



DOUGLAS DC-9 "Flight International" operators' reference drawing (see page 903 for key)

Commercial Aircraft of the World ...

centre section 10ft. Altogether 121 DC-7Cs were sold. This was the last stretch of the famous DC-4/7 series. The DC-7C finally went out of production late in 1958 at the same time as the DC-6B; 33 DC-7Cs have been converted into DC-7CF cargo aircraft. Some 115 are still in service. The DC-7C cost about £800,000 in 1956 and increased to about £930,000 by 1959. *Flight* description: July 6, 1956.

DC-7F and -7CF Douglas have converted 21 DC-7Bs and 33 DC-7Cs for all-cargo operations. The designations -7F and -7CF have been coined by the airlines but are not officially recognized by Douglas and the FAA. The conversion consists of fitting large front and rear side doors, heavier floor structure, lining the inside fuselage walls with glass-fibre laminate, and removing some windows. The cost of conversion was about £115,000. The first converted -7B went into service with American Airlines in September 1959.

DC-8 Latest addition to the famous family of airliners was announced in 1955, first flown on May 30, 1958, certificated (JT3 domestic model) on August 31, 1959, and introduced into service simultaneously by United Air Lines and Delta on September 18, 1959. A total of 234 have been ordered by 26 airlines.

Like its rival the Boeing 707, the DC-8 is offered in a variety of versions. There are two domestic (series 10 and 20) and three intercontinental models (series 30, 40, 50) with different tankages and engines. Unlike their rival, Boeing, Douglas have not received a

single military order for this type. All versions of the DC-8 have similar overall dimensions. To improve range, speed and payload, early in the development of the type Douglas designed an extended leading edge for the full span of the wing. By extending the chord 4 per cent the wing area was increased to 2,883 sq ft, resulting in an 8 per cent improved specific range and reducing the cost per ton-mile by more than 1 per cent.

DC-8F Announced in April 1961, the Jet Trader version of the DC-8 was the first long-haul jet to be designed for all-freight or mixed cargo-passenger work. First flown on October 29, 1962, and in scheduled service for 18 months, it has the same powerplant as the DC-8-50 and incorporates the wing leading-edge modifications. Interior arrangements are variable, ranging from the all-cargo aircraft, capable of carrying up to 95,300lb of bulk-loaded freight, or 91,113lb on pallets, to an all-passenger transport capable of seating 189 economy-class passengers. A typical mixed configuration quoted by Douglas is 54 passengers with baggage, 54,500lb of cargo and fuel reserves to give an operating range of 4,000 miles.

First purchaser was TCA, who have six. See pages 942-943 for a complete order list.

DC-9 After more than a year of speculation whether the company could afford the cost of developing its 2086 short-range jet—during which time a number of important American airlines became committed to the BAC One-Eleven—Douglas finally decided to go ahead in April 1963. With a large part of the cost of its DC-8 programme still not yet covered by sales, Douglas have arranged an unusual cost- and profit-sharing scheme with major structure and systems sub-contractors. Largest sub-contractors in the scheme are de Havilland

Aircraft of Canada, who have designed and are building the rear fuselage, empennage, and a large part of the wing. The first aircraft is now in final assembly and is scheduled to fly next February or March, with certification scheduled to be completed by the end of 1965 in time for airline service early in 1966. The first operator to order the DC-9 was Delta, and a number of important orders during the year—including Air Canada, TWA and Swissair—have ensured a significant place for the type.

CX-HLS For more than three years Douglas project engineers have been working on the design of an extremely large turbofan aircraft to meet a possible US military requirement. The design work, which has included the construction of a full-scale mock-up, is at present a company-financed project, but the Department of Defense is reported to be favourably inclined towards the idea, which is also the object of competitive proposals by Boeing and Lockheed.

The civil possibilities are being considered in line with the Government policy established with the joint civil/military Lockheed C-141. It has been reported that a civil CX-HLS could carry 500 passengers over 4,000-mile stages at fares 30 per cent below those of today.

FAIRCHILD Fairchild Hiller Corporation, Aircraft-Missiles Division, Hagerstown, Maryland, USA.

F-27 After a long-standing association with Fokker, Fairchild started production of F-27 aircraft in 1957. The first Fairchild-built F-27 flew on April 12, 1958, and the first delivery was made, to West Coast Airlines, on June 22, 1958. Fairchild has built and sold 107 F-27s to date. A further batch of 15 is now in production.