9119 regd.11.41, cancelled 02.11.44; VT-AQW c/n 9113 regd.11.41, cancelled 02.07.44; VT-AQX c/n 9127 regd.11.41, cancelled 16.08.44; VT-AQY c/n 9117 regd.10.41, cancelled 20.11.44; VT-AQZ c/n 9120 regd.10.41, cancelled 28.04.44.

Beech D17S: VT-ALY c/n 399 regd.05.40, sold 11.47.

Beech C.18S: VT-ALP c/n ? regd.06.39, cancelled 20.12.39; VT-ALQ c/n ? regd.06.39, cancelled 20.12.39; VT-ALR c/n ? regd.06.39, cancelled 20.12.39;

VT-AVV c/n 6176 regd.03.46, sold 12.05.50; VT-CFQ c/n 6480 regd.11.46, damaged in gear-up landing Bombay 08.02.48; VT-CER c/n 6399 regd.11.46, sold to Hyderabad Government 12.04.48.

Noorduyn UC-64A Norseman 6: VT-CFF c/n 734 regd.06.46, written off Rangoon 31.08.47.

Douglas DC-3: VT-ATI c/n 4922 regd.13.10.45, written off Jammu 13.11.47; VT-ATK c/n 4946 regd.15.10.45, cancelled 03.12.49; VT-ATV c/n 4182 regd.04.12.45, to IAC 01.08.53; VT-ATY c/n 13714 regd.28.12.45, transferred to Indian Air Force 22.12.47; VT-ATZ c/n 13689 regd.28.12.45, to IAC 01.08.53; VT-AUA c/n 13245 regd.13.12.45, to IAC 01.08.53; VT-AUB c/n 13278 regd.28.12.45, to IAC 01.08.53; VT-AUC c/n 18914 regd.28.12.45, sold to Union of Burma Airways as XY-ACF 18.07.59; VT-AUD c/n 13716 regd.21.11.46, written off 20 miles south of Delhi shortly after taking off from Delhi bound for Bombay 09.05.53, 18 lives lost; VT-AUE c/n 19519 regd.11.12.45, to IAC 01.08.53; VT-AUF c/n 13712 regd.28.11.45, written off unknown location 10.01.47; VT-AUG c/n 4175 regd.28.11.45, written off Korangi Creek, Pakistan, 27.12.47; VT-AUR c/n 13686 regd.18.12.45, sold to INA 12.03.49; VT-CCA c/n 25298 regd.16.09.46, written off Bangalore 15.09.51; VT-CCB c/n 25475 regd.16.09.46, sold to Air Ceylon as VP-CAR 17.02.47; VT-CCC c/n 25299 regd.16.09.46, to IAC 01.08.53; VT-CCD c/n 25468 regd.16.09.46, to IAC 01.08.53; VT-CFG c/n 4888 regd.12.04.48, to IAC 01.08.53; VT-CFK c/n 26049 regd.17.03.48, written off Katagiri 13.12.50; VT-CFL c/n 20248 regd.25.07.46, written off Junagari 18.09.47; VT-CFY c/n 9767 regd.04.03.47, cancelled after 1950; VT-CGP c/n 12928 regd.15.11.54, transferred to Indian Air Force 12.04.62; VT-CHH c/n 13380 regd.01.06.49, to IAC 01.08.53; VT-DAT c/n 13168 regd.02.49, written off Barrakpore, Calcutta, 26.09.50.

Douglas C-54B Skymaster: VT-DAW c/n 27234 regd.04.01.51, to IAC 01.08.53.

Vickers 632 Viking 1B: VT-CIY c/n 201 delivered 08.04.47, to IAC 01.08.53; VT-CIZ c/n 202 delivered 30.04.47, written off following belly-landing on beach at Marre, north of Bombay, 07.04.49; VT-CKW c/n 203 delivered 09.06.47, to IAC 01.08.53; VT-CKX c/n 204 delivered 19.07.47, to IAC 01.08.53; VT-CLY c/n 205 delivered 28.08.47, written off when crashing following engine failure Bombay 06.02.48; VT-CLZ c/n 206 delivered 09.09.47, to IAC 01.08.53; VT-CRB c/n 251 delivered 22.02.48, to IAC 01.08.53; VT-CRC c/n 253 delivered 05.03.48, to IAC 01.08.53; VT-CSP c/n 254 delivered 12.05.48, to IAC 01.08.53.

Lockheed L-749 Constellation: VT-CQP c/n 2506 "Malabar Princess"; VT-CQR c/n 2505 "Rajput Princess"; VT-CQS c/n 2504 "Mogul Princess"; VT-DAR c/n 2619 "Maratha Princess"; VT-DAS c/n 2620 "Himalayan Princess"; VT-DEO c/n 2665 "Bengal Princess"; VT-DEP c/n 2666 "Kashmir Princess".

Lockheed L-1049C/E/G Super Constellation: VT-DGL c/n 4547 "Empress Nurjehan"; VT-DGM c/n 4548 "Rani of Ind"; VT-DHL c/n 4613 "Rani of Ajanta"; VT-DHM c/n 4614 "Rani of Ellora"; VT-DHN c/n 4615 "Rani of Chittor"; VT-DIL c/n 4646 "Rani of Nilgiris"; VT-DIM c/n 4666 "Rani of Ayodhya"; VT-DIN c/n 4667 "Rani of Agra"; VT-DJW c/n 4686 "Rani of Bijapur"; VT-DJX c/n 4687 "Rani of Sagurai".

Constellation fleet included for completeness, but aircraft flown almost entirely on international routes.

Varadaraja Airways, Madras

DH.89A Dragon Rapide: VT-ARM c/n 6650 regd.19.10.49, sold 27.08.57; VT-CBY c/n 6869 regd.19.10.49, sold 21.03.55.



Final series 632 Viking delivered to Air India, VT-CSP (c/n 254) is seen at Weybridge prior to delivery to the airline in May 1948. (Vickers-Armstrongs)



After retirement from Indian Airlines service in 1959, the airline parked the Viking fleet at Safdarjung, New Delhi, where they were offered for sale. There were no takers, and series 604 VT-AZB (c/n 126) was one of a number of aircraft sold to a Bombay scrap merchant in 1962. (Jacques Guillem Collection)

A pair of Deccan Airways Douglas DC-3s awaiting their next schedules circa 1948. First registered in February 1947, VT-CJD (c/n 12826) was written off at Hatiara on April 5 1950, after an engine failed taking off from Dum Dum Airport, Calcutta, with the loss of all three crew members.



BHARAT AIRWAYS

- THE BIRLA LINE -



A spotlight on one of India's colourful post-war airlines, whose Douglas Skymaster fleet roamed far and wide

One of India's more colourful pre-nationalisation carriers, Bharat Airways was founded in August 1945 by Birla Brothers Ltd., who held a controlling interest in the airline right up until nationalisation in August 1953. Operations began with a Bristol Mk.IIA Wayfarer and several Dakotas in June 1947, followed by three Douglas DC-4s. Trading as 'The Birla Line', Bharat's DC-3s operated a network of schedules linking Calcutta with Delhi, Agartala, Chittagong, Patna via Ranchi, Silchar via Agartala and Gauhati, and Imphal via Agartala and Silchar. Another route linked Agartala with Mohanbari via Gauhati, Tezpur and Jorhat. Meanwhile, the DC-4s established an important international route linking Calcutta with Bangkok, and later onwards to Singapore and Djakarta, which was flown once weekly in each direction. After the airline's first DC-4, VT-CYK (c/n 3089) was written off in Pakistan on December 30 1949, operations continued with VT-CZT (c/n 10419) and VT-CZW (c/n 10353).

One of the airline's most lucrative operations, though, came from the carriage of ship's crews around the globe. This activity began in 1950 with DC-4s regularly repatriating Indian seamen to Calcutta and Bombay whenever their ship was laid up in a foreign port. Occasionally the Dakotas were also used on this work, but Bharat's DC-4s became familiar visitors to several port cities around the world. Other charters included the carriage of eight tons of general cargo from Milan to Bangkok on January 15 1951. The frequency of shipping charters moved up a gear in the autumn of 1951 when the airline struck a deal with the UK broker Lambert Brothers, which now hired Bharat DC-4s for many of its assignments. The first Lambert charter took place in mid-September when a DC-3 and a DC-4 carried 66 seamen from Calcutta to Brisbane to join the British Phosphate Commissioners steamer "Triona", with the return flight to Calcutta repatriating the outgoing crew. A second charter from Calcutta to Brisbane was flown by a Bharat DC-4 on October 5 when another 54 seamen were conveyed to the steamer "Triatic" lying in Brisbane Harbour. Even more ambitious was a flight which began in Calcutta on November 28 1951 which saw a DC-4 initially flying westwards to Athens, where 54 seamen boarded the aircraft, and were then flown across the globe to Auckland, New Zealand, on behalf of a Greek shipping company.

On March 18 1952 a Bharat DC-4 landed at London Airport inbound from Calcutta on a ship's crew charter, and this was followed by

HEADING PHOTOGRAPH: A Bharat Airways Douglas DC-4 arrives at Athens Airport on a charter flight in April 1953.

(Stephen Piercey Collection)

RIGHT: Douglas C-54 Skymaster VT-CZW (c/n 10353) "Pubva Doot" in full Bharat Airways livery.

a Calcutta to Marseilles shipping charter on April 8. Two weeks later, the airline was hired to carry the Indian cricket team, comprising 17 players and nine coaches and support staff, from Calcutta to London, where the DC-4 landed on April 22. This was India's first tour of the UK since independence. They lost three of the four test matches, and played a further 29 matches with county sides before returning home at the end of the season in September. Two long distance mariners charters were undertaken between Hong Kong and Amsterdam during May, followed by a Calcutta to Singapore flight on August 17 carrying 55 sailors joining the "Empire Wallace". Most notable of all operations during August, though, was the carriage of the Indian Olympic Team home to Calcutta on August 13. Having participated in the 1952 Helsinki Olympics, the team first flew to Paris by scheduled airline, before flying to India aboard a Bharat DC-4.

Another series of flights took place between Calcutta and Brisbane between late October and early December 1952 carrying 120 seamen on behalf of the British Phosphate Commissioners, while a DC-4 left Amsterdam on November 15 carrying cargo to Bangkok, and another aircraft departed from Hong Kong two days later carrying 37 seamen to Bombay. A 53-strong ship's crew took off from London on board a Bharat DC-4 on December 10 bound for Hong Kong, followed by an Amsterdam to Hong Kong charter in early February and a London to Bombay and Calcutta shipping charter on March 4. Several further charters to Hong Kong, Amsterdam, London, Bombay and Calcutta were performed between March and June. Another flight saw a party of Indian visitors attending the Coronation of Queen Elizabeth flying into London in May aboard a Bharat DC-4, which then flew them home again on June 4 1953.

Many of these charters continued following nationalisation in August 1953, and Bharat Airways now became Line No.2 of Indian Airlines Corporation. At the time, the fleet comprised ten DC-3s and two DC-4s.

