



Fig. 1. Locate the C risers and pull down forcefully



Fig. 2. Using your body weight to assist the pull-down



Fig. 3. The wing starts to stall and descend

HOW TO BE A BETTER PILOT

CFI Tim King continues his series aimed at the beginner paraglider pilot

NO 7. HIGH WIND CANOPY CONTROL

You're in the air having a great time and the wind picks up a little. Your top-landing option has just got a bit trickier.

If you are competent at carrying out a high-wind top landing with a controlled finish, then all well and good, but you need to be confident and practiced before attempting such a landing unless the top landing area is big, safe and open, allowing for any mistakes. And of course, if the wind picks up to a potentially hazardous strength then a bottom landing must be an available option.

You need to top land in a nicely controlled manner, touch down and collapse the wing. You may be confident with your approach and set up, but do you get a niggling feeling of apprehension brought on by the thought that, when your feet do finally touch down, you're going to have to collapse and control 27m² of wing in a fair old blow and stay completely on top of the situation? Being dragged through other people's gear or the car park is not an option!

Many of the common errors that I see occurring in this situation can be attributed to a lack of commitment, application of inappropriate controls, or by simply being off balance. Any one of these factors alone could spell disaster, but too often I see all three together, culminating in an all-too-predictable finale. The only positive outcome is the continued employment of the staff in the local repair loft!

Our goal then, is to collapse the wing swiftly without it generating any lift or drag, and then move ourselves towards the wing and gather it up to make it safe.

Being pulled off balance, sliding across the ground or being hoiked back up into the air are not healthy options. However, my usual mantra - of employing good skill and the correct technique - will eliminate the need to trust in luck.

There are several different ways to achieve this goal. If your particular technique works for you every time without fail, then it is the right one for you. If however you are a fairly new CP, you have probably observed other pilots performing several different techniques with varying degrees of success, and may be a little confused as to which one would best suit you.

Different classes and designs of gliders react differently to the various collapsing methods. The long brake travel of a novice glider ('low end' EN B or A) dictates a different technique to that required for sportier high-aspect, short-brake-travel wings. The low aspect ratio of a novice wing, coupled with the forgiving nature of their long brake travel, means that collapsing and stalling enough of the wing before you are pulled upwards backwards is high-on impossible.

With a higher-aspect wing with shorter brake travel, it is possible to collapse the wing rapidly by using brakes alone if you're quick. However

many pilots still choose to adopt the more 'dead sure' option of collapsing the wing by using C or back risers.

Many gliders now are eliminating some of the lower lines, yet still the lines fan out to the attachment points on the wing. We may only have three risers accommodating all of these lines, and when using the rear risers to collapse the wing a large physical effort can be required to pull them down enough to collapse the wing. The same applies to wings with 'trimmer wire' where the loading of the line-attachment points has been spread out along the chord more than the traditional set up.

Let's analyse a few of the more common techniques employed on the hill today.

The front riser collapse

By pulling down sharply on the front risers at the same time, an instant collapse is achieved with little effort. The downside to this technique is that once the wing has dropped to the ground, it tends to thrash about when you release the risers to apply the brakes. If one slips out of your grip the wing has a tendency to snap open with a force that can lurch you off balance. If you're quick it's OK, but there is a risk of lack of control when finishing off the manoeuvre.

C risers on one and brake on the other

This technique is fairly glider specific and requires a lot of control. As you pull down on, say, the left C riser you are then naturally rotated to the left to face the wing (a good thing), and the glider starts to collapse onto the left wing tip. If the right brake is then applied at the correct rate the job is done. I find this technique a little fiddly, especially if it's really blowing, and the timing is crucial. Nevertheless it does have a few dedicated and successful followers - usually higher airtimers.

The C riser collapse

Probably the most popular method and the one that we will look at in the most detail. The success of this method lies in the fact that it is simple, symmetrical and logical. Locating the risers can be a little unfamiliar at first - make yourself familiar with the colour-coding of the risers for your particular wing.

The aim of the manoeuvre is to collapse the wing as soon as you touch down with your feet, then move towards one of the wing tips to gain final control. You need to be aware that when you pull down on the risers you are going to be pulled downwind slightly. For this reason, as you pull firmly down on the risers you must initiate a turn towards the wing at the same time, so as not to get pulled off your feet whilst facing backwards.



Fig. 4. Release the risers and pull the brakes whilst moving towards the wing tip



Fig. 5. If you have fallen over turn and face the wing, reach for the rear lines or brakes and gather them swiftly

The sequence:

- Feet touch down.
- Locate C risers (can be done before touchdown if conditions allow).
- Keep brakes in hands and pull down forcefully on the risers (Fig. 1). You may need to use a lot of your body weight to achieve this (Fig. 2). Pull down enough to stall the wing (Fig. 3). As you do this it's imperative that you rotate to face the wing swiftly. Your weight may be lifted slightly at this point, so rotating to face the wing and therefore keeping your balance is crucial.
- Once facing the wing, in one fluid motion release the risers and apply full brake whilst running towards and up the side of the wing (Fig. 4).
- In extreme conditions you can gather some tip lines until you reach the cloth at the wing tip and are secure.
- Quickly mushroom the glider to make it safe to exit your harness.

It's very important that the above actions should all link into one fast, fluid motion.

If you fall over

Falling over in windy conditions is never pretty. However it does happen, and if it does you need to do something about it before you start getting dragged. Many pilots in this situation seem to freeze. Taken by surprise and experiencing the unknown seems to render the pilot useless. This must not be the case.

Try and rehearse in your mind what you would do if you found yourself pulled off balance and being dragged up the hill. Whilst this may seem almost amusing on an open, grassy field, imagine the consequences of a boulder-strewn slope.

To make yourself familiar with your unusual attitude you can rehearse the recovery from this position physically. A common fault of the falling-off-balance pilot is to reach out with a hand to break your fall. Try to avoid this. The outstretched hand applies brake and accentuates your predicament. You must always try and roll off any momentum with no outstretched limbs – this advice holds for many sports.

The more athletic of you may find it quite straightforward to initiate a roll as you get pulled backwards and then exit the roll back on your feet. Snowboarders will be familiar with this manoeuvre. However if you do find yourself on your back or side being dragged then you must do something.

Take a brake on one side and gather it in until you reach the cloth (Fig. 5). If you can't find a brake line then gather any bunch of lines from any rear riser. If you gather rapidly, even if you inadvertently gather some A lines, the wing won't inflate significantly.

Make safe, dust yourself off, check the security of your reserve system... and breathe.

Next month: General maintenance and field repairs

Tim King is CFI of Sky Paragliding (www.skyparagliding.co.uk). An earlier version of this series of articles appeared in Skywings in 16 parts between October 2003 and June 2005. The present series has been substantially revised and updated.



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