learly, a relatively unknown aeroplane from an almost equally unknown designer will not be a major subject for clubhouse or hangar talk, but in the Thorp T-211 we have a machine that might have enjoyed a very different status.

Despite John Thorp's name remaining largely in the background he has a quiet claim to fame, for in World War 2 he created the T-10 – known as the Little Dipper – which was designed to be flown by US infantrymen who had no pilot training. The theory was proven in practice when an army sergeant was selected at random, given an hour's briefing and ordered to fly it. He did – and returned to earth without physical harm to man or machine. Perhaps more significantly Thorp designed the little known T-16, which subsequently became widely known as the Piper Cherokee!

Although designed in wartime, the twoseat low wing T-211 met a rather dull dawn several years later, when Adams Aviation built the majority of the components needed to complete about 100 airframes, most of which fell by the proverbial wayside. Several other organisations endeavoured to pick up the pieces, but all failed until the late 1980s when Thorp Aero Inc made a fresh start. As late as 1990 a lone specimen with the US registration N-98DB came to the UK on a sales tour and in the following year, for the same purpose, a brand new G-BTHP (a clearly selected out-ofsequence registration) was based at Shipdham in Norfolk. This was the machine that I had the opportunity to fly.

In October of 1991 the UK agent Adrian Hall-Carpenter brought it to Old Warden and invited me to put it on trial. I aimed to look at it for two purposes: as a pleasure/touring type, and as an ab initio trainer. No previous attempts had been made to sell the T-211 in the UK, so its long dormant history was unknown and the idea was to ease it into the marketplace as a new contender.

Access to the two-seat side-by-side cockpit is not as easy as I would choose, as the wing root walkway is mildly difficult to negotiate, but it is a small machine with a span of only 25 feet and, once aboard, the interior is more spacious than might be expected. The one-piece canopy slides back easily and offers the choice of being open or closed in flight. There are full dual controls with

## **have been a contender...**

From the man who designed the Cherokee, the Thorp T-211 could have carved itself a niche in UK club training fleets, says **David Ogilvy** 

proper sticks, the whole package connected by pushrods instead of the customary cables. The trim wheel, flap lever, brake lever and throttle are centrally placed within realistic reach of either occupant. On a trainer, this is important but not always the case.

The toe brakes are effective for taxying, but on roughish ground the ride is harsher than it could be. For a normal take-off there is no need to lower the flaps and the T-211's nosewheel comes off the ground at about 50 mph; it all unsticks, almost of its own accord, after about a further 15. It takes very little time to notice – and appreciate – that the controls are responsive, with a lively sporty feel. Although the specification claims a rate of climb of 750 fpm, I found that 'HP had no difficulty in doing slightly better than that, but I am and always have been a relative lightweight, so perhaps I am lucky in more than one way.

In level flight the view in most directions is good, but as with so many other types little behind is visible. Setting the 100hp Continental 0-200 at a recommended 2500rpm achieves a useful cruise of about 118mph. Like the original Ercoupe, due to restricted stick/elevator travel, the T-211 is alleged to be unstallable, going into a rather mushy wobble just above 40 IAS. The published specification, though, quotes the stalling speed as

46, so perhaps the designer was aware that such a situation could

arise. Trim changes between different flight conditions are minimal.

The recommended approach speed is 80mph, but I was happier at a little less than that. Due to a relatively high wing loading of 12.1 lbs per sq. ft a powered approach is recommended as, on a glide, the high rate of descent and restricted elevator response immediately prior to touchdown can prove mildly uncomfortable – or even embarrassing!

From a purely in-flight handling aspect, the T-211 is very pleasant. The light and responsive controls are in contrast to the rather spongy feel that applies to so

many products from the USA. It even needs rudder in a turn! It is stable and rides the bumps more happily in the air than on the ground. With more than 500 lbs between the

## G-BTHP=

Main picture: Comfortable and easy to fly, the T-211 makes an excellent tourer Right: nosewheel comes off at 50mph without flap, the remainder at 65 Below: wing walkway is slightly difficult to negotiate





empty and loaded (1270 lbs) weight, a place behind the occupants for 80 lbs of luggage and a fuel capacity of 20 gallons, it is very practicable for all but very longdistance touring. The specification claims a range slightly in excess of 400 miles.

As a trainer, I cannot bring myself to be quite so encouraging. The pleasant handling is a bonus as it encourages a student to develop a touch of finesse, but the muchpublicised unstallability means that lowspeed handling cannot be covered down to the important break-away and recovery stages. If a pilot is to be licensed to fly an aeroplane with conventional characteristics he or she must gain a reasonable ration of experience in coping with all aspects of a machine's likely behaviour.

Another characteristic detracts from the T-211's otherwise good behaviour: this is the need to make powered approaches, for although these are standard practice in today's operational environment, they are not helpful towards judgment and they create a need to treat forced landings as a wholly specialised exercise. In my young days the standard procedure was to close the throttle at an appropriate point (depending on the wind strength) on the base leg and aim not to use power again until turning off at the end of the landing run. Before my time (yes, this did exist!) such a call for accuracy was even stronger: service pilots were required to pay fines into







squadron funds and private pilots were liable to be rebuked in the clubhouse if they needed to creep-on the throttle once it had been pulled back so, when needed, this was done as surreptitiously as possible! Gone are the days in which a normal approach and landing formed useful and critical practice for a forced landing.

So what is the verdict? It would have been a good light tourer and with such pleasant control responses, could have made cruise flying more enjoyable than on many other types. As a trainer, though, the points that I have mentioned detract from its value. Nevertheless, if it had been available in quantity it could have had a place on club fleets and might have proved popular for private ownership by pilots who appreciate an aeroplane's handling qualities.

As it is, only three T-211s have places

## Left: T-211's wingspan of only 25 feet means a high wind loading

Bottom: a Thorp T-211 was used as a test-bed for the Wilksch WAM-120 diesel engine Top: for all its small size, the T-211's cockpit feels surprisingly roomy Right: the T-211 is now being manufactured by Taneja Aerospace in Bangalore for final assembly by IndUS Aviation in Texas Below: a Continental-engined version of the IndUS Aviation Thorp on the UK register. G-BTHP remains alive, as does G-BYJF, and both have current EASA Certificates of Airworthiness. An oddity in two ways is G-TZ11 which, like 'THP, has a 'personalised' identity and has been used as a test-bed for the Wilksch WAM-120 diesel engine that runs on Jet A-1; unlike its more standard brethren, it has operated on a Permit to Fly, but this expired in August 2008 and the work has been completed so, according to the LAA, 'Z11 may not fly again.

In the T-211 we have an interesting machine that should have enjoyed a more successful career than it achieved. As has been common with other designs, combinations of technical, administrative and monetary mishaps seen to have dictated the terms for the virtual demise of a likeable and seemingly practical little aeroplane.





