

The letter below appeared in the Spring 2004 edition of GASCO Flight Safety following on from articles in the previous issue. We feel Brian's advice ought to be widely read.

*I feel that some points are the real drive home issues that need to be emphasised. There is no such thing as 'stalling speed'. The definition of 'stalling speed' refers to a particular test-configuration which has no bearing on real-life operations. In real accidents no aircraft departs at 'stalling speed'. No-one ever dies from a straight-and-level stall. Any aircraft can stall at any speed. Any light aircraft can be flown completely unstalled at a quarter of stall speed or below – and at the other end of the scale any light aircraft can be most definitely fully-stalled at 150% of quoted stall speed with even the flimsiest of modern designs. On a tough machine call that 300% – an Extra has a 'stall speed' of 50, but will stall heartily at 150. The stall is only and solely related to angle of attack (Alpha). Stalling alpha can be reached at any speed, and the drama of the event is much exaggerated by out-of-balance flight – in short, if you have too much left rudder on, the device will flick and spin left. (In fact not entirely true, but accurate 99% of the time, and for the odd 1% you have to work at it). The higher the weight (through G loading) obviously the more vicious the stall. So the classic stall accident is a slightly accelerated stall (the aircraft weighing more under G – forget the silly word 'accelerated'). For example overshooting the finals turn. ruddering it into the turn, drag flap, too much pull meaning too much alpha – whap and goodnight with a stallspin into turn. The best defence is practice. I know many people who spend meticulous hours on their flying – working out the latest EFIS (whatever that is), studying the GPS so they can feed the most complicated route from Little Chalfont to Darwin – anything but actually getting up there and exploring the handling of their aircraft. Be brave – go feel it. Don't bother with instruments. The ASI is a vague and sometimes actually misleading device; the stall-warner ditto. Feel it. I have never met an aeroplane which doesn't talk to you near the stall, it may shake, the elevators may go soggy, pitch may get heavy or unresponsive, BUT however it talks to you, it WILL talk to you. They all do. All of them. Try it level, in turns, descending, climbing, with flap, without flap, with power, without power. Let it develop into a spin if it is cleared for it... FEEL what it's telling you. Then you will recognise that feel again. That's your armoury. That's your treasure. For the sake of a couple of hours practice, you will have acquired real skills, which will last. It will also free up your head – with your aircraft handling more confident, you will have more attention to spare. Obviously, practise at height. Take an instructor if you want to, but don't bother with a numbers-wimp. Take the old guy in the corner who still does side-slips... or, at height, just venture into it yourself. I suspect this is Not Politically Correct advice – but why not? Let the facts bear me out: I have never heard of any accident resulting from a sensible person trying cautious experiments at height. Learning, yes. Dying, no.*