



Dedicated

CHAIRMAN'S AIRWAVES

Weight increase turning into wait increase

By Andy Aiken

I SIT writing this with 15cm of snow on the ground yet again, wondering if spring will ever arrive.

I do hope so, but in the meantime, as we approach the flying season, I thought I would update members on issues the council and other volunteers have been engaged in over the winter months.

The first is the possible increase in the microlight weight limit to 600kg. As Europe rushes towards embracing changes to the EASA limit, unfortunately we have been unable to engage with the CAA on this important issue, and as a result the UK is no nearer to any increase in the microlight MTOW.

This is frustrating, to say the least, as Europe rushes ahead, with even the French agreeing an increase to 500kg, with additional allowances for parachutes and floats.

I hope that in the near future I will be able to report progress on this issue so that BMAA members will have access to the increased payload that we desperately need. I can assure members that the BMAA continues to pressure the CAA on this issue.

And while we are dealing with bad news, an update on another long-running issue.

We have for some time been considering the possibility of third-party insurance being offered as an membership benefit to BMAA members, but we have now come to the conclusion that the numbers just don't add up for the BMAA.

The introduction of such a scheme would require a very considerable increase to membership subscriptions and only benefit a proportion of the membership, so we have agreed not to pursue this issue any further.

To end on a more positive note, I can confirm that Spamfield is on for the bank holiday weekend of 25-26 August at Sandown, and Dan Subhani is promising us an even bigger and better event, so do put it in your diary. □



Ladies and gentlemen, start your engines

But do make sure you're in the aircraft.
The Microlight Pilots' Survival Guide, by
Paul Dewhurst



THE Raven began its takeoff run in spirited fashion, accelerating unusually quickly across the freshly mown grass.

After a brief run it left the ground and quickly nosed up into a rapid climb, followed by a climbing turn.

With the wings glinting in the morning sun and the unique wing shape showing itself off for admiration,

it arced up, tracing a stylish dynamic curve in the sky.

But hold on a minute: the turn was steepening and now the nose was pointing downwards and the machine rushing back to earth. With 180° complete and the ground rushing up, would the pilot pull up in time?

It was not to be. With an ear-splitting crash, it simultaneously hit the ground, and the side of the airfield clubhouse Portakabin, at full speed, sending mud and lumps of wood into the sky like a small North Korean bomb.

Surely no one could survive that crash? But wait: a small distance away by the start point stood the pilot, looking rather shocked.

He'd started the seemingly recalcitrant beast from the outside and found out too late that it was set on full throttle, after which it went up for its first and only solo.

Based on a true story – I jest you not!

Aeroplanes are not cars

Generally in life, starting up machines doesn't require too much care and attention. We emerge from our front door in the morning still a bit bleary eyed, plonk ourselves in the driver's seat of the car, turn the key, yawn, put on the seat belt and then get our brains in a slightly higher gear for the drive to work.

Our default can all too easily become the same for starting our aircraft's engine: a seemingly unimportant part of the process, with our full attention anticipating the exhilarating act of flight itself.

The problem with aeroplanes is that they are fundamentally different to most things with an engine:

- we start them "in gear";
- we sometimes start them from the outside;
- the brakes are puny, wheels small and potential power high;
- it's propelled by a whirling meat cleaver, and it generates a small hurricane immediately behind it.

All these points need careful consideration for all our starts to be drama-free.

The wrong sort of adventure

Here is another true story that shares some common points with the first:

The Pegasus Q was loaded for adventure: camping gear inside the cockpit skirt and freshly refuelled, and the pilot equipped with the obligatory Ozee suit over thick clothing, with balaclava and helmet on.

After sitting in the seat fruitlessly pulling the starter handle to no effect, he was getting a bit hot and bothered.

After a while he took off his helmet and balaclava, unzipped his suit and began his second attempt at starting. This time he didn't wear his seat belt, and sat in the back seat to get a greater pull on the starter handle.

After several more attempts, the engine fired and stopped, then after a few more pulls came to life.

Stuttering at first, it then increased revs, but they didn't stop increasing, and kept on climbing inexorably to full power.

With just a simple brake in the form of a bar that rubs the front wheel, it was no match for the thrust.

The machine sped off, gaining speed, and the surprised pilot never got to the ignition switch in time before it hit a concrete wall. Unrestrained and unhelmeted, he was thrown from the machine against the wall and suffered a serious life-altering head injury.

Check your throttle(s)

Trikes have two throttles, and both need to be closed before starting.

Our machines all use Bowden cables to operate the throttle mechanism, and over time these can suffer from fraying internally, which can lead to jamming the throttle. In the case of the Q accident, stowage of equipment under the seat was later found to have snagged the cable and pulled the throttle fully open.

With the throttle substantially open, starting is difficult, which in itself is a warning. But once enough fuel is present they often do start – with potential consequences, as illustrated in the two accidents above.

In the first, the pilot was starting from outside, then narrowly missed being sliced by the prop as his machine shot away. He lost the aircraft and had some embarrassment, but he was certainly the lucky one.

And starting accidents are not confined to trikes, either. There have been plenty of runaway fixed-wing starting accidents, and the odd maiming after hand-swinging too.

Take a look in the back issues of *MF* and you will find a salutary tale by ex-BMAA CEO Chris Finnigan about just that. When after attempting solo hand-swinging, he was run over by his own SkyRanger, which then proceeded to do its best to escape the airfield by using the prop in an attempt to tunnel out through the hedge.

Do your checks – every time

Another common accident scenario is when starting without planning to fly, for example as a check after maintenance or just a periodic bad-weather start to get the oil flowing round the engine and wake it from its slumber.

It's then all too easy to disconnect from the checks and drills and the attention that you have been taught to pay in basic training when starting for flight.

Here is another story related to that.



In this case the task was carb balancing; an important maintenance task to keep the engine running sweetly, the engine in this case being a Full Monty 100hp take-no-prisoners unit.

For this the pilot decided he needed an assistant to sit in the trike and work the throttle through the range on command, while he adjusted the carb settings.

No other pilots were around, but a non-flying volunteer was found. The pilot sat him in the trike and briefed him on what to do, but he wasn't wearing a helmet or strapped in.

The pilot started the engine and asked the volunteer to increase revs, but the response was more sensitive than he was expecting, and the machine lurched forwards.

Panic ensued, his legs went stiffly to the brace position, and full power was inadvertently applied.

Since 100hp defeats microlight brakes with ease, as I said earlier, the machine shot off into an empty hangar. It was substantially damaged, and the volunteer was thrown out and badly injured.

So we must give every start our full attention; they are all equal in their potential for disaster.

Put your stamp on starts

To minimise the chance of forgetting an important consideration, we can use our old friend the checklist. I am sure we were all taught one during training, and it's important that we don't drift into a more casual approach over time.

In the absence of a specific manufacturer's checklist, the industry generic standard is **STAMP**:

Security: Brakes on, occupants in, seat belts fastened, helmets (if applicable) on and fastened, no loose articles. Control locks or ties off (just in case the machine runs away), and all ground anchors, tiedowns, towbars etc taken off and put away.