TIME TO SOLVE A KNOTTY PROBLEM

The BGA Safety
Team tells how
a good safety
culture starts on
the ground

■ Clubs can obtain printed copies of Safety Briefings from the BGA Office.

HERE'S what's wrong!' a BGA colleague cried gleefully, brandishing the tow rope trailing from the back of an airfield buggy. Met with blank looks of incomprehension, he pointed vigorously at the rope: "Knots!" Exasperated by our continued bewilderment, he finally explained: "If you can't be bothered to undo tow rope tangles before they tighten, then you probably can't be bothered to fix safety problems either!"

A positive 'culture' is a characteristic of many aspects of a healthy, successful club, and it's particularly true of club safety. Carefully developed operating procedures, well-maintained equipment and disciplined flying are all essential, of course, but when



things break and the unforeseen occurs we need sensible, thoughtful people to spot and evaluate the problem, make sound decisions, and take action to put things right. In the air, we regard it as good airmanship; but the culture of care and consideration often begins on the ground.

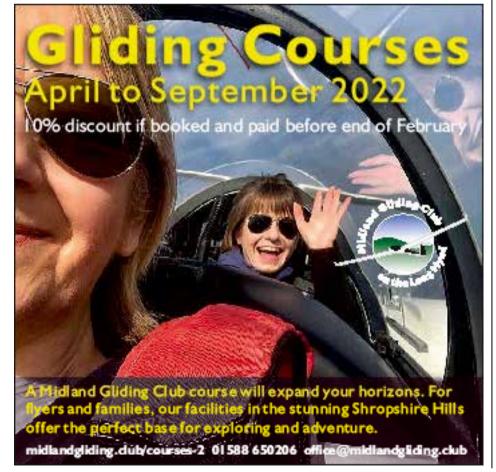
Safety culture

The term safety culture emerged from the International Atomic Energy Agency's investigation into the Chernobyl nuclear reactor disaster of 1986, and its subsequent development of principles to be applied across the nuclear power industry [1]. It has been examined and championed by, among others, James Reason – originator of the Swiss cheese model of aviation accidents [2].

A safety culture is considered to have two parts. The first, which largely falls to the club management, is a safety 'framework', comprising rules and procedures, training and supervision, and mechanisms for reporting problems and addressing them. It's important that the approach to safety is seen to be genuine, intelligent and responsive.

The second is how club members and staff at all levels act – the idea being that individual alertness, judgement and action can provide resilience to situations that elude or are not covered by standard procedures and monitoring arrangements. For the individual, two key aspects are an interest in the safety of others as well as oneself; and a readiness to do something about it.

Recognising the common safety interest implies that we'll comply with general rules and procedures even when we think them



unnecessary, so while a safety culture gives us some individual empowerment, it's balanced by the occasional inconvenience. The alternative would be a disorderly free-for-all or at least a poor example to those who lack our experience and judgement. It's important that the rules and procedures are sensible in the first place, of course.

Just as important is a willingness to act when needs be, rather than looking away or leaving the problem for someone else. Our accident records provide some compelling examples.

Ground-handling accidents

Ground-handling accidents cause glider damage of many thousands of pounds every year. Gliders are strong against flight loads, but on the ground even the slow application of inappropriate forces can lead to expensive repairs. The focus and discipline expected when flying dissipate when faced with familiar distractions on the ground. And, while aircraft are subject to rigorous and regular inspections and servicing, the formal maintenance regime does not automatically extend to ground equipment.

As an example, several gliders each year incur rudder or elevator damage when towout gear fails. In one recent case, a training glider was being towed to the launch point when the tail dolly collapsed. Members had been aware that two of the three securing clips had failed, but the damage was not reported, nobody fixed it, and the dolly continued in use until the remaining clip failed too. In another case, a single-seater fell off its dolly because the locking clip had become deformed. Another glider detached from the tow vehicle because a bolt was missing from the tow bar fitting; and an expensive two-seater was damaged when the tail dolly hinges sheared. In most, if not all, of these cases, the deficiencies would have been apparent beforehand and the glider damage could have been avoided.

Good equipment can suffer from misuse, and some of these gear failures could have been prompted by towing the glider too quickly: certainly other gliders have been damaged by being towed faster than was appropriate for the terrain and tow-out kit. Still more accidents occur when a driver tows a glider too close to another glider, vehicle, building or other obstacle.

Such accidents require the collusion of the driver who goes too quickly or leaves insufficient clearance, and the onlookers who choose not to intervene. It can be hard

to step in when something's not right, but there's no doubt that some of the clubs with the best safety cultures adopt a very active approach to intervention. Done kindly with diplomacy it need not offend; indeed, it can be reassuring to know that someone else is looking out for you.

This positive culture has some domestic advantages, because members who spot and fix problems are likely to pick up snags around the airfield and clubhouse as well. A tidy, well-kept site and enthusiastic welcome are often signs of a good safety culture. They help to attract and retain new members, too.

Volunteer culture

Happily, UK gliding is almost entirely club-based and volunteer-run, and the few professionals also often contribute enthusiastically outside their working hours. Bar a few curmudgeons, most club members are happy to offer their time and effort when suitably encouraged and supported. Indeed, it can be necessary to guard against over-enthusiasm, and ensure that everyone involved in safety-critical operations knows what they're doing or is adequately supervised.

Experienced volunteers can present a different risk because of their excessive commitment and willingness to oblige, and accidents have happened when a tired, dehydrated or anxious pilot felt it their duty to fly a visitor, instruct, or perform some other club duty. In the same circumstances, a professional pilot might perhaps be more objective. It doesn't help that we're often the least able to assess our own fitness to fly.

In such situations, we rely upon others to spot the warning signs, identify the problem and intervene. If that happens at your club, you've a good safety culture.

Tim Freegarde and the BGA safety team

■ We'd love to be able to offer a manual for establishing a club safety culture, but it's a tough problem. Please contact us if you have some ideas! There's lots of inspiration in the BGA's Managing Flying Risk [3].

[1] International Nuclear Safety Advisory Group, Safety Series No 75-INSAG-4 (1991) https://tinvurl.com/ flvriaht2201 [2] J Reason, Work & Stress 12 (3), 293 (1998) https://tinyurl.com/ flyright2202 [3] BGA Managing Flying Risk https://tinyurl.com/ flyright2203

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