

GOING FOR A SPIN

Regular spinning practice can save lives. BGA National Coach Mike Fox looks at how to avoid becoming an accident statistic

ONE of the most important roles of the BGA is to try to reduce accidents; especially the most serious. The BGA provides information on how common accidents occur and how to avoid them while flying. One of the common ways to have a serious accident in a glider is inadvertent stalling and spinning. BORING! I hear the masses cry! Well, it is boring unless – like me – you have a passion for trying to keep your mates safe while partaking in a sport that they love. I like keeping my friends safe, so I'll continue.

Background

We are still in the throes of a winching safety initiative which has led to fewer accidents. The winching initiative looked at the accident stats and decided that there were a few common risks and incorrect techniques that led to those risks. The team then went ahead and tried to educate in order to introduce better techniques to avoid the common risks; easy. Let's do the same for spinning.

So what are the common elements of stalling and spinning accidents? There are dozens! Unfortunately, we seem to be spinning 'in' from all sorts of different circumstances. They

include field landings, during and after winch launches, in the circuit, off final turns, spinning during aerobatics, spinning into the hill, etc. The only commonality is that, before most of these accidents, it appears that the pilot stopped flying the aircraft due to being distracted and overloaded by something that was going on outside the cockpit. Sometimes that other thing was a low final turn, a field landing perhaps left too late or possibly failing to handle a turn that wasn't required off a launch failure.

Example

How can we avoid these accidents? Let's start by telling a story. It is fictitious, but I'd be willing to bet that many pilots have found themselves in not dissimilar situations. Have a think at the star markers as to what you

might do, then read on:

You take a launch and attempt to soar some distance downwind of the airfield. The climb doesn't work, so you straighten up to return to the site. You have barely enough height to get back and you realise that there are limited field landing options between you and the airfield. There is a nice stubble field further downwind – away from home. * Well – you could probably sneak into one of the little grass fields on the way home, but they may have stock in them at this time of year. * Sod it – you go for it anyway. Fortunately the air is ok on the way back, so you arrive low but ok. Ahead lies a runway which is safe to land on, but is on the opposite side to the operation and your trailer. It'll take ages to walk back, get the car and towout kit – you could just sneak back round to the normal circuit and land closer to everything. * Sod it – you're not that low.... Oops – you are now after that sink, but if you turn in here, you'll look really silly, and stop them launching for 15 mins. * Sod it – you'll be fine. You stagger round the final turn at 100 feet and land near the trailer line. Great!

Analysis

How do you feel? Good? Or do you feel a bit daft for taking the risks and using your skills a little too much? I know I have ruined a nice flight in this way several times (many years ago of course!). Did you monitor the string and speed around those last turns, or were you a little more fixated on the view outside down the wing with the world looking very close and whizzing past?

This is how those stalling and spinning accidents occur, but we have all been there or seen others in similar situations – right? Have another look at the scenario above. How could you avoid the obvious dodgy bits? You could ask yourself in the first instance "what are the chances that I can glide back with sufficient height to spare?" If the answer is 50/50, then you could say "what are the chances of being able to land out successfully short of the airfield"? This might also be 50/50. So, if you add both risks, you find that there is a good chance of breaking the glider and therefore perhaps injuring yourself. If you make the same decision to go for it say 10 times in your gliding career, you are very

THE CASUALTY LIST (1974 to 2008)

All of the stalling casualties were as a result of accidents, ie none were as a result of practice stalls. All but two (possibly only one) of the spin accidents resulting in three deaths (possibly only one) were accidental.

	Serious injuries	Deaths	Total
Stalls	47	4	51
Spins	79	56	135
Totals	126	60	186

It is thought that around one million practice spins have been conducted in this period, and a greater number of practice stalls.

**AN AMAZING
NUMBER OF
PILOTS OVER-
RUDDER TURNS
WHEN THEY
ARE STRESSED.
AN EQUALLY
AMAZING
PROPORTION
ALLOW SPEED
TO BLEED
OFF WHEN
WORKLOAD
IS HIGH**

likely to break more than one glider. Why not accept that a mistake has already been made, find a nice field and buy the beers tonight? It won't be a long retrieve anyhow! You will then avoid all the other decisions and frights that are otherwise going to occur if you press on. If you do press on and get away with it, don't 'push it' more than you have to! Land on that first bit of airfield, breathe a sigh of relief and start walking.

Avoiding form filling (or worse)

Have a look at the following to see how you can avoid being the next spinning accident pilot:

- Try to plan your flight so that you don't get distracted from flying the aircraft accurately or so overloaded you fail to notice you are about to stall or spin! How can you do that? Well – some of you may have heard a great little aviation saying: The superior pilot uses his superior judgement to avoid those situations that require his superior skills (apologies to the ladies). This is not classical flight planning while on the ground – this is planning while airborne to avoid stress. You could also call this flying defensively.

- If you do need to use superior skill despite careful flight planning; do you possess it? When under pressure it is well known that handling skills deteriorate. Are you monitoring coordination? What about the speed? An amazing number of pilots over-rudder turns when they are stressed. An equally amazing proportion allow speed to bleed off when workload is high. If you are not sure, then get an instructor's opinion – they will be able to give you exercises to improve your basic handling.

- Get more practice with an instructor by flying a club glider. You must make sure you are competent before attempting any stalling or spinning on your own. If you haven't approached the spin lately, fly with an instructor in a suitable aircraft, and get the ok before trying it solo. Remember – the stats tell us that spinning deliberately while current, and at an appropriate height, is SAFE. Not being in current practice at stalling and spinning is the unsafe practice!

- I know what you are thinking: "how can I possibly not know that I'm about to stall and spin? – it's obvious." Well I have been there myself. I can tell you that it's not obvious when you have messed up and are trying to get round a low final turn into a small field. I can tell you because I have nearly spun in myself. I was saved by being current at stalling and spinning my glider. All I had to



Practise regularly so that if the worst happens you will know what to do to save the day (Pete Masson/glidingimages.com)

do was relax the backward pressure and take off some bank. But it was close. You may own a glider which isn't cleared for spinning. You must not contradict a command in the flight manual, so don't spin it. What you can do though, is get it to the point of departure so that it drops a wing, and then recover by moving the stick forward. You will then have most of the story, so that you may recognise the symptoms when you need to most. (See above about getting some training first.)

Join in!

So join us in thinking a little more about how you plan your flying so that you always keep sufficient capacity in hand to concentrate on flying accurately. Talk to an instructor and get involved in exploring what the sensations are like as you stall and depart into a spin. Practise regularly, if possible in your own aircraft, so that when the worst happens, the alarm bells will ring loud and clear, and you will know what to do to save the day.

None of this need detract from the fun but 'safety initiatives' are often seen as boring, and perhaps stifling. Surely this is all about thinking about your flying and attempting to arm yourself with as much knowledge as possible to keep yourself safe, even when you have to use some of your superior skills!

■ **Instructors – we need your help! Please do not pay lip service to the stalling and spinning elements of flying training. We need your help to better train our pilots.**

Try to come up with realistic scenarios to link in with your training, especially when it comes to the further stalling and spinning. Don't just do all the stalling and spinning in one block. If possible, break it all up into bite-size chunks, and link in to flying that a student may have seen.

Please remember that practising stalling and spinning when properly thought out and briefed is statistically very safe.

The aim of the exercise is to arm your students for flying single-seaters – most of which spin like tops!

Please see www.gliding.co.uk/safespining for more advice.

■ The author would like to thank the other members of the spinning Initiative group (Graham Morris, Colin Sword,

Tony Parker, Hugh Browning and Phil King) for their input into this article

