VICKERS VC10 APPROACHING COMPLETION

Film and photographic facility at British Aircraft Corporation Weybridge factory

Sunday, 4th February, 1962.

Publication of film and pictures embargoed until 0001 hrs. Local Time on Thursday, 8th February, 1962.

Background Notes

The VC10 is the first big jet airliner with rear-mounted engines. (The rear-engine layout was pioneered by Sud Aviation with the Caravelle and has since been adopted for all the new jet airliner designs in Britain and North America).

Among the benefits of this "New Look" are a clean wing, for better take-off and landing performance, and a quieter, more comfortable cabin.

The first VC10 is now structurally almost complete and systems and flight test equipment are being installed. The first flight is scheduled for May.

Orders have been announced for a total of 54 VC10s - 42 for BOAC, five for RAF Transport Command, four for British United Airways and three for Ghanan Airways.

The first VC10 is registered G-ARTA and is owned by Vickers. The fuselages of BOAC's first three VC10s - G-ARVA, B and C - have been completed and major components of others can now be seen on the production line.

Delivery to BOAC is scheduled to begin in December, 1963 on completion of an extensive test programme.

In the BOAC layout the standard VC10 will carry 135 passengers. Thirty of BOAC's aircraft will be Super VC10s, with capacity for 163 passengers.

The VC10 is the biggest single aircraft project ever tackled in Europe. With its four advanced-model Rolls-Royce Conway engines it will be the world's most powerful airliner (although noise problems will not be increased due to the better take-off and climb performance of the clean-winged

VC10; in fact, it will be less restricted by airport noise regulations than current big jets).

Some VC10 facts and figures

Dimensions:

Length: 158 ft.

Wing span: 140 ft.

Height: 41 ft.

The high-mounted tailplane of the VC10 has a span 8 ft. greater than that of a Spitfire and its area - 645 square feet - is only 240 sq. ft. less than the wing area of the original Viscount 630. The height of the tailplane above the ground is equal to that of a four-storey building.

Weights:

The maximum take-off weight of the standard VC10, in initial form, is 299,000 lb. - or almost 150 short tons. /J3

Of this total, the equipped aircraft accounts for 69 tons. The maximum fuel load of 17,940 gallons weighs some 71 tons, and is equal to the total weight of a fully loaded Vanguard airliner. The maximum payload is 19 tons, equivalent to three London Transport Routemaster buses or - more factually - 150 passengers and baggage plus four tons of freight and mail.

Performance:

The VC10 cruises at up to 600 m.p.h. Its maximum range with 100 passengers and reserves is over 5,000 miles, or 4,400 miles with full payload. Maximum cruise speed of the VC10 is Mach 0.88, or nearly nine-tenths of the speed of sound. In practice it will be some 15-20 m.p.h. faster than competitive jets. The approach speeds of the VC10, however, due to the clean wing design, will be the lowest yet achieved with a jet transport, and are comparable with the approach speeds used by the Viscount.

Second-generation design:

Design of the VC10 is based on British Aircraft Corporation's experience in the manufacture of over 500 turbine-powered transport aircraft, which have flown well over 4,500,000 hours in airline service.

The structure and systems of the VC10 are claimed to be the most

advanced of any transport aircraft.

Over half the airframe, for example, is machined from solid steels and alloys.

The systems are fully duplicated for safety and reliability, and the aircraft has been designed from the outset for automatic landing, when the necessary equipment has been fully developed. (The VC10 and de Havilland Trident are the only airliners designed to take advantage of automatic landing).

The four rear-mounted Rolls-Royce Conway 42-1 engines of the VC10 produce 21,000 lb. thrust each at take-off, and are nearly 17% more powerful than Conways used in existing big jets. The Super VC10 will have the Conway 42-3 of 22,500 lb. thrust.

2nd February, 1962.