

The power and the gory

Or why relying on throttle for approaches could leave you in a heap one day, says **Anthony Preston**

THE LAA's monthly magazine, *Light Aviation*, is delivered to my house in a furtive manner and a manila envelope.

I wouldn't want neighbours to know its resident is anything but a microlight pilot and a devotee of *MF*.

Still, inside, Dudley Pattison offers valuable advice: "Always land a nosewheel aircraft as if it's a taildragger. That nosewheel isn't there to land on, it's just there to prop the engine up."

Wolfgang Langewiesche might have had something similar to say in his excellent book *Stick and Rudder* long ago.

This observation tempts me to explore the instructor's challenge to impart landing technique painlessly to the contemporary student: to teach him to land.

We at rural Beccles on the border between Suffolk and Norfolk have the good fortune to share aerodrome territory with RainAir, presided over by Rainer Forster.

RainAir is a Group A school, teaching on Cessna 152 and 172, and its school of thought differs from ours at Mid Anglia Microlights.

Microlights in their infancy were less reliable than light aircraft, which were powered by Lycoming and Continental engines from the USA – solid, dependable, heavy, low-revving and direct drive.

In order to comply with the microlight definition, microlight engines were highrevving, light and mostly two-stroke, consequently more subject to seizure. The microlight student was taught to fly constantly aware that his source of power might at any time choose to abandon him.

Cross-country flights were embarked upon with trepidation and a keen eye trained to scour the terrain in search of suitable forced landing sites.

In the circuit, while the jockey in his sturdy Cessna happily powers in on the approach, the more circumspect microlight aviator prefers to glide, in the knowledge that sudden loss of power won't force him to try to stretch it.

Landing short and slow is perilous and unwelcome. Landing deep may bury you, undignified, in the far hedge, but it won't invite threshold stall or spin. Furthermore, the microlight student will be more acquainted with engine failure after takeoff routines, reducing terrors beyond the boundary.

Given the legacy of early mistrust, the BMAA syllabus continues to emphasise power-off approach and landing (Exercise 13), not only because of height over threshold but also of invaluable training in practice forced landings (Exercise 16a).

If your routine circuit includes perfecting judgement in landing on the numbers without recourse to throttle, the better your chance of a successful forced landing.

Reliance on power as a substitute for

judgement not only fails to develop skills, but also encourages landings where an elegant flare of the Dudley Pattison school gives way to driving into the ground on three wheels.

They say a good landing is more likely after a good approach, and good approaches are with engine at idle.

By this we don't imply that all approaches should be glides; the student must be acquainted with powered approaches, but his natural instinct should be glide. "Speed controlled by stick, sink by throttle!" are words that come readily to mind when heavy landing and undershooting are to be averted.

An elegant flare, with the tail down and nose up, not only reflects pride in execution, but is also kinder on the aeroplane, since it uses aerodynamic braking to reduce touchdown speed, distance over ground, wear on tyres and brakes and impact on nose leg.

Touching down at or near the stall also encourages the aircraft to stick to the ground and avoid embarrassing pilot-induced oscillation.

Above Judges John Pearce and Mick Broom watch Paul Dewhurst and Paul Welsh make a perfect deck landing at the World Championships last year