Jet Age Comes to India

Indian Airlines introduces the VISCOUNT
Introducing the Viscount the Indian Airlines Corporation is conscious that it will transform air travel into something more than a race against time.

The Viscount is not just a new aircraft. It is a new concept of flight, ushering in the jet age to India.

Imaginatively designed and engineered by Vickers-Armstrongs, the Viscount is powered by four Rolls-Royce ‘Dart’ engines. The association of these two famous names in the trade has resulted in providing the aircraft builders’ answer to the long quest for a medium-range, high-speed aircraft which would eliminate “flight fatigue” due to noise and vibration.

The turbo-prop engines—jet-powered, but propeller driven—enable the Viscount to cruise at 325 m. p.h. at altitudes above 20,000 feet. Travel at these heights—well above the “weather”—in a fully pressurised, air-conditioned and sound-proof comfort is a delightful winged experience, something beyond getting from one point to the other in the shortest possible time.

The turbo-prop is designed the same way as the turbo-jet, only the power derived from the gas-turbines, instead of being used entirely to obtain a jet thrust, is harnessed to a propeller shaft, which also be 80% of the power developed, the residue providing an additional jet thrust.

Gas-turbine engines which power turbo-props and jets having practically no reciprocating moving parts like the piston engines now largely used in civil aviation are free from vibration. Smooth flight is, of course, further ensured by flying over the “weather”. This again is thanks largely to the turbo-prop engines which enable the Viscount to climb swiftly to its cruising height where pressurisation keeps the cabin as if it were at a height of only 4,000 feet above sea level.

Operating Cycle: (1) Air is drawn into the engine through an annular air intake. (2) Air is directed to a two-stage centrifugal compressor. (3) This compressed air is then forced to seven straight-flow combustion chambers where it is mixed with low volatile kerosene and ignited. (4) The tremendous energy created drives a two-stage axial-flow turbine. (5) The turbine power is transmitted by a shaft to drive the engine compressor and then through a high-ratio reduction gear to drive the propeller.
Vibration-free and silent comfort of the Vickers make passengers feel completely at home. The flight is so smooth that you can even write down the "minutes of the meeting".
EXTENDING from Karachi to Rangoon and from Schengen to Colombo, Indian Airlines is one of the largest domestic networks in the world. Its regular flights to all the major cities of India and to the capitals of surrounding countries cover 32,700 route-miles. A fleet of 68 planes, including Skyliners, Vikings, Dakotas and Boeings, operates 122 flights a day. To this fleet is now being added 10 Vincents. These four-engined turbo-propes have proved to be the finest medium-speed airliners in the world, as is obvious from their popularity with the passengers of thirty other airlines. Swift, smooth, silent, sure, the Vincent is preferred by passengers because it offers a new style of comfort, free from vibration and noise, and because it saves time. Operation greater it because it is faster than propeller-engined aircraft and cheaper than jets.

The ten Vincents 708s ordered by I.A.C. are powered by four Rolls-Royce Dart propeller turbines, each developing 1750 equivalent horse power (including 250 lb jet thrust) at take off.

Normal cruising speed of the I.A.C. Vincent is 235 m.p.h. and the still air range is 1,350 miles, with full payload and fuel reserves. Fuel capacity is 1,900 imperial gallons. Accommodation is for 44 passengers and two air hostesses. Two toilets are situated forward and a galley aft. The flight crew comprises two pilots and a radio operator.

Indus Airline Corporation plans to use its Vincent fleet on routes in India and neighbouring countries. To start with, the following routes will be developed: Delhi-Calcutta, Calcutta-Rangoon, Bombay-Delhi and Bombay-Calcutta. During 1958 the Vincent network will be extended to cover Bombay-Bangalore, Delhi-Karachi, Delhi-Rabindra-Head, Madras-Calcutta and Bombay-Madras-Tiruchirapalli-Calcutta.

Considerable time savings will be effected on these routes compared with existing schedules. Delhi-Calcutta will be flown in 4 hr 35 mins faster and 1 hour 10 mins. will be cut on the Delhi-Bombay and the Bombay-Calcutta services.
Four powerful turbo-prop engines and advanced design pressurization enable the Viscount to fly above the weather.

The turbine-hushed and perfectly sound-proofed cabin of the Viscount make it advisable to whisper discreetly.
Large oval picture windows—19" x 26" in size—permit unobstructed viewing even for the passenger on the aisle.

Turbo-prop engines having no reciprocating parts, vibration is almost completely eliminated, ensuring fatiguedless flight.