The parachute landing fall

a useful technique for surviving hard paraglider landings unscathed

‘The situation was deteriorating. I was too low. Ahead of me were trees and three barbed wire fences: to the left and right more obstacles. Behind me to the right, a large field; I would have to go for this, the safest option, but I would be landing downwind.

‘The ground came up very fast. I assumed the Parachute Landing Fall position and executed a forward left landing, letting my body relax totally as it hit the ground. I also flared the canopy fully as my feet touched down.

‘Jumping to my feet and pulling in on the brake lines, I gathered my canopy and tried to look a lot cooler than I felt as a fellow pilot came over to check that I was OK.’

The landing roll technique was developed by the Army’s Parachute Training School during World War II and is the most effective way of avoiding injury in circumstances similar to the above. Why then are some paraglider pilots reluctant to carry it out? There are times when a stand-up landing is inadvisable, to say the least. It is essential to practice your PLF technique until it becomes an automatic drill in an emergency. Many pilots can bring to mind occasions when a good PLF has saved them from serious injury, and more than a few will admit a PLF has saved them from almost certain disablement or death.

what is the purpose of a PLF?

To spread the shock of impact smoothly over a large area of the body and over a long period of time, and to avoid hitting the ground with head, elbows or hands. It can be useful when landing fast (eg downwind) or when your vertical rate of descent is excessive.

the position

Legs together, toes and heels pressed against one another, feet flat and parallel to the ground, knees bent and pressed together. Back rounded, chin on chest, eyes watching the ground. Hands holding control handles, elbows in. The whole body must be relaxed on touching the ground but alert to keep the extremities pressed in, to maintain the position and assist the landing roll.

sideways landings

Relax the body on touchdown and be ready to twist the upper body away from the direction of travel. Roll along the side of the leg, thigh and then buttock across the back to the opposite shoulder, keeping the head forward with the chin on the chest. When the thigh touches the ground keep legs together, lift off the ground and roll over.

backward landings

As above but looking behind you as the ground approaches under the elbow. Twist the lower body in the direction of travel and the shoulders away from the ground on touch-down and roll.

Always try to land into wind, although in an emergency this may not be possible, as in the above incident. It is preferable to land downwind if it is necessary to avoid obstacles such as power cables, etc.

The PLF will be available when you need it if you practice, practice, practice it. It’s no good if you can’t remember what to do when the ground is coming up fast.

finally

While perfectly-executed PLF can save you from serious injury, the reality in paragliding is that it may be quite some time before you ever need to attempt one, and expecting perfection is unrealistic. If you find yourself in a situation where a crash landing is inevitable, remember the following:

• Keep everything (arms, legs and chin) tucked in.
• Keep everything slightly bent.
• Relax!

Forward landings

The same principles as above apply, but obviously twist the legs and feet at a 45-degree angle to the ground before touch-down and prepare to twist the shoulders in the opposite direction during the roll.

If the ground is approaching from the left, twist the shoulders to the right during the roll and vice versa.

Current practice

Following recent consultation with the British Parachute Association and a review of the evolving demands of our sport, the BHPA has decided to update its guidance on landing training. The Parachute Landing Fall (PLF) has historically been learnt as part of a paragliding training course, but it is acknowledged that it is not practised by qualified pilots on the basis that they rarely, if ever, expect to use one. Added to this is the reality that, in the instances where the PLF might be useful, the pilot is rarely in a physical position to carry one out. Current practice is outlined in the BHPA Technical Manual. The PLF as described in the above article is still considered a valid technique.

The important elements of the PLF for adoption into your landing training are that the feet and knees are pressed together, the knees bent and the body relaxed. The chin should be on the chest, your hands and elbows tucked in. Discussion with your instructor about situations when this landing technique may be required is essential.