

CONCENTRATE!

Bernard Eckey explains how focusing on the right thing at the right time enables you to enhance your performance

CONCENTRATION is the art of focusing on the right thing at the right time. Few other areas are as important. The very safety of a flight depends to a large degree on the ability of the pilot to concentrate until the aircraft is back on the ground or, better still, back in the hangar. On some flights, we can't relax for a single minute, while on others we can afford to sit back and admire the view.

The need to concentrate fully also depends on whether we fly competitively or whether we conduct local soaring and fly just for the fun of it. This statement doesn't imply disrespect for pilots conducting local soaring, but local soaring requires nowhere near as much concentration as a cross-country flight.

The necessary level of concentration also depends very much on the various stages of the flight. Apart from take-off and landing, our utmost concentration is required while low and in need of a thermal. Maintaining such a high level of concentration is hardly possible over a long period. For this reason, it becomes important to regulate concentration and arousal levels, especially during long-distance flights.

Most of us have little trouble concentrating while the task on hand is progressing as expected. We run on automatic – in “cruise control” so to speak. Our mind is clear to focus on the

broader issues and we feel relaxed in the knowledge that we have the situation nicely under control. Scientists call this the ‘Ideal Performance State’ (IPS). In other words, as long as everything is running smoothly, humans are in a frame of mind which ensures that an appropriate level of concentration is maintained. This occurs without any great input on the part of the individual.

But things can change rapidly when we get distracted or stressed. External distractions from other people, the environment, equipment problems, incomplete preparation etc, are just as detrimental as internal distractions from our own mind, such as emotions, mental baggage and the like. As soon as our arousal level changes (or we get very nervous or feel particularly anxious),

we move away from our IPS. Things get even worse when stress – our greatest enemy – takes over. Understanding what causes stress is vital when it comes to coping with it and successfully managing it.

Stress occurs in two stages:

● **Stage 1 – Trigger.** The trigger to stress is our reaction to something. The examples in gliding are plentiful. If, for example, we experience very strong sink and get alarmingly close to an outlanding (perhaps even over difficult terrain) stage 2 will be triggered automatically.

● **Stage 2 – Arousal.** Our body reacts instantly by releasing a complex combination of stress hormones. They ensure that all available blood is directed towards our muscles and our body gets ready for an inherent ‘fight or flight’ response. Little blood is left for the brain, which means that our mental capacity and our concentration levels become mismatched to the task on hand. We become overloaded and as a result we usually experience a highly significant drop in performance.

All individuals have their own concentration styles or characteristic ways of focusing on the job at hand. For example, some pilots function well under pressure while others don't handle high situational demands very well and become easily confused or overloaded. Overload situations occur when too many things are going on at the same time and pilots are unsure what their priorities should be. Countless thoughts are rushing through their heads and there are just too many points to think about.

For an inexperienced pilot, task prioritisation can easily become too complex and it is common for old, bad habits to creep back in or for mistakes to occur. However, experienced pilots are less likely to suffer from overload situations. They can ignore irrelevant information and block out distractions while executing proven solutions learned during similar situations in the past.

Some exceptional pilots have acquired the ability to switch to a narrow type of concentration and focus on nothing but an answer to a specific predicament. Analytical thinking and the ability to come up with alternative solutions is a very important skill in gliding and comes in handy in situations where our attention needs to be directed towards



Competitive flying and local soaring require different levels of concentration. The necessary level of concentration also depends on the various stages of the flight (Bernard Eckey)

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critical operational demands. After a particular crisis has been satisfactorily resolved, these pilots can switch back to a broader type of focus again. Needless to say, people possessing the technique to adapt their concentration levels as required greatly increase their chances of a superior performance.

Adjusting concentration levels to specific in-flight situations

Experienced pilots know that even long phases of brilliance can never make up for short periods of poor concentration. They also know that peak concentration is neither possible nor required at all times. After a good climb back to a comfortable altitude, or when conditions ahead give no reason for concern, we can and should relax a little. In situations like these we can reaffirm to ourselves that we have the situation nicely under control. After re-trimming the glider we can eat an apple, take a bite from a sandwich, have a drink, or simply find time for a position report.

The situation is fundamentally different when we are in any form of tricky in-flight situation. Because high levels of concentration are required in these circumstances we must employ thought control techniques and arousal control skills as discussed below.

Relaxation

What can we do to avoid excessive tension build-up and how can we relax or remain relaxed during critical in-flight situations? One of the first things to happen to our body in a stressful situation is a tensioning of muscles in preparation to a 'fight or flight' response. At the same time there is a release of adrenalin and an increase in the rate of breathing to meet the extra demand for oxygen. Although these are automatic body responses, we must direct our attention towards these functions. Two proven methods are described below:

● **Controlling our breathing.** This is of great value in relaxation. People at ease with themselves and the world breathe slowly, deeply and rhythmically. Fortunately we can control our breathing and therefore we can, at least for a short time, override our automatic body functions and take conscious control of it by inhaling deeply and slowly through the nose. We concentrate on the movement of our chest and inhale very deeply indeed, but unforced and unhurried. Whilst slowly breathing in, we count to four or five and when the inhalation is complete we pause for about two seconds. As we exhale very slowly through the nose we count to four or five again. Exhalation should take at least as long

as inhalation. Of course, we need to repeat the exercise a few times and when we feel the first positive results it is helpful to say to ourselves that our breathing has become calm, deep and regular. Intrusive thoughts might periodically come into our mind to interrupt the smooth flow of this technique. This is quite normal. We just refocus on our slow breathing (and counting) as we resume the exercise and carry on where we left off. After only a short period of time we will find that we markedly unwind and significantly reduce our level of tension.

● **Progressive muscle relaxation.** Again, the objective is to relax on cue, but this method is less suitable for use in an aircraft as it takes longer and could therefore become a safety issue. For this reason it should only be undertaken prior to a flight or in a two-seater. The technique requires a deliberate tensioning of muscle groups for as long as it takes to feel the tension generated. After about 6-8 seconds we clearly notice how that feels. Now we relax this particular muscle group while paying attention to the contrasting feeling. Repeating the exercise several times and doing the same thing to other parts of the body (especially tense shoulders or neck muscles) is bound to lead to mental relaxation which in turn allows us to regulate concentration and arousal levels.

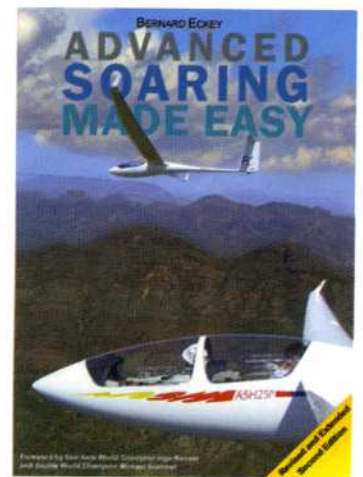
As for any other skill, these techniques need to be practiced and rehearsed to benefit from, if and when the going gets tough. Without prior practising on the ground, pilots will find it hard to implement these suggestions properly and might not get the desired results. However, I want to assure you that the results will be worth the effort for the patient and committed glider pilot.

Gliding is all about information gathering, drawing the correct conclusions and implementing appropriate decisions. Being able to deal with a large number of inputs at one time is of vital importance for performance enhancement. A pilot who is able to concentrate in a focused way while blocking out distractions is well prepared for success and safety. One reason why a five-hour flight remains part of the Silver C certificate is to test mental stamina. If glider pilots think of things other than the job at hand they are not concentrating enough. Fluctuations in concentration can often be traced back to unsuitable nutrition or dehydration, so be sure to attend to this first.

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Bernard Eckey is a pilot, instructor, record holder and head coach for South Australia. He flies an ASH 25 and has 3,500 hours (including multiple 1,000km flights and one 1,116km FAI triangle)



■ This article is an excerpt from Bernard Eckey's *Advanced Soaring Made Easy*. The revised and extended second version is available at £35 from www.bgashop.co.uk