**IN THE AIR**

**PIPER PA-30 TWIN COMANCHE**

(Two Lycoming IO-320-B giving 160 h.p. each)

Span, 36ft; length, 28ft; wing area, 178 sq ft; empty weight of basic aircraft, 2,160 lb; gross weight, 3,600 lb; fuel capacity, 90 US gal (84 usable); wing loading, 22.25 lb/sq ft; power loading, 11.25 lb/h.p.

Performance: Max speed at sea level, 205 m.p.h.; cruising at 75 per cent power at sea level, 181-1 m.p.h.; 75 per cent power at 8,000 ft, 174 m.p.h.; 12,000 ft, 169 m.p.h.; 15,225 gal/hr, 1,905 miles; scaling speed, power off, all down, 69 m.p.h.; twin-engined initial climb, 1,440 ft/min at 112 m.p.h.; single-engined initial climb, 340 ft/min at 108 m.p.h.; service ceiling, 16,600 ft; single-engined service ceiling, 9,800 ft; single-engined absolute ceiling, 11,700 ft; take-off run, 950 ft; take-off to 50 ft, short-field effort, 1,570 ft; landing from 50 ft, short-field effort, 1,875 ft; accelerate-stop distance to and from 80 m.p.h., 2,470 ft.

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Of any of the 140 or so types I have flown I have completely forgotten, others I would rather forget; but some stick in my memory as particularly satisfying and pleasant. Among these are the Meteor 8 (because I grew up with it), the Hunter 66, Lightning, Aero Commander 520, Safir, Scout, Porter, Comanche 250 and, on its own special pin-head, the 1910 Curtiss Pusher. Now there is a new recruit to my short list of undying favourites, the Twin Comanche.

For a year I have heard tales of its prowess, but reserved judgment on its handling. It seemed too good to be true. Having now wrung the aircraft out fairly extensively in 1hr 45min, most of the reservations are gone and, all in all, I consider it one of the most important and stimulating aircraft to have emerged in recent years. The dominant impression is of delightful handling at cruising speeds, astonishing speed on low power and low fuel consumption, and exceptionally low noise level. The single Comanche is an outstanding aeroplane, but the Twin Comanche is a very considerable further advance.

You cannot get something for nothing and, although the Twin Comanche is exceptionally fast and economical, its low horsepower and power-to-weight ratio of 11.25 lb/h.p. must ultimately impose some small limitations, but they are as small as possible by virtue of the extremely clean airframe. Single-engined climb of 260 ft/min at gross weight is not exceptional and the private pilot must cope with side-by-side asymmetric handling (in contrast with centreline thrust), but Piper have lent him every assistance, including a very light rudder and the fastest-feathering propellers I have ever encountered. Single-engine ceiling also improves about 1,200 ft; take-off run, 950 ft; take-off to 50 ft, short-field effort, 1,570 ft; landing from 50 ft, short-field effort, 1,875 ft; accelerate-stop distance to and from 80 m.p.h., 2,470 ft.

As important as any of its other virtues is that this sparkling performance and comfort can be had for a remarkably low price, the standard bare aircraft costing £14,636 delivered in UK. The version with course-selecting autopilot, full instruments and lighting, two generators and two vacuum pumps, but without radio, costs £15,641, a price which cannot be equalled by any other aircraft with remotely the same capabilities. Remember that the Twin Comanche can carry full fuel, four people, baggage and equipment for almost 5hr at 194 m.p.h., without reserves. This aircraft must sell like hot cakes in the USA, and should do proportionately well in the much more restricted European market. I cannot go further without recording—and thereby echoing everyone else’s opinion—that the Twin Comanche looks simply gorgeous. Piper talk about tiger-shark nacelles and the missile look, and I have never seen better-justified publicity language.

The aircraft in the accompanying photographs is the Piper demonstrator for Geneva, flown over by the redoubtable Max Conrad with Randolph Churchill’s son Winston. They crossed from Gander to Shannon, in company with BEAS’s own Twin Comanche G-ASLD and an Apache 235, in 9hr 40min, flying at a TAS of 170 m.p.h. at 9,000 ft on a mere 12 US gal/hr. They picked up tailwinds of up to 70kt in the wake of hurricane Beulah. Subject of this air test was G-ASLD. Incidentally, Piper are themselves writing the ARB flight manuals for public-transport category so that the aircraft are immediately validated for this work when they arrive.

There is no need here to enumerate the many changes wrought in turning the single Comanche into the Twin—the story was fully told in Flight International for April 25. Suffice it to say that, although the Twin is definitely a new aeroplane, its cabin, instrument panel and systems have been only slightly changed from those of the single. Cabin layout is the same, except that soundproofing is virtually doubled, with double windows, and ventilation has been greatly increased. Heating is by 27,500 BThU Southwind combustion heater, with separate fresh-air intakes in the extreme nose and beside the dorsal fin, and an extractor outlet. Toe brakes, control wheels, undercarriage and flap actuation, fuel tankage and lighting, two generators and two vacuum pumps, but without radio, costs £15,641, a price which cannot be equalled by any other aircraft with remotely the same capabilities. Remember that the Twin Comanche can carry full fuel, four people, baggage and equipment for almost 5hr at 194 m.p.h., without reserves. This aircraft must sell like hot cakes in the USA, and should do proportionately well in the much more restricted European market. I cannot go further without recording—and thereby echoing everyone else’s opinion—that the Twin Comanche looks simply gorgeous. Piper talk about tiger-shark nacelles and the missile look, and I have never seen better-justified publicity language.

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