



DC-7 This further development of the DC-4 family owed its origins to the competitive pressures on the domestic routes within the United States and particularly to the struggle between the airline "giants," American, United and TWA, on the transcontinental routes. In 1950 TWA ordered from Lockheed a stretched version of the Constellation, the L.1049C with the new powerful Wright Turbo-Compound engine. This aircraft was obviously going to outpace the DC-6B then in service and would, for the first time, offer non-stop coast-to-coast capability. Another important factor was the ALPA and FAA ruling on a maximum of 8hr for pilot time without rest. The DC-7 was the first aircraft scheduled coast-to-coast in less than 8hr. American Airlines accordingly ordered from Douglas an equivalent development of the DC-6B using the same compound engine, and this became the DC-7. It entered service in 1953.

Although fast, the DC-7 is perhaps an example of a transport aeroplane which has been developed beyond the point of diminishing returns. Although the type served its purpose admirably—indeed, 109 were built—its economic characteristics are inferior to those of the DC-6B. The cost was about £570,000. About 95 are in service. *Flight* description: July 30, 1954.

DC-7B The DC-7B is similar to the DC-7 but is cleared for higher weights. Seven of the DC-7Bs built were fitted with extra tankage, and some of the remainder have since been modified. The DC-7B first flew on April 21, 1955, and entered service with Pan American less than a month later. A total of 109 DC-7Bs were built, and the price increased from about £680,000 in 1955 to about £820,000 in 1957. About 21 DC-7Bs have been converted to DC-7F cargo aircraft. Resale price for an un-modified -7B today stands at around £90,000.

DC-7C The DC-7 and DC-7B were criticized in service for their relatively high interior noise and vibration levels, which resulted from the 3,250 b.h.p. Wright compound engines in an airframe designed originally (as the DC-4) for units of 1,450 h.p. This led Pan American to discuss with Douglas ways of improving the design while stretching it still further to provide non-stop North Atlantic range. Ability to fly the North Atlantic routes non-stop on a high percentage of occasions in the critical westbound direction against the strong prevailing winds had long been a major objective of all the competing Atlantic carriers, so that the DC-7C marked an important step forward both operationally and commercially. Douglas developed the DC-7C from the DC-7B in the short space of about a year, increasing the overall wing span by extending the

DC-6B The DC-6B passenger airliner was the logical outcome of the DC-6A freighter, and will accommodate up to 107 passengers. The first DC-6B flew on January 23, 1951, and the type entered service, with United Air Lines and American Airlines, in April of the same year. Flown by AA and UAL on the prestige "coast-to-coast" routes, the DC-6B was for a time the fastest equipment in use. However, it was not so much for its performance, which does not differ greatly from that of the DC-6, as for its excellent economics that the DC-6B was to gain a great reputation, remain longer in production and be built in greater numbers than any other of the later developments of the DC-4. It is probable that lower seat-mile costs have, in fact, been achieved with DC-6Bs than with any other piston-engined equipment. A total of 286 DC-6Bs were produced and production was not completed until late in 1958, when manufacture of the DC-8 jet transport was getting under way; some 240 are still in service. The DC-6B cost about £500,000 in 1958.

an aeroplane for the US transcontinental routes. The first flight took place on February 15, 1946. After the war, manufacture for the airlines got under way and deliveries to United started in 1947. Some 175 DC-6s were built and 150 are still in service. The DC-6 cost between £210,000 and £230,000 in 1946-47 and its price rose to about £310,000 in 1951. Resale price today is about £70,000.

DC-6A The success of the DC-6 suggested that further improvements in specific operating costs could be achieved with this same basic design by simply expanding its payload capacity. This was done with great success with the DC-6A, which appeared in 1949. Some airlines installed passenger interiors in DC-6As and called the aircraft DC-6Cs. Some 77 DC-6As were built for commercial operators of which 70 are still in service. In addition, 167 military models of the DC-6A have been supplied to the US Services. About 23 DC-6Bs belonging to eight airlines have been converted by Douglas to DC-6A standard.