

DHC-6 Twin Otter The DHC-6 was designed to meet a long-term requirement for a small, multi-engined, short-haul passenger and general-purpose aircraft. Following careful market research the decision to go ahead was made early in 1964, and the aircraft was announced in August 1964. The entire programme was funded by the Hawker Siddeley company. There was no prototype in the accepted sense of the term, because the airframe was based on that of the single-engined Otter, and the P&W PT6 engine had proved itself in a modified Otter and in the DHC-2 Mk III Turbo-Beaver.

Production of the first batch of Twin Otters began in August 1964, and the first flight was in May 1965. The C of A was granted by the US FAA in April 1966 and the first Twin Otter was delivered to the Ontario Department of Lands and Forests in July of that year. To date 54 Twin Otters have been delivered with 68 on order and more on option. Float and ski undercarriages have been tested and approved. Since the initial certification the gross weight has been increased slightly. A planned early development is to lengthen the nose to make a bigger forward baggage compartment, and to install a slightly more powerful PT6. A flight handling assessment of the Twin Otter appeared in the September 8, 1966, issue of *Flight*.

Twin Otter orders: Aeralpi, 9 (4 delivered); Aero Commuter, 5 (on order); Air Alpes, 1 (on order); Air Commuter, 3 (delivered); Air Wisconsin, 2 (delivered); Atlas Aviation, 1 (delivered); Braathens, 1 (on order); East African Airways, 2 (1 delivered); East-West Airlines, 1 (on order); General Air, 1 (delivered); Guyana Airways, 1 (delivered); Hawaii Jet-Aire, 5 (1 delivered); Leeward Island Air Transport, 3 (delivered); Northern Consolidated Airlines, 2 (delivered); NASA Commuter Airlines, 4 (on order); Pilgrim Airlines, 3 (2 delivered); Redbank Air Taxi, 1 (delivered); State-Wide Airlines, 6 (on order); Sudan Airways, 3 (on order); Surinam Airways, 2 (on order); Trans Australia Airlines, 8 (2 delivered); Trans-East Airlines, 6 (on order); Transportes Aereos Terrestres, 1 (delivered); Wardair, 1 (delivered); Wien Alaska, 2 (on order); Windward Island Airways, 1 (delivered); various government departments, military services and private operators, 47 total (27 delivered). Total orders, 122 (54 delivered).

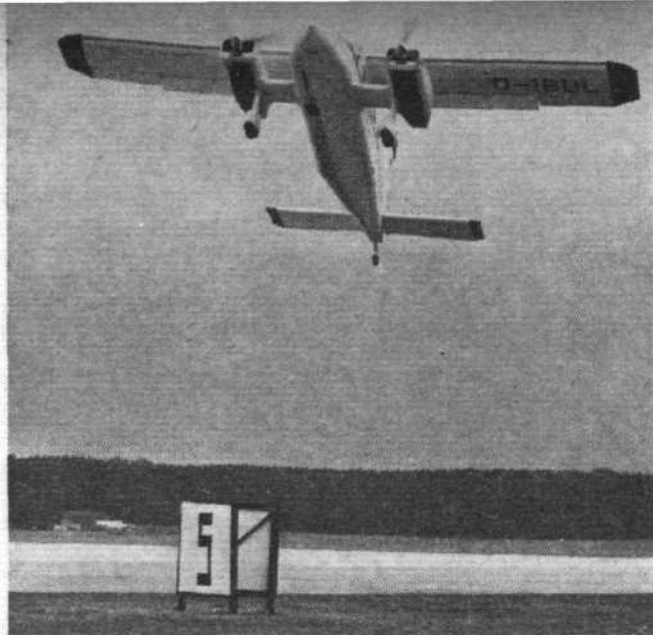
DHC-6 Twin Otter Data

Powerplant: two 579 e.s.h.p. Pratt & Whitney PT6A-20A free-turbine turboprops. **Dimensions:** span, 65ft; length, 51.8ft; height, 18.6ft; wing area, 420 sq ft; wheel track, 12.5ft; wheelbase, 14.8ft. **Weights:** take-off gross, 11,579lb; max landing and zero fuel, 11,000lb; equipped empty, 6,244lb (14-seats), 6,297lb (19-seats). **Fuel capacity:** 315 Imp gal (standard tanks). **Accommodation:** cabin length, 18.5ft; front hold volume, 38 cu ft; rear hold volume, 88 cu ft; max seating capacity, 19; unpressurised cabin. **Performance:** FAR take-off field length (to 50ft, ISA, s.l., g.w.), 1,900ft; take-off speed, 66kt; FAR landing field length (from 50ft, ISA, s.l., max land wt), 1,965ft; approach speed, 83kt; max cruise speed, 165kt at 10,000ft; long-range cruise, 120kt at 10,000ft; max permitted altitude 24,300ft (with oxygen); engine-out service ceiling, 8,500ft; max payload range (ISA, still air, no reserves), 4,296lb over 199 n.m.; full-tanks payload-range (same conditions), 3,800lb over 499 n.m. **Approximate price:** \$300,000 ex-works (£108,000).

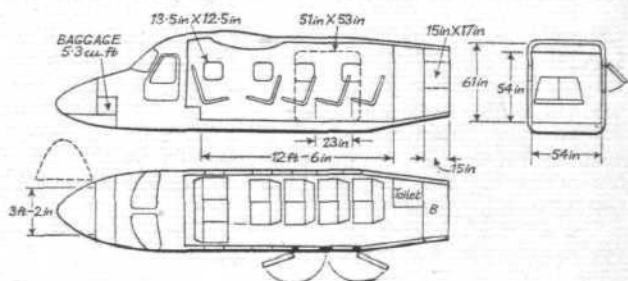
DORNIER

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Do28D Skyservant This aircraft is a development, for commercial users, of the STOL principles exploited by Dornier in the Do27 single-engined and Do28 light-twin six-seaters. The Do28D Skyservant differs from the Do28 in having greatly increased cabin volume (encompassed in a box-like fuselage with a large double opening side-door), higher permitted operating weights and more powerful engines. The wings and their devices (leading-edge slats



The Dornier Skyservant is an outstandingly good STOL performer, and has an adaptable interior that will take up to 11 passengers



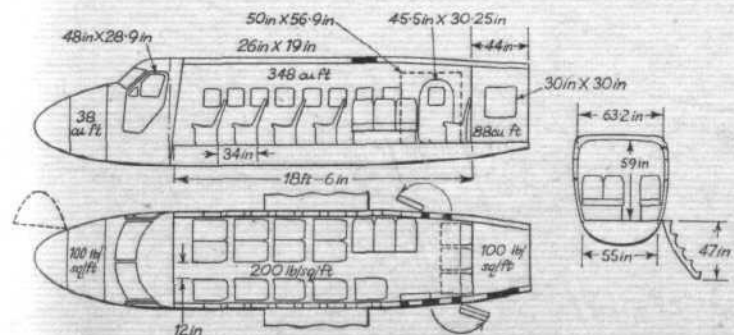
and double-slotted flaps) and the general arrangement of having the engines on stub wings with a fixed tailwheel-type undercarriage, follow the company's well-proven and favoured layout.

The Skyservant received German and American airworthiness certification early this year, and production aircraft are now being delivered. Biggest sales so far (27 aircraft on order and 50 on option) have been to the North American agents Butler Aviation, who see a big market among the expanding ranks of third-level carriers.

Development of the Skyservant to turboprop power has always been a possibility, but the piston-engined basic version will be important for some time in order to minimise the purchase price. The Skyservant comes between the Britten-Norman Islander and the DHC Twin Otter in terms of price and payload.

Do28D Skyservant Data

Powerplant: two 380 h.p. Lycoming IGSO-540 piston engines. **Dimensions:** span, 49.2ft; length, 37.4ft; height, 12.8ft; wing area, 302 sq ft; wheel track, 11.6ft; wheelbase, 27.8ft. **Weights:** take-off gross, 8,040lb; empty, 4,767lb (13-seater). **Fuel capacity:** 200 Imp gal. **Accommodation:** cabin length, 13ft; cabin volume, 290 cu ft; high-density capacity, 11 seats. **Performance:** FAR take-off to 50ft (ISA, s.l., g.w.), 1,100ft; take-off speed, 65kt; FAR landing distance from 50ft (ISA, s.l., g.w.), 1,400ft; approach speed, 71kt; max cruise speed, 175kt at 11,000ft; long-range cruise speed, 130kt at 12,000ft; max permitted operating ceiling, 26,000ft; engine-out service ceiling, 6,000; max payload range (ISA, still air, no reserves), 2,400lb over 300 n.m.; full-tanks payload-range (same conditions), 1,400lb over 1,050 n.m. **Price:** approximately DM600,000 (£55,000).



Aeralpi of Milan has received four Twin Otters out of a total order for nine, and is using them into Alpine airfields. Left, Twin Otter interior

