

The old adage 'we learn from our mistakes' is so very true in aviation. However, there are far too many pitfalls in flying to rely just on our own experiences; we have to learn from others' mistakes too.



We never stop learning..... by Gerry Humphreys

I'd got my PPL at University Air Squadron flying in Bulldogs in the '70s. On leaving the RAF 20 years later was a bit miffed to find that the Harrier did not count to keep it 'alive'. The CAA required me to do refresher training and a skills flight test to renew my licence; I did a few hours with an instructor in a Cessna 150 and ticked all the boxes before moving back to Ireland. A few months later, armed with my shiny renewed PPL, I joined the local flying club and soon got checked out on the Rallye – known as the 'Tin Parachute' - an ideal machine for the club's short strip. The 'premier' club aircraft was a 180 HP version that cost a bit more per hour than the other less-thirsty 100 HP machines, but had superior all-round performance.

Having flown single-seaters most of my life I was looking forward to taking my family and friends flying. First in line was my sister, who was nervous of flying and had never been up in a small aircraft. It was a lovely sunny day and I decided to land away and have a picnic having booked the 'big' Rallye for the afternoon. Although I believed my sis had total confidence in her big brother, I really knew it would be a 'white knuckle' ride for her no matter how much I tried to make things smooth.

We arrived at the club airfield to find the 180HP machine in the back of the hangar – unserviceable. However, it turned out that one of the 100Hp machines was not booked so I put my name down for that one. I sent my sis off to get a cup of tea and grabbed the operating handbook having not flown that particular aircraft before. A quick look and it was evident that we would be OK ‘2-up’ with half fuel and a picnic; just below Max all-up weight and a bit to spare on the take-off ground roll – no snags!!

I did a careful pre-flight and though it was a little older than the other plane I was used to, seemed in sound mechanical order. I had convinced myself it was a blessing in disguise as it was going to cost less per hour, so would be better value for pottering around than the guzzler in the hangar! I was a bit surprised to find very little fuel in the tanks... in fact they appeared to be almost empty; I supposed that there was some local SOP that it was OK to fly in the circuit with less than the normal 45 minutes’ minimum fuel remaining – after all I had routinely landed the Harrier with ‘flashing bingos’ from the hover – less than 2 minutes fuel remaining. Given it was such a nice warm day and we might do a bit more tourism than the line I had drawn on my map, I put plenty of fuel in – after all the only time you can have too much is when you are on fire... right?

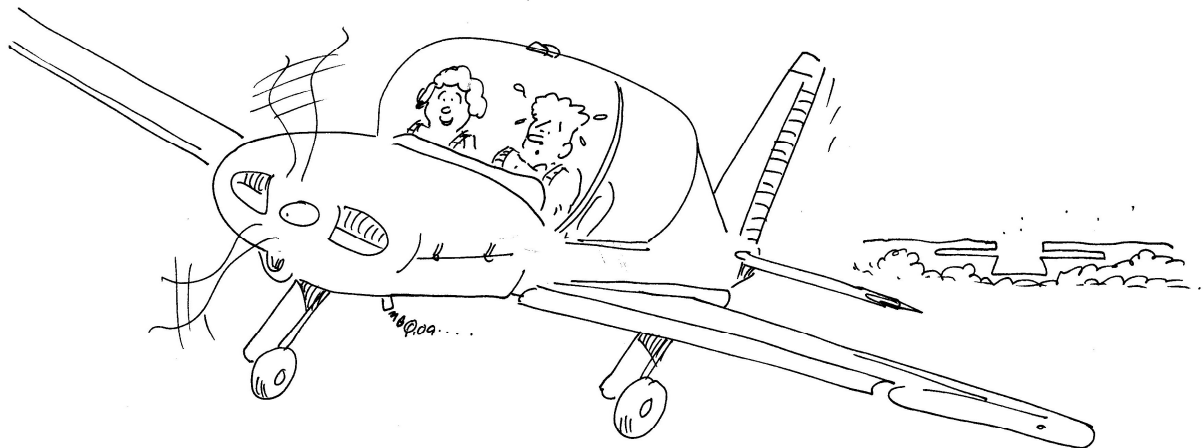
We strapped in and taxied out – I remember thinking how nice it was to see so many people about – and so interested in us going flying – what a great atmosphere there is about the place. I’m going to enjoy the flying here.

I taxied right to the end of the strip and, like all tyro Rallye pilots, struggled with the ‘supermarket trolley’ nose-wheel to line it up straight. A fair bit of X-wind from the left, so a bit of into-wind aileron and prepare for plenty of right rudder to keep the machine on the narrow strip of tar. Full power (RPM a little bit low static, but I guessed it would wind up as we got some speed) then brakes off and the acceleration was .... underwhelming – to say the least! No problem I thought, you’ve been spoiled with all those powerful jets, this is a Rallye, they fly at almost any speed. All the gauges look normal except the ASI which seems to be moving in treacle. I must have a bit of brake on... no.. toes clear.. Halfway point now.. only 200m left. Hmmm, this is not too sprightly. Let’s see if I can haul it off into ground effect and accelerate there, that left brake may have been a little ‘draggy’.. Perhaps I should abort here; then again maybe not – don’t like the look of that wall and public road just off the end of the runway, anyway, my sis will have a heart attack if I do anything dramatic... and I’ll have to fill in lots of paperwork, and all those people watching will think I’m such an eejit... Looks like the ASI is unstuck now – its reached the white line - only 40 kts but the plane is supposed to fly there... off we come! A quick check around to see if I have done anything wrong, but everything looks normal, flaps correct, engine loud, slats out, ball in the middle, ...only now the VSI seems to be stuck.. we are not climbing, and those trees I always thought were a bit close to the end of the runway - are looking bigger that they ever did before... The tops look like just leaves and twigs anyway... just as well, I think they just parted for us... Whew!!

I looked across at my sister who smiled at me and said ‘Isn’t this lovely!’ ‘Um... Yes..’ I answered. Ignorance is bliss – she had absolutely no idea that we had just got airborne thanks to the curvature of the earth!! We flew around for an hour and had a very pleasant picnic. When we got back I mentioned the poor take-off performance to one of the other pilots. I learned that particular aircraft was a well known ‘under’ performer. An imminent annual, a tired engine, old prop, ‘draggy’ brakes, and general old age meant that no-one in their right mind would fly it 2-up with baggage and

anything more than enough fuel to do a few circuits... I realised that's why there was an audience as we took off...

*"Whee! We're flying!"*



*No, Sis, the Earth rejected us....*

Lessons learned? Lots. Always treat old (esp French) aeroplane performance figures with a pinch of salt – remember the figures were established by a skygod test pilot using a new aircraft in its prime. Factor in all the small details that affect performance, temperature a little high over the runway? Pressure a little below ISA? Are those wheels running completely free? Are the tyres at the correct pressure? Is there going to be a little dab of brake to keep it straight in a crosswind? Is there grass, is it wet, is the soil soft?

Another huge lesson for me was the realisation that, after over 20 years flying I was completely on my own, and knew next to nothing about operating small aeroplanes. Everyone around me assumed I was a hugely experienced professional pilot and no-one dreamt of questioning my actions. Having been used to flying within an organisation where everything was closely supervised, I had no-one looking over my shoulder. I guess it is the same for airline pilots who 'come back' to private flying. Just because someone is experienced does not mean everything they do is sensible.

Postscript: The aircraft had a lot of engine work done during its annual later that summer to try and improve its power output, however, the engine was still not happy and seized a few hours later during its run-in period; fortunately the solo student aboard at the time walked away, the 'tin parachute' attached to the engine looked after him well!