

# VICKERS VISCOUNT

VICKERS-ARMSTRONGS LIMITED · WEYBRIDGE · SURREY · ENGLAND

## THE VICKERS VISCOUNT 800

### Background Information

The Viscount 800 has been evolved from the famous Viscount 700 series to meet the special requirements of high-density inter-city traffic over short and medium distances. It has been developed in close and continuous co-operation between Vickers-Armstrongs and B.E.A., against a steadily increasing background of operational experience. In practical terms this amounts to more than 139,000 revenue hours flown and over 1 $\frac{3}{4}$  million passengers carried by B.E.A. alone since the Corporation's first ViscounTs were introduced to service nearly four years ago. (The world-wide total of Viscount flying hours is now approximately 500,000).

The initial B.E.A. contract for twelve Viscount Type 802 aircraft was signed in April 1954. Subsequently additional orders were placed for twelve more V.802s and fourteen V.806 aircraft. B.E.A. also has an option on nineteen V.810-840 ViscounTs.

The first Viscount 800 made its maiden flight from Brooklands on July 27th, 1956 and was officially named by Lady Douglas of Kirtleside, the wife of B.E.A.'s Chairman, at a ceremony which took place at Wisley on November 27th, 1956. The Certificate of Airworthiness for the V.802 was awarded on January 10th, 1957.

The main differences between the V.800 and V.700 series are as follows:-

Fuselage lengthened forward of the wing by 46 inches and rear pressure bulkhead moved aft by 65 inches, giving an effective increase in cabin length of 9 feet 3 inches. This is equivalent to three additional rows of seats. Loading doors are of rectangular instead of oval shape and incorporate a new parallel-linkage hinge. The main door measures 5 feet high by 4 feet wide and was designed for loading by fork-lift. The cabin floor is of metal instead of wood and is stressed for freight loading at up to 150 lb/sq. ft. The Rolls-Royce Dart turbo-props are of latest Mk. 510 type, driving Rotol "Parallel-planform" propellers, and producing approximately 13 per cent more take-off power than the Darts fitted in previous B.E.A. ViscounTs.

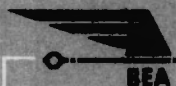
As operated by B.E.A., the Viscount 800 will normally accommodate 57 passengers, with two toilets aft, galley forward and wardrobe compartments on each side of the fuselage opposite the propeller discs. The interior is trimmed in Vynide in the B.E.A. colours of red and grey.

Provision is made in the design of the Viscount 800 for "multi-role" operation; the aircraft can carry first-class or tourist passengers, mixed first-class and tourist passengers, freight, or a passenger-freight combination. All interior fittings pick up on seat rails, and the Short Bros. and Harland seats can be folded against the cabin walls when a change of role is desired. The Viscount 800 can thus be converted from a 57-seater to a freighter in a matter of minutes.

Like the 27 Viscount 700s already delivered to B.E.A., the new 800 series will form part of the "Discovery" class, and will bear the names of famous explorers.

Equipment installed in B.E.A.'s Viscount 800 fleet will include the Smiths Flight System; the Decca Navigator and Flight Log; Standard Telephones V.C.R., I.L.S., H.F. and V.H.F. radio; Marconi A.D.F; Ultra Intercom; Murphy public-address equipment; G.E.C. galley equipment; and Dunlop wheels incorporating Maxaret braking and tubeless tyres.

February, 1957.



# BEA news

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WHITEHALL 8821

11th February, 1957.

BRITAIN'S NEWEST AIRLINER  
BEA Viscount 800 on London-Paris Route

The second stage of BEA's plan for an all turbo-powered airliner fleet will begin on Monday 18th February, when the Vickers Viscount 800 will go into regular service between London and Paris.

The "new look" Viscount 800 will effectively double the capacity of BEA's turbo-prop fleet between now and the coming summer when 24 of the new Viscounts will have been delivered, and will further consolidate BEA's technical leadership at the head of the world's airlines.

The Viscount 800 will also be operating services from London to Switzerland, Nice, Germany, Denmark, Holland, Belgium, Dublin, Edinburgh, Glasgow and Belfast. An air freighter conversion lifting six tons of cargo will already be in service between London and Paris and London and Milan.

Viscount 800 airliners, at one stroke, will raise the standard of comfort on major BEA routes and release Viscount 701s and Elizabethans for improving services on other routes. Altogether the introduction of the Viscount 800 will cause a change of aircraft type on approximately one hundred BEA services, counting flights both ways. In addition to aircraft changes, new routes will be opened between London and Dublin, London-Valencia, London-Belgrade, Manchester-Palma, Manchester-Barcelona, Manchester-Dublin and Birmingham-Dublin.

The Viscount 800 will operate four round passenger flights  
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and one round freighter flight daily between London and Paris starting on 18th February. In April this will be increased to eleven round passenger flights and one round freighter flight daily. The flight will take seventy minutes - fifteen minutes less than the current service operated by Elizabethan piston-engined airliners.

Here in table form is set out the BEA introduction programme of the Viscount 800:

February	:	London-Paris
March	:	London-Glasgow-Edinburgh
April	:	London-Dublin London-Frankfurt London-Belfast
May	:	London-Geneva
June	:	London-Zurich London-Dusseldorf London-Brussels
July	:	London-Nice London-Copenhagen London-Amsterdam

#### Quick Conversion to Freighter

Longer, roomier and quieter than the Viscount 701, the Viscount 800 is equipped with more powerful Rolls-Royce propeller-turbine engines to carry a heavier load without loss of cruising speed.

The cabin of the new "800" is 9 feet 3 inches longer and a few inches wider than that of the Viscount 701 at present in service. The interior has been completely re-styled and the new Viscount seats 57 passengers compared with 47 in the earlier version. A new type of seat, manufactured by Short Brothers and Harland, is designed to fold against the sides of the cabin when the aircraft is wanted for freight carrying duties. The seating lay-out can be changed at very short notice with the aid of a movable bulkhead and rail-mounted seats. Two toilets and a wardrobe have now been included in the amenities of the aircraft.

A further fleet of 14 faster and more powerful Viscount 800s is to be delivered later in 1957 for service with BEA next winter.

# Sidney-Barton Limited

FIELD HOUSE, 15-25 BREAMS BUILDINGS, LONDON, E.C.4.

CHANCERY 9551

## NEW SEAT FOR NEW FLEET

British European Airway's new Viscount 800 fleet, which goes into service on 18th February, between London and Paris, will be equipped with the most up-to-date development in aircraft seating.

B.E.A. issued specifications to some 30 firms, including American manufacturers for a lighter but stronger seat combining greater comfort with increased safety. The design selected was that submitted by Short Bros. & Harland Limited, the Belfast aircraft manufacturers, who in close co-operation with B.E.A., have developed the original prototype to meet the stringent passenger comfort requirements of the airline.

One of the advantages of the seat is that it increases the flexibility of civil aircraft in airline service, enabling the Viscount 800 to play a dual purpose role with the minimum of time and effort. By raising the central hinged arm rest, removing the inboard leg from the seat rail and folding it inwards, thereby unlocking the outer leg, the seat can be stowed against the fuselage wall, thus providing greatly increased space for cargo. This operation is very simple and requires no tools.

Efforts to reduce weight have been so successful that both the double and triple seats now installed in the Viscount 800 weigh less than the original specification demanded. The overall saving in weight is equivalent to two passengers, taking their average weight as 170 lbs. Although the Short seat is much lighter than any competitive aircraft seat, it satisfies the new A.R.B. strength requirement for forward and aft facing seats of 9G - i.e. capable of withstanding nine times the force of gravity.

The Short seat can be adjusted to five recline positions and is fitted with foam plastic cushions and a folding table which is unaffected by the recline positions.

It has a minimum of assembly units, thus reducing maintenance and spares costs for airline operators. It is designed for either forward or backward facing. The tops of the headrests are tapered to enable the passenger to see almost the whole length of the aircraft. This reduces the claustrophobic effect which is sometimes experienced by passengers.

The upholstery is easily removable for laundering.

There is up to 2 inches adjustment for increased width.

The Short seat, which can be fitted into other types of aircraft, is provisionally patented and is now being mass produced at the Belfast factory.

All enquiries to  
Frank O'Shanohun,  
CHANCERY 9551

11th February, 1957

## TECHNICAL NOTE

### Structure

The chair is constructed in tubular and sheet metal form using high-strength and light-weight materials.

### Interchangeability

The chair units can be fitted on the port or starboard sides by changing the outboard and inboard legs. Duplicated fittings on the seat base structures are provided for these changes.

### Weight

The first eight sets of seats delivered have produced average weights as follows:-

Double units - 59 lbs.

Triple units - 87 lbs.

These weights include all fittings - table, magazine container, etc.

In the Viscount fitted with these seats, the weight saving is as follows:

Double units - 13 lbs.

Triple units - 12 lbs.

The overall saving on the 57 seat version is 303 lbs.

### Assemblies

Chair assemblies are designed to accommodate the minimum number of sub-assemblies which are as follows:-

Double units only	-	1 base structure
Triple units only	-	1 base structure
Standard to both double and triple units	-	outboard leg inboard leg outboard and centre arm rest backs complete with table and magazine containers seat cushions back cushions upholstery coverings seat base supports