

STAY IN CONTROL

WHEN TURNING BASE LEG



Loss of Control in the Circuit

I'll just go and do a few circuits to keep current, that won't need much planning or thinking about....

With the poor weather last winter and months now of being grounded due to Covid-19, it's a case of getting current! If circuits are that easy, and don't need much preparation, you might be surprised by the number of incidents and accidents there are due to loss of control in the circuit.

In the last five years 'loss of control in flight' events accounted for 20% of all General Aviation (GA) accidents, 44% of all fatalities and 55% of all serious injuries and the majority of these occurred during the approach.

Loss of control in the circuit at low level is not a good place to be. It invariably ends up in a stall and or spin which might, perhaps, be easily recoverable at 5,000ft but not so at 500ft. The cause is a high angle attack resulting in reducing airspeed leading to a loss of lift and ultimately a stall.

So why does it happen?

Flying a circuit involves differing handling skills through the various phases of flight in a matter of just a few minutes, climbing, turning, levelling off, descending, changing power settings, using the flaps and trim — and not forgetting lookout. It's a high workload, especially when you include all the radio calls, with the particularly critical stages being take-off, climb-out, setting up the approach, turning onto final, and the final approach itself.

“
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How good are your handling skills really? Are you sufficiently aware of the correct attitudes, i.e. a safe angle of attack, for that climb speed? The same is true for setting up the approach, lowering the flaps and maintaining the correct speed for a stable approach that only needs minor adjustments. Is the aircraft in balance, is the trim adjusted correctly?

Turning from base to final is a very common place for poor speed control, it might surprise you but generally pilots tend to lower the nose in a left turn and raise it in a right turn due to the offset seating (unless you are in single-seater or tandem cockpit where the picture is the same both ways).

Where are you looking when you do a turn? Again, it's a case of knowing 'the picture' and adjusting your attitude going into and coming out of the turn as well as during it. Resting your elbow on the armrest and pivoting from that point will lead to unintended pitch changes in a turn.

After take-off is another area where poor attitude control can lead to poor speed management at a critical time. Is the trim set correctly (particularly after a touch & go), are the flaps in the correct position, is an early noise abatement turn is required? Any or all of these can lead to a high angle of attack when you really don't want to go there...

Other factors can interfere with handling skills too: distractions due to RT calls, passengers talking, looking for other aircraft, disorientation at an unfamiliar airfield, or even at your home base (multiple runways, change of circuit etc).

Weather can also play a big part — turbulence, crosswinds and wind shear, for example. Do you check the wind forecast for 1000ft as well as the surface? It's not always thought of 'just for a circuit', but it's certainly worth thinking about in pre-flight planning, the variations in wind speed and direction can be quite marked.

Then, perhaps more importantly, there's complacency. Rather than think 'I'll just pop out and do a few circuits, done it plenty of times...', maybe it's smarter to think 'I'll do a Threat and Error check first, think through and plan the different phases of the flight properly even though "it's only a circuit" and have a safe and enjoyable time rather than adding to the incident/accident statistics'.

(In view of the Pandemic have a read of CAP1925, Covid 19 — preparing to return to Normal Flying Operations for GA Pilots.)