



Of conventional appearance and construction, the Partenavia Oscar nevertheless combines good performance and low price; but the accommodation is fairly tight

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PARTENAVIA P.64 OSCAR

OVER the last two years the tiny Naples company Partenavia has built some 40 P.57 Fachiro III high-wing touring four-seaters. Most of these clean little aircraft were sold to Italian aero clubs and so the company's products are not widely known outside Italy. However, with a new and improved version of the Fachiro III known as the P.64 Oscar, Luigi Pascale, chief designer and director of the company, hopes to start making export sales. In common with all sections of the Italian aircraft industry, Partenavia looks south of Europe to Africa for the biggest export possibilities.

Apart from the Fachiro III—which, incidentally, achieved fame by coming second in the Tour of Sicily Air Race on several occasions—and the P.59 two-seat Jolly, the Partenavia factory's main source of income has been in the design and construction of mechanical handling equipment for brick works. Signor Pascale, who is also a lecturer in aeronautics at Naples University, first built an aircraft (a modest two-seater rather like an early Cub) just after the war. His other ventures have ranged from a hot little two-seat racer which did over 200 m.p.h. on 150 h.p., to the Sea-sky sailplane designed for towing behind a speedboat. This latter device ended its days powered by a Citroen Ami-six engine.

The main features of the P.64 Oscar are a good performance (over 150 m.p.h. cruise) at a reasonable price (£4,870 ex-works), and a simple structure designed for cheap and easy repair. The comparatively good performance for such a

An unusual feature for an aircraft of this size is the generous number of access doors—two to starboard and one, for the pilot, to port. Although the cabin is narrow there is enough panel space for full IFR instrumentation



general arrangement results from much care in achieving a clean external finish. The laminar-flow wing has an accurately formed single-piece glass-fibre leading edge, with integrally moulded ribs in the same material, back to 35 per cent chord, where it bolts on to a light-alloy torsion box. The slim mild-steel tube fuselage has a hard smooth covering of glass-fibre fabric treated with butyrate paint in accordance with the Razorback technique. Interior accommodation of the Oscar is a little tight with four grown men aboard, but a generous number of doors make for easy access; an enlarged cargo door will be offered on production aircraft. Also planned to fly next summer is the P.65 Oscar Six, with a longer fuselage, an additional row of seats, and a 230 h.p. Rolls-Royce Continental O-470-R.

An initial production run of ten Oscars powered by 180 h.p. Lycoming O-360s is being laid down. Airworthiness certification by the Italian Aeronautical Registry is expected early next year when a demonstration tour of Africa will be made to appoint agents. The aircraft may also visit Britain in the spring for the same purpose.

In a short flight from Naples' Capodichino Airport, where Partenavia assembles aircraft in a nearby factory, I found the Oscar quite fast for its power within the limitations of its overall shape. Handling at normal speeds is pleasant; the aircraft has a good rate of roll for a moderate effort and neutral heading stability. However, the all-flying tailplane transmits quite large out-of-trim forces over the range of flap and power settings at low speeds, and trimmer gearing is such as to require quite a lot of tweaking on the wheel to take-up the load on, say, a full-flap overshoot. Another feature which made me think that this was a man's aircraft was the barbaric strength needed to pull the flaps down and to twist the handle to latch; we all had one heartstopping moment during stalls when the catch slipped and the flaps flew up with a tremendous bang. The prototype also displayed quite a severe wing drop at the stall; the designer assured me that plans were in hand for these shortcomings to be rectified on production aircraft.

PARTENAVIA P.64 OSCAR

(One 180 h.p. Lycoming O-360-A1A driving a Hartzell constant-speed propeller)

Span, 33ft; length, 23.4ft; wing area, 144sq ft; fuel tank capacity, 44 Imp gal; basic empty weight, 1,430lb; gross weight, 2,420lb; wing loading, 16.8lb/sq ft; power loading, 13.45lb/h.p.

Performance (claimed) Maximum speed, 168 m.p.h.; cruising speed (75 per cent power) 155 m.p.h. TAS at 7,000ft and 8.6 Imp gal/hr; cruising speed (65 per cent power), 145 m.p.h. TAS at 11,000ft and 7.5 Imp gal/hr; stalling speed flaps down, 64 m.p.h. IAS; take-off ground run, 850ft; landing ground run, 500ft

With a structure designed for cheapness and simplicity (glass-fibre and mild-steel are not the best materials from the strength-to-weight point of view) the useful load naturally suffers somewhat. When I flew the prototype there were four people on board (730lb) and half fuel (22 Imp gal, 160lb) leaving enough disposable load for 100lb of luggage, fuel or extra equipment. Following take-off at 100lb under gross, the Oscar climbed at almost 1,000ft/min on full power and at a forward speed of 165km/hr (103 m.p.h.)—quite spritely considering the highish span- and wing-loading. Full-power in level flight gave a good 253km/hr. IAS at 1,500ft (over 160 m.p.h. TAS). A typical cruise setting of 2,400 r.p.m. and 24in (approximately 75 per cent power) returned 142 m.p.h. TAS; nearer the engine's full throttle height this power setting is claimed to give 155 m.p.h. At the best-range setting of 65 per cent power the Oscar is claimed to cruise at 145 m.p.h. at 11,000ft and this would give a dry-tanks range, starting with full fuel, of 900 miles (fuel consumption 7 Imp gal/hr).

Good big slotted flaps give the Oscar a potentially steep approach gradient. Power off and with full deflection, I-LRAS went downhill at 1,800ft/min at the recommended approach speed of 130km/hr (81 m.p.h.). The stalling speed in this condition was 80km/hr IAS (50 m.p.h.) with quite a sharp wing drop of about 40°. The brochure claims 64 m.p.h. in this condition, which would appear to be unduly pessimistic even allowing for the known big position error. In any case the stalling speed is comparatively high. The aircraft has been spun during the course of development trials but it is not planned to have this ability written into the initial C of A: Signor Pascale said that it would be if flying clubs demanded it for training.

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