

The Shape of the Future

THE shape of the next generation of British jet airliners has been decided by three of our largest aircraft companies, Vickers-Armstrong, Bristol Aircraft and de Havilland, and recently-revealed details of the aircraft show them to be generally similar externally.

The Vickers V.C.10, Bristol 200 and D.H.121 differ drastically from the accepted British method of burying the engines in the wings, and have mounted them—in pods—on the rear fuselage, in much the same manner as the engines of the Sud-Aviation S.E.210 Caravelle. This method is claimed to have several advantages, including a clean wing and minimum noise level in the passenger cabin.

No decision has yet been made about producing the Bristol 200, but a contract for thirty-five V.C.10s—excluding spares—worth £60 million, was signed between B.O.A.C. and Vickers on 14th January. The first V.C.10 is expected to fly in the late summer of 1961, and deliveries to B.O.A.C. will begin two years later and will be spread over 1964 and 1965.

The first news of B.O.A.C.'s intention to place an order for the V.C.10 was released in May last year, when the aircraft was stated to meet the Corporation's requirements for the African, Australian and Far-Eastern routes from the mid-1960s on. Since then developments in the design of the aircraft, and in the power from its four Rolls-Royce engines, have made the V.C.10 an airliner which B.O.A.C. will use on its North Atlantic as well as the Far-Eastern routes, without impairing its efficiency on the latter services. (The Boeing 707 has already been selected for the North Atlantic service in the early 1960s.)

The fuselage will be of the "double-bubble" type with a top passenger deck capable of carrying up to 152 people in extra high-density seating, up to 135 in standard high-density, or 108 in a first-class arrangement. Substantial underfloor freight capacity is provided. The aircraft is capable of operating from high-altitude airports in hot weather without suffering the limitations of payload associated with these conditions.

Available details of the V.C.10 are: Span 140 ft. 0 in., length 158 ft. 0 in., height 41 ft. 2 in. Maximum gross weight (long haul) 299,000 lb. Wing area 2,800 sq. ft. Fuselage width 12 ft. 4 in.

The Bristol 200 has been designed to meet B.E.A.'s requirements for a short-haul jet airliner and is in direct competition with the de Havilland D.H.121. It is planned that the 200 will be developed by the Hawker Aircraft and Bristol Aircraft companies in a partnership.

Two of the turbojet engines are in pods on the rear fuselage, with the third buried in the fuselage. Air intake for this engine is just forward of the fin.

Like the V.C.10, the Bristol 200 has a "double-bubble" fuselage with a maximum capacity for 100 passengers plus freight. No mention has been made of the engines, and it is to be assumed that the Olympus variant will be used.

Interest in the aircraft has been shown by overseas customers, and a Bristol sales and engineering team under the leadership of Dr. A. E. Russel, Bristol's chief engineer, is now in the United States to discuss the projected 200 with a major American airline. The following details of the aircraft have been released: Span 91 ft. 0 in., length 121 ft. 6 in. Maximum gross weight 120,000 lb. Maximum speed 600 m.p.h.

plus; range with capacity payload 1,700 miles.

The D.H.121 bears a strong resemblance to the Bristol 200, and like the latter is powered by three turbojet engines. No details have been released, but it is thought that the 121 is as large as the Bristol 200.

Across the Atlantic the Boeing Airplane Company have released details of their Model 720, a new intermediate-range jet airliner, much in the same class as the two British transports. The new machine is the third of the 707 family and will be capable of carrying a gross payload of 33,000 lb., including up to 130 passengers.

External dimensions of the 720 will be identical to those of the 707, and it will have a maximum speed in excess of 600 m.p.h., plus a maximum range of 2,600 miles.

Data: Span 130 ft. 10 in., length 134 ft. 6 in., height 38 ft. 7 in. Gross weight 203,000 lb.

(Top to bottom). Artist's impressions of the D.H.121; Bristol 200 and a model of the Vickers V.C.10

