

# **Training News**

Issue 11 / Autumn 2021

### Introduction

We hope instructors enjoy receiving this newsletter. If you have anything that you would like to add next issue, or any comments please drop us a line – mike@gliding.co.uk

### Licencing, EASA, SFCL etc



What a rollercoaster ride (to use a charitable description) the licence transition has been for all of us in the last few years. The original deadline for holding a licence was the 8<sup>th</sup> of April 2015! More recently, we anticipated that everyone who wanted to fly most sailplanes would need a licence by the end of this year. We now have a new deadline of the 8<sup>th</sup> of December 2023. What does this mean for us all?

Leading up to this date BGA and National rules continue to apply to pilots of 'Part – 21' and non-part 21 sailplanes. Many of us hold SPLs, and there are some advantages to that – for example a simpler path to flying Self Launching Sailplanes and TMGs. It may be that if you would like to fly a self launching sailplane or TMG, doing it via a SPL is the way to go. Nearly 2000 SPLs have been

issued through the conversion process so far.

So, for the moment, we have 'peak flexibility!' This means that we can all continue to use our BGA qualifications as well as those of us with SPLs continuing to use the privileges of those licences.

#### COVID - Thanks!

Another rollercoaster of a ride lately has been the COVID-19 pandemic that has seen pilots struggling to stay in practice through lockdowns, isolations, travel restrictions etc. We did worry that there would be a rash of accidents due to lack of currency/recency.

In reality, although there were probably a few accidents in the last 18 months that could be put down to lack of currency, that flood did not appear. So, we want to thank all club instructors out there for getting yourselves and your pilots back in the air safely. Let's hope there are no more flying lockdowns!

# Stall and Spin training

Stalling and spin training are topics on which glider pilots can talk for hours! I think it's true to say that many pilots and some instructors don't really like spinning. Of course, the reason that we must think carefully about spin training is because spin accidents still happen. Last year, we had 3 spinning accidents which injured and killed some of our friends.

To attempt to ease the burden on clubs flying the K13, we have recently written to CFIs setting out that as long as students have been trained to recover from full spins, the further spinning exercises can optionally be taken simply to the point of departure. This does not mean that we should do less 'spin training'. However, I believe that we do need to improve the quality of the spin training that we give to students. Let's focus on what we are trying to achieve here.

There are four important motivations to the stalling and spin training that we carry out:

- 1. We must train pilots to plan their flights both on the ground and in the air to avoid high workload situations.
- 2. We must train pilots to handle the glider accurately when they are under a high workload.

- 3. We must train pilots to recognise the pre-stall symptoms and recover to normal flight before things develop into a full stall or spin.
- 4. We must teach students to recognise and recover from full stalls and spins.

You can see that there should be several – in fact - four barriers in the 'swiss cheese' above. Have a look at this example:

- 1. The pilot fails to plan a flight so that they end up low at the wrong end of the airfield and they attempt to start a low circuit. They elect to continue rather than plan an abbreviated circuit.
- 2. The pressure is on, and our pilot starts to tense up. They will need to fly accurately and at an appropriate speed now. Unfortunately, they don't. They get slow and over rudder a turn.



- 3. The glider starts to get a bit quiet, but the pilot is stressed and tense. The glider buffets, but again, the pilot doesn't recognise it.
- 4. The nose is starting to drop, along with the inner wing, and the glider is starting to spin. Fortunately, with the glider at 400', the pilot recognises this, moves the stick forward just in time and ends up recovering in the first ¼ of a turn. The glider lands a bit heavily in a field next to the airfield.

By the way – the above is a synopsis of a real accident report in a plastic single seater.

So how can we instruct to address the above points and plug the holes in the cheese?

1. Avoiding high workload situations.

On the ground – we can set a good example by thinking about and briefing our flight and any contingencies should we get low. Use Threat and Error Management.

In the air – keep it simple! As instructors, we must NEVER do anything with a student on board that we would not want them to do when solo. We must turn in early on circuits where we would want our students to turn. We must return to the airfield early enough to allow for a nice circuit etc. If you as an instructor push the boundaries, so will your student when they are solo. Try to teach this by asking the student to think ahead 'do you think we will be able to finish our final turn by 300'? No? 'Well – let's do something about it then!'

2. Handling the glider accurately under high workloads.

First teach the student how to recognise those high workload situations. Symptoms will be different for different pilots. Tensed shoulders, tingling fingers, pushing on both rudder pedals together are examples. Discuss this with your student.

Place the student in those situations SAFELY. Perhaps a winch launch failure, maybe a turn—back from an aerotow failure at a safe height. Maybe out of position in a circuit and a turn—in early. Remember not to put the glider anywhere near a high workload for you and **take over** at the first sign of mis-handling. Remember that you are trying to increase their workload — not overload them!

3. Recognise and recover from pre-stall and spin symptoms

Play around with different scenarios. Look at the different pitch attitudes and stall warnings in an over-ruddered and balanced turn. Look at the amount of buffet in different situations, play with the ailerons to see what effect they have at different speeds. How does the glider feel when near the stall? The BGA instructor manual has all the details. The further stalling and spinning exercises are a good start here, and if you don't have to spin off them, you have ample time to 'play' at different scenarios etc.

4. Recognise and recover from full stalls and spins

I can remember in my stalling and spin training the instructor yanking the nose up 20 degrees above the horizon and showing me a stall and then, with rudder, a spin. I can remember thinking how unlikely I was to fall foul of that situation in real life! Please be practical. Most gliders spin best from an under-banked, over – ruddered turn, and mush stalls in turns are what catch pilots out. We have to teach our students to be able to recognise and recover from a full spin.

Ideally your students should be able to initiate and handle the entry and the spin themselves. Why? Because they will feel what the glider is like as it departs, and they will perform the full recovery. If you hand the controls to a student

once the glider is spinning, very often the controls will be relaxed towards the centre at some stage. This will normally recover most 2 seat gliders. Students need to be relaxed enough to be fully aware of what's happening and recover deliberately and accurately.

Above all – spin training should be integrated into training so that exercises are tailored to the situations that you and your student find yourselves in. Starting winch launch training? Have a look at the spinning scenarios! Chatting about circuits and turning in early? Maybe incorporate spinning off an over-ruddered, under banked turn!

You get the idea – Spin training should be fun and incorporated into training – not just 'bolted on' in two 4000' aerotows!



### Radio use at clubs

There have been some accidents lately that might have been avoided by better communication.

I still find it a bit weird that, for instance, on aerotow we have such a huge variation in methods of signalling to the tug. Why not – horror of horrors – use the radio?!

Have a look at BGA Op Reg 34 and 35 here: https://members.gliding.co.uk/wp-content/uploads/sites/3/2015/04/BGA-Operational-Regulations-3-Mar-21.pdf

As a pilot of a glider being launched, it is always good to be listening on frequency. Much better for a tug pilot to call that your airbrakes are open,

or that the engine sounds funny and that's why we are turning back towards the club! For the glider pilot – tows are the expensive method of launching – doing some training? 'Could you simply tow us upwind above these few cumulus please?' Trying to soar? 'Could you tow me downwind to the large cumulus, and if those don't look great, back upwind to the sunlight please'!

# Winching and training

It's been 15 years since the BGA safe winch launching initiative kicked off in 2006. Since then it is almost certain that, through our collective efforts, we have saved not just a few, but many of our gliding friends' lives through education of safer winching techniques.

Of course, memories fade, and there are many pilots who have started gliding recently who know nothing of the high accident rates before the initiative. Unfortunately, it seems that in the last couple of years, the accident rate has begun to increase again. You know the plea I'm about to make — please can we reinforce the correct, safe techniques for winch launching and launch failures as laid out in the BGA instructor manual and on the BGA safe winch launching web page here: <a href="https://members.gliding.co.uk/bga-safety-management/safe-winching/">https://members.gliding.co.uk/bga-safety-management/safe-winching/</a>. Let's continue to keep our friends safe from a winch launching accident.

# Late Take Over Again.

I know we keep bringing this subject up, but there is a reason. Substantial damage accidents in two seat training gliders with an instructor who fails to take over control in time to prevent an accident are continuing at a rate of 60-70 percent of total.

Consider the impact on your club's ability to train members, fly trial lessons etc, if one of your two seaters is put out of action by a preventable accident.

It is really easy to say that students learn from their mistakes, but will they really learn? I don't think so. Some



instructors believe that they should let their students get as close as possible to making a mistake and stop them just before and that they will learn from that. I don't buy that. Getting very close to making a mistake intentionally is not good training as we all know that things can go very wrong very quickly.

The answer is to brief your student well, set out the acceptable parameters for the flight and If things go outside these limits then take over control.

The following guidelines are available at: <a href="https://members.gliding.co.uk/wp-">https://members.gliding.co.uk/wp-</a>

#### content/uploads/sites/3/2017/10/TakeOver-2-5-16.pdf

- 1. Take over IMMEDIATELY, even if you are a very experienced instructor, if P2 makes a
- 2. potentially dangerous error, for example:
  - on a simulated winch launch failure, does not lower the nose to the appropriate attitude, allows the speed to fall below the minimum approach speed, turns in the wrong direction, opens airbrakes before establishing adequate speed
  - fails to release on a launch with wing drop
  - low final turn
  - shallowing approach
  - · fails to round out at an appropriate height
  - takes spin recovery action in a spiral dive
- 3. Demonstrate safe handling / manoeuvring
- 4. If near the ground, do not give control back to P2

Please let's all see if we can make a concerted effort to reduce the number of these training accidents.

### Tow out kit

There have been loads of accidents lately caused by dilapidated tow out kit including worn catches, fixings pulling out of glass fibre and broken tow-out arms. Some of these accidents cost us all (through insurance) many thousands of pounds. I realise it's not really an instructing matter, but if you see anything that concerns you, please could you raise the issue with the owner of the glider please?

### **Epilogue**

We would like to wish all our fantastic instructors a good winter season. We hope you get some flying in!

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October 2021 mike@gliding.co.uk