One that nearly made it

Competition from used military Chipmunks undercut sales of this useful trainer, says ***David Ogilvy***

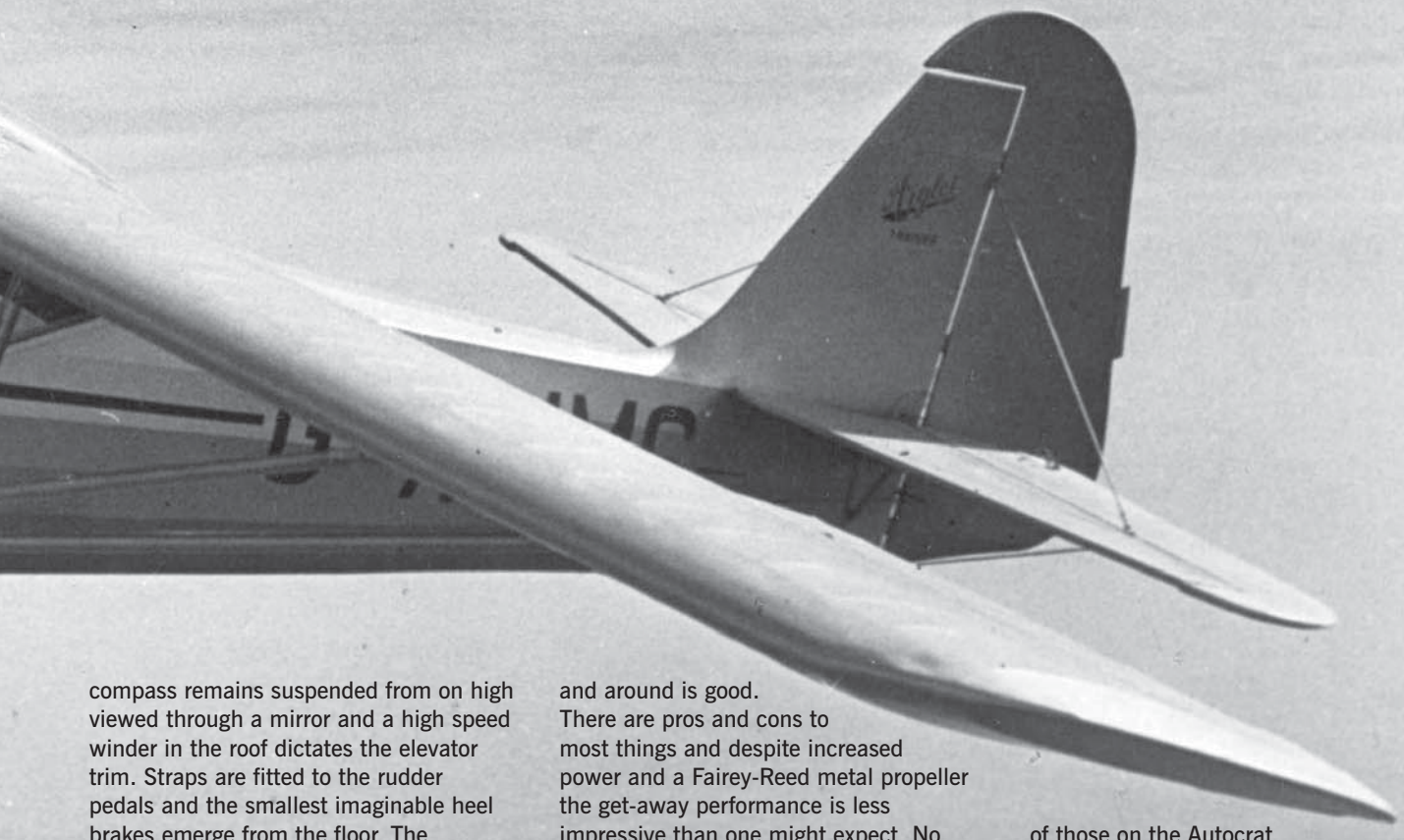
For some people the name 'Auster' is a bit of a mystery. Many treat it as a type in itself, while others use it as a maker's name. The problem is that either view can be correct. Why? Because when the basic design came into the UK from the USA, Leicester-based Taylorcraft Aeroplanes Ltd named one of their products 'Auster'. Then, to show a complete divorce from the country of origin, the company changed its name to Auster Aircraft Ltd. From that stage, each design had its own designation and/or name, eg Auster 5/J1 Autocrat which was the first post-war mass-produced civil machine (covered in the February 2005 issue of *General Aviation*).

In this case why do I include this aircraft's role in the heading when so many types also were intended to serve in the instructional field? Because the Aiglet Trainer is a design in itself and is a different machine from the basic Aiglet. Whilst most variants in the Auster range were broadly similar in appearance as strut-braced high-wing cabin monoplanes, they varied more in performance and utility than their shared shape might suggest.

The Aiglet Trainer came to light in 1951 with an Autocrat fuselage modified to take a Gipsy Major 1 of 130hp in place of the earlier design's 100hp Cirrus Minor 2. The wings were shortened by four feet, the fin was enlarged and the bracing struts were strengthened. The result was a semi-aerobatic machine stressed to between 3.5 and 4.5g depending on the loaded weight.

In common with other Austers, despite doors on each side, the J5F is not particularly easy to enter, but once inside the simplicity of the generous cabin has its own appeal, with a large dose of clear Perspex ahead. Many features were unaltered from the earlier Autocrat, but with a four-point harness in place of the original lap-strap. The

Left: the prototype Aiglet Trainer, an Autocrat fuselage married to a 130 hp engine
Above: the brochure model, G-AMMS, is still in flying condition today
Main picture: shorter wings and larger tail marked out the Trainer



Photos via Philip Jarrett

compass remains suspended from on high viewed through a mirror and a high speed winder in the roof dictates the elevator trim. Straps are fitted to the rudder pedals and the smallest imaginable heel brakes emerge from the floor. The functionally simple cockpit reveals all cables in the open for all to see. Unlike its predecessor, though, which had a fuselage-mounted fuel tank ahead of the cockpit, the J5F has tanks in each wing root accommodating a total of 32 gallons.

On the move, the Trainer with its free-castering tailwheel behaves quite well, and once the heel brakes are mastered taxying presents no problems. Compared with many tail-draggers, the view ahead and around is good.

There are pros and cons to most things and despite increased power and a Fairey-Reed metal propeller the get-away performance is less impressive than one might expect. No doubt this is due to the reduced span and heavier wing loading, leading to a comfortable lift-off speed of almost 60mph. The subsequent climb rate is about 650 feet per minute.

On the level, a fairly generous 2100rpm produces a cruise of almost 110mph, using 6.5 gallons per hour. A noticeable bonus at this stage is the improved performance by the J5F's Frize ailerons compared with the relative slop of those on the Autocrat.

Here, unlike on take-off, the reduced span reveals its positive qualities. The stall is innocuous at all flap settings, but with the lot lowered the rate of nose drop is very marked.

Not surprisingly the Aiglet Trainer feels generally more manoeuvrable than its predecessor, but the high-wing strut-braced configuration does not put one into an aerobatic mind frame. Although a loop from only 10mph above cruising

speed goes round very happily, the rolling plane is a bit more cumbersome. Again, the fault may well be mine, for I am being comparative and when I tried it I had established an amicable relationship with the user-friendly Chipmunk! Perhaps my comments become fruitless, though, when I remind readers that the famous Avalanche – basically a half loop with more than a flick roll on the top – created by Ranald Porteous and made public at the Farnborough display in 1951, was performed on the prototype J5F.

Back on the circuit, the initial approach at 70 leads to selective use of flaps, which are controlled by a handle, three feet in length, beside the left-wing root rib, with a sleeve that is pulled forward to lower 10, 20 or 30 degree settings. This is not particularly easy to operate and can be reached only by the left seat occupant, which is a marked disadvantage on a trainer. This, like many other of the type's features, is a left-over from the Autocrat and its forebears.

After a final line-up at 60, the J5F touches down on three points more readily than its forerunner, which had a reluctance to stay down and would bounce energetically on a premature contact during rather than after completing the round-out. Despite the extent of the flat side area, with differential use of the heel brakes, Austers in general are relatively easy to keep straight on the landing run, although some care is needed to avoid a nose-over. Overall, the bungee suspension seems more tolerant than on earlier machines.

The standard J5F was the most numerous of the Aiglet Trainers, but there were other variants powered by the Cirrus Major and the Gipsy Major 10. Production was spread on a low-key basis over seven years to 1958 and only 28 examples of the 70 built came onto the UK register. With considerable numbers of ex-RAF Chipmunks coming onto the market at relatively low cost, demand for new aircraft from cash-strapped flying training organisations must have been low, but small numbers of J5Fs were used by some leading organisations including Air Service Training at Hamble, Airways Aero Association (initially at Croydon) and the College of Aeronautics at Cranfield.

Almost certainly from the handling aspect, the Aiglet Trainer was the most pleasant of the many Auster products and without competition from the used market more would have been sold. Today six remain on the UK register and three of these are airworthy. A few others operate in other parts of the globe, keeping alive an interesting type that had the misfortune to come onto the training scene at the wrong time. ■

Top left: strengthened struts helped stress the Trainer up to 4.5g
Above left: a Trainer for export, this one registered in Rhodesia
Above: the Trainer is relatively easy to land, with forgiving suspension
Below: G-AMMS today – 'the most pleasant-handling Auster'