

# Porter in England

## The New Pilatus STOL Utility Demonstrated

SINCE the Paris Show last June, when the first prototype appeared on the ground and in the air, relatively little has been heard of the Swiss Pilatus PC.6 Porter; but during a recent brief demonstration tour which this new STOL utility aircraft made in this country, *Flight* was able to inspect it closely. Unfortunately, atrocious weather prevented a proper assessment of handling characteristics, but the aircraft appeared to behave extremely well in half a gale, pouring rain and very low ceilings.

Despite its "utility" appearance the machine has a great deal to recommend it as a workaday transport. The structure is all-metal, with a braced wing carrying slotted ailerons and double-slotted flaps and integral tankage at the roots. The powerplant is a Lycoming GSO-480 supercharged 340 h.p. engine driving a constant-speed, three-blade Hartzell propeller, the installation being entirely closed at the rear and all cooling provided by an exhaust augments tube located to port so that exhaust fumes cannot enter the cabin via the door.

The main undercarriage is damped by a single oleo-pneumatic strut each side and the standard 27in x 11in wheels and disc brakes can be rapidly replaced by outside wheels, combined ski-wheel gear or floats. The tailwheel oleo is attached to the fuselage stern-post, remaining entirely exposed; and the tailwheel may be steered from the rudder bar, freed to caster or locked central. A special tailplane aerofoil section helps to counteract trim changes with flap extension and tailplane incidence is varied for trimming. The prototypes have rudder trim, but this is barely necessary. Structure in general appears to be of very high quality although the layout is extremely simple.

A remarkable feature of the Porter is the arrangement of the main components so that the thrust line is high and the wing set low without spoiling visibility from the pilot's seat or the space available in the large cabin. The cockpit transparency is in fact a single plastic moulding extending from the wing spar to the coaming and wrapped round to form deep side-panels. From the pilot's seat one can almost see the upper surface of the wing, look straight down at the gear and all along both wings. Directly forwards, the engine obscures the ground for some 100ft ahead. Noteworthy in the cockpit area are the clear, linoleum-lined floor, simplicity of controls and a desk-like shelf across the full width of the bottom of the instrument panel on which documents and personal equipment can be conveniently lodged.

### PILATUS PC.6 PORTER

(One Lycoming GSO-480 giving 340 h.p.)

Span, 49ft 10in; length, 33ft 6in; wing area, 306.8 sq ft; gross weight, 3,970lb; wing loading, 12.9lb/sq ft; power loading, 11.7lb/h.p.; equipped weight, 2,425lb; useful load, 1,543lb; cruising speed, 125 m.p.h.; landing speed, 44 m.p.h.; initial rate of climb, 1,140ft/min; service ceiling, 23,750ft; take-off run, 420ft; landing run, 330ft; take-off to 50ft at 8,000ft, 970ft; range, with standard tankage, over 500 miles.

Aft of the pilot's seat the cabin extends rearwards no less than 7ft 6½in along a level floor; and a trap door in the rear bulkhead allows long loads to extend well into the rear fuselage. There is head room of almost 4ft. Rails in the floor allow rapid installation and positioning of up to six lightweight passenger seats in addition to pilot and passenger seats in the cockpit. Cabin width is a



The Pilatus Porter has a chunky appearance, but useful performance and considerable capacity. This view was taken from "Flight's" Gemini as the Porter "peeled off" from close formation

continuous 3ft 9½in. A trap door measuring 1ft 10½in x 2ft 11½in can be opened in flight for supply dropping and an escape hatch is provided in the port wall. The main access door to starboard is no less than 4ft 11in wide, consisting of two hinged panels without a central pillar. The Porter can be flown with the door removed if necessary, for parachuting or other tasks. There is ample room for two stretchers and two seated patients and vertical survey cameras can be mounted over the trap door. A maximum load of eight occupants may be carried with less than full fuel.

An alternative powerplant is the Lycoming GO-480 of 270 h.p., but with the more powerful engine a Porter, without radio and unpainted, costs only £13,000 ex works. Its service ceiling is no less than 23,750ft but, lightly loaded, it has already been flown to 31,000ft. The first prototype flew last May and appeared in Paris in June, the second prototype, registered HB-FAO, is the one which visited England, and the third prototype has been bought by the well-known Swiss alpine pilot Hermann Geiger. He is reported to consider the Porter the ideal aircraft for passenger, rescue and utility flying in the Swiss Alps. A production batch of 20 is now going through the Pilatus factory at Stans. Present capacity of the integral tanks is 57 Imp gal but this may be extended further outboard as an optional extra to provide a capacity of 88 Imp gal. Endurance will thus be increased from four to six hours and extreme range from 500 to 750 miles. Cruising T.A.S. is 125 m.p.h. Other quantitative data are given in the table.

Below left, the doors are almost 5ft wide and the seats are on rails on the flat floor. Ski-wheel gear and engine cowling are shown at right. All engine-cooling air is entrained by the exhaust augments on the port side of the nose

