

Small is beautiful

*The Topsy Nipper is an attractive single seater with much to offer in minimal space, says **David Ogilvy***

Some aircraft have very appropriate names and, with a span of under twenty feet, the Topsy Nipper falls neatly into this category. Although encouragingly basic, with no 'sales frills', this intriguing little aeroplane is clearly the result of some well-thought-out planning at the early design stage. It was the brainchild of Monsieur E.O. Tips of Avions Fairey in Belgium who, in pre-World War II days, had created the attractive Topsy B two-seater.



Among the Nipper's many favourable features is a good view in most directions (with downward vision panels in the wing roots) an all-flying fin/rudder, a simple undercarriage with disc brakes and an ingenious facility for accommodating a large person in a very small cockpit. The prototype took to the air late in 1957 and all early specimens were Belgian built, appearing on the market about 18 months later at a fly-away at £818.

In 1967 the design rights were obtained by Nipper Aircraft Limited, who arranged for series production by Slingsby Sailplanes of Kirkbymoorside in Yorkshire. In 1968 a factory fire put an end to that, after which plans were made available for use by amateur constructors. Altogether 14 Belgian

built and 32 from Yorkshire appeared on the UK civil register. Since then considerable numbers have been home-built and eight such machines are airworthy out of 21 Nippers with current LAA permits.

My introduction to the Nipper in 1962 led to a friendship with G-ARBP, then owned by the late David Greenland, who was an instructor colleague with the London School of Flying at Elstree. 'BP was one of the early Belgian batch produced in 1960 and survived until cancellation from the register in 2008, completing two years short of a half century of active life.

The Nipper has a welded steel-tube fuselage and a one-piece wooden wing; the airframe is well suited to the tasks to which it has been put, including, after some

modifications, success in aerobatic competitions. For this the original 1600cc converted VW engine was replaced by an 1834cc unit with much improved inverted performance. The machine that I flew, though, had the earlier lower-powered unit.

Getting into the Nipper is not the easiest of tasks, but once aboard there is a pleasant surprise. Because of the slim fuselage the cockpit is unavoidably narrow, but this is offset by an ingenious design feature: the wing roots are hollow and it is practicable to place one's elbows within them, so all but the broadest of people can be accommodated in reasonable comfort. Everything within is minimal, but no frills are needed: the small instrument panel sits just above the straight-through main spar and its



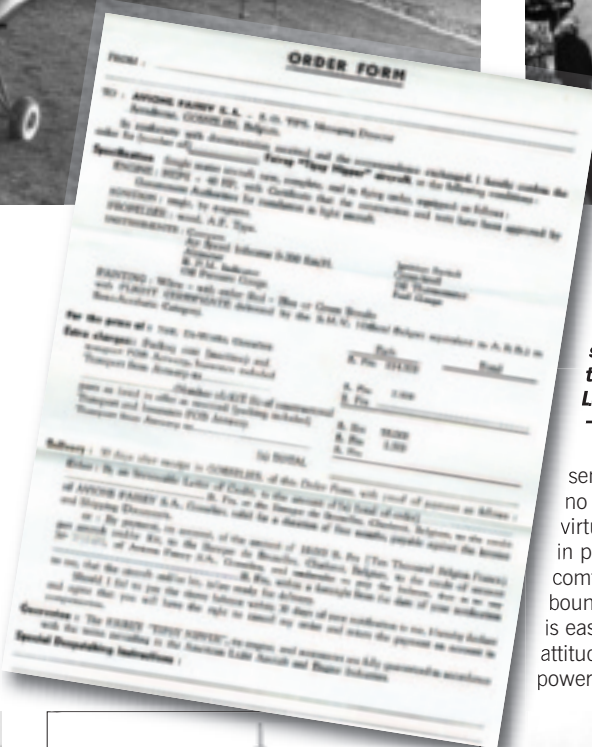
Photos via Philip Jarrett



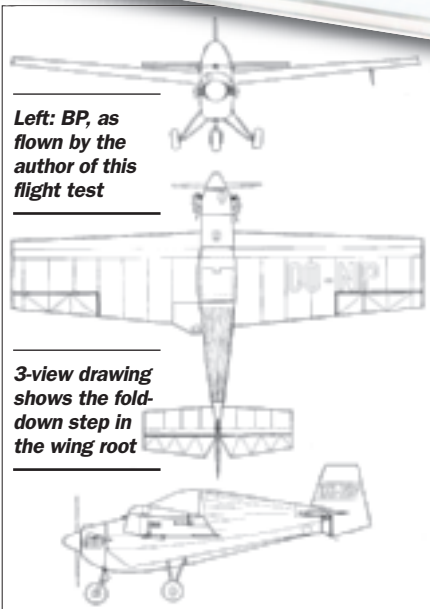
Top left: Avions Fairey SA dating from 1958 shows the open and closed cockpit options for the Nipper
Above: a Topsy Nipper displayed in a store in Bremen in 1961 with a price tag of 14,500 Deutschmarks
Left: an original order form

contents – just an ASI, altimeter, rev counter and slip indicator – are wholly sufficient for the job. Under the spar we find the fuel cock for the 7-gallon tank, carburettor heat control and a choke. Apart from a compass, with brake lever and elevator trimmer on the control column, that is about it.

With the Nipper's good forward and sideways views, taxiing is easy, and the little machine can be squeezed very controllably through the most confined of spaces, as I needed to prove on one occasion when other aircraft had been parked inconsiderately. With almost any other type I would have balked even at the thought, let alone the act, but by this time I had gained sufficient experience – and, with it, confidence – to go through. In retrospect, though, perhaps I should have



sense flown at about 75mph. As there are no flaps (with resultant trim changes) and virtually no effect on trim with alterations in power, it is possible to settle into a comfortably stable approach, crossing the boundary at about 55mph. The touch down is easily judged, calling for only a minor attitude adjustment, especially if a trickle of power is maintained on the way in.



Left: BP, as flown by the author of this flight test

3-view drawing shows the fold-down step in the wing root



The fold-down step and basic panel

considered the possibility of a brake failure, but I was young and keen to get going. The take-off is quite surprisingly short and soon we are climbing at 70mph, gaining probably 550 feet a minute. It took very little time to learn that the controls are light and enjoyably responsive, even at this relatively low speed. Nippers have existed with a range of power outputs from their modified VW engines, but on the level 'BP' would purr along happily at about 88mph IAS and, if pushed, would touch 108.

At various earlier times the Nipper has been through changes in its aerobatic authority, yet I am pleased to say, after checking with Francis Donaldson, the LAA's Chief Engineer, that it is cleared for +4/-2g and for all normal manoeuvres. I understand, though, that Yorkshire's Barry Smith, who has been a Nipper aerobatic exponent for many years, has had his machine cleared for +6/-3. As I write this, his far-from-standard machine is being reworked extensively again. Some people refuse to be satisfied!

I can confirm that the Nipper is happy to perform all standard aerobatics very crisply, but before indulging in these it is wise to see what goes on at and near the stall. Here we have a machine with impeccable behaviour, the break-away happening calmly at about 40mph IAS, with no tendency to play any tricks. The incipient spin is equally well

mannered, with instant recovery.

After noting that all is well at lower speeds, it is time to try more. The loop, starting at 110-115, is a quick and easy affair, seeming to be completed almost before it begins. Manoeuvres in roll are unusually straightforward for such a light and low-powered aeroplane, although the little VW engine in basic form wastes no time before coughing and spluttering when on the way round; some active 'pooling' is needed to keep the nose from falling below the horizon. In all aspects of flight, especially in aerobatics, it is important to make allowances for the very low power that is lurking 'up front'.

In the circuit, behaviour is as good as we might expect. The bulk of the pattern makes

The Nipper is a delight to fly. I was lucky enough to be able to borrow 'BP' to attend a few meetings at away-from-home aerodromes. Among its many virtuous qualities the good view from the cockpit is a very credit-worthy safety feature. There is little on the downside, but a no-reserves range of 200 miles may not be enough for some people, so a modification is available to add wing-tip tanks to the mark III variant.

Unlike most aeroplanes that came to light so long ago, the Nipper is more than a living survivor of a past era, as seven new home-built examples are under construction. So, fortunately, we should see these intriguing little machines with us for many years to come.

**Spare parts are available from Nipper Kits and Components Limited, Foxley, Blackness Lane, Keston, Kent BR2 6HL. Telephone 01689 858351 ■*