

"BIG SIX" DECADE

*A Short History of the
Douglas DC-6 Series*

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The first DC-6 prototype—designated XC-112 by the U.S.A.F.—airborne on its maiden flight on February 15, 1946, by Douglas test pilots John F. Martin and George Jansen.

TEN years ago last August the prototype Douglas DC-6 was nearing the end of its flight trials; it had first flown on February 15, 1946. The remarkable achievement of Donald Douglas and his company in the continuous production of a seemingly endless line of history-making transport aircraft—from the DC-2 onwards—amply justifies the slogan "More people fly Douglas than by all other airliners combined." It is certainly no idle boast.

In the highly competitive business of furnishing a majority of the world's most famous airlines with four-engined pressurized long range transports, Douglas and Lockheed, with their DC-6/DC-7 series and Constellation/Super Connie series respectively, have been the greatest of rivals since 1946. Ten years later one finds that element of competition as great as ever with official announcements regarding the latest sales of DC-6Bs and DC-7s, and Super Constellations series 1049G and 1649A to a large number of major airlines throughout the Western world.

By the end of 1955 about 450 DC-6 series (including the DC-6B and DC-6A Liftmaster Freighter series) were in operation by 13 American and 18 other airlines outside the U.S.A. About one hundred DC-6Bs are still to be delivered to several airlines, whilst most of the 200-odd ordered progressively since 1951 have been delivered and are in service at the time of writing, a total of about 30 of the freighter version known as the DC-6A are flying and on order for Slick Airways Inc., Flying Tiger Line Inc., American Airlines Inc., K.L.M., P.A.A., Sabena and Canadian Pacific Airlines. The total number of commercial DC-6As delivered to date is 24 in addition to which it is believed about 200 of the military versions of the type have been supplied to the U.S.A.F. and U.S. Navy. Service designations are C-118 and R6D-1 respectively.

Original design of the DC-6 was begun late in the war years, primarily for a commercial transport, but existing conditions prevented any production for commercial use taking place at that

time. Instead, a prototype was built as a military transport for the U.S.A.A.F., was designated the XC-112 (C.N.42881), and made its first flight on February 15, 1946, with test pilots John F. Martin and Geo. Jansen at the controls (the same Douglas pilots, incidentally, who flew the second prototype Skymaster DC-4A on its first flight early in 1942). Following successful flight trials and C.A.A. type certification of the second prototype built (c.n.42854 NX90701), deliveries of the commercial DC-6 began early in 1947, with the first production aircraft going concurrently to United Airlines and American Airlines, since these two companies were the first to order this type. Later deliveries were made to Braniff, Delta, National and P.A.A.-Grace, whilst the first aircraft supplied to a foreign airline went to Sabena, who bought three. Other early buyers were K.L.M. (7), S.A.S. (13), Aerolinas Argentina (6), Philippine Airlines (5), B.C.P.A. (4), C.M.A. (Mexico) 3, and L.A.I. (Italy) 3. Several of these airlines subsequently took delivery of additional DC-6s and DC-6Bs. American and United Airlines were by far the largest original customers, the former purchasing 50 and the latter 45 DC-6s respectively. These two airlines, together with P.A.A., also have the largest DC-6B fleets flying today. P.A.A. operate a total of 45 DC-6Bs, which they call "Super Sixes."

The older DC-4 having completed over a billion miles of flying (mostly during the war), it was natural that a great deal of the vast operating experience derived from this thoroughly proven airframe was built into the new larger, more powerful and luxurious DC-6. In exterior appearance both types are greatly similar: the DC-6's fuselage is 7ft longer than that of the DC-4 and is fully pressurized. The standard DC-6 is some 24,900 lb heavier in laden weight—although this figure is increased to 37,000 lb in the case of the latest DC-6B series. Span for both types is 117ft, but the wing of the DC-6 being slightly modified. The most recognizable exterior feature of the DC-6 is, of course, its square-shaped windows, in contrast to the port-hole type familiar in the case of the DC-4.

The fuselage is a semi-monocoque structure of traverse frames and longitudinal stringers with an Alcad sheet skin. The wing centre-section has three spars which pass through the fuselage and are permanently attached to it, whereas the two inter sections are single-spar units. Both centre and outer sections have firmer ribs, span-wise stringers and Alcad covering. N.A.C.A.-type slotted flaps extend along the trailing edge of the wing from fuselage to aileron, both ailerons and flaps being single-span structures with metal covering. Engine nacelles are all carried in the centre section. Fin and tailplane are two-spar Alcan-covered structures; the rudder is a single-spar unit with fabric covering, as are the elevators. The retractable undercarriage has twin wheels on a single shock-strut, these retracting forward into the inboard engine nacelles and being enclosed by twin doors. The single nosewheel is fully steerable and retracts forward into the nose.

Seen here at Santa Monica is N.37507 (C.N.42872) "Mainliner Portland," one of the earliest DC-6s for United Airlines. This aircraft, like a number of others that have been flying with United and American Airlines since 1947, has logged about 30,000 airframe hours.

