



SAFETY

Take 2 and stay out of trouble



by Safety Officer John Teesdale

WHEN you opened this copy of *MF*, a poster should have fallen out. This is for the Take 2 initiative, which was instigated by Gordon Verity of Cheshire Flyers and further developed by the North West Local Airspace Infringement Team (LAIT).

It has now been rolled out nationally and is endorsed by the BMAA. Please don't use it for wrapping your fish and chips. Rather, post it in prominent view somewhere.

You can see that the idea is to give yourself a safety margin of 2nm horizontally and 200ft vertically from controlled airspace.

I would add to this that if you're close to controlled airspace, always listen out on radio to the nearest controlling authority and use a listening squawk if available.

Infringements of controlled or restricted airspace are on the increase, and during 2017, two microlight pilots were prosecuted for airspace infringements. The fines imposed were not small, in one case £1675 plus £750 costs.

I've talked to both pilots, and I can tell you they didn't infringe deliberately. Nobody infringes airspace deliberately; it happens because of human error. We are all human and we all make mistakes.

The purpose of this month's article is to show you how to use strategies to reduce the chance of human error.

Firstly, here's a summary of the incidents:

Pilot A

He hadn't flown for some time and was under pressure to get his hours in before his rating expired. Rigging the aircraft took a long time because he was alone. He made a mistake when connecting the battery and fused his radio.



Whoops, that's a bit close for comfort

He was running out of time and rushed his takeoff checks, not realising until airborne that he had forgotten his map. Impulsively, he pushed on, confident that he knew the local area well enough, but as the sun dropped below the horizon, he became disoriented.

Without a map or radio, he was struggling. His pilot brain told him to turn back but continuation bias (press-onitis) got the better of him.

To his horror, he saw Manchester Airport in the gloom, but by now he had lost all confidence as well as situational awareness and his brain went into denial.

After landing, he put the aircraft away and went home, but after a couple of days became aware of the enquiry into the infringement and contacted the authorities. His actions had caused chaos at Manchester ATC, with 15 passenger aircraft being delayed.

Pilot B

He was taking a passenger to show him the village where he lived from the air. The village was quite close to an airfield where a flying display was being held that day. There was a two-mile radius Temporary Reserved Area (TRA) in place all day for the display, and a six-mile radius TRA in place for the duration of the Red Arrows display.

The village was outside the two-mile radius, but inside the six-mile Red Arrows TRA. Pilot B was aware of the Notam and the Red Arrows display time, but unfortunately not aware that the clock on his aeroplane was half an hour out.

He didn't tune his radio to the display aerodrome frequency, and was consequently unaware the display was live. The Red Arrows leader had to break off the display, and Pilot B's goose was cooked.

I have particular empathy with Pilot B, as I once made an almost identical mistake – involving not the Red Arrows, but the Queen's birthday flight returning to Brize Norton after the flypast over London. They didn't have to divert or scatter, but the leader quite rightly filed an airprox. Yes, that was me, I made a simple timing error. So remember; it could happen to you.

Now, let's look at the Human Factors involved, and how to combat them;

External pressures and influences

Avoid exposing yourself to pressure to complete a flight. Time pressures will tempt you to cut corners and make bad decisions.

Situational pressure can overcome your ability to make a rational judgement and trigger the first of our hazardous attitudes, in this case...

Impulsiveness

Pilots who are “usually so careful” occasionally do things that are quite reckless. Remember: think before you act, regardless of the pressure to act on impulse.

Complacency

It's really easy to think: “Oh, it'll be OK,” when really you know it won't. Adopt a risk-based approach: identify risks such as weather or lack of currency or systems failure such as radio.

If you identify a number of risks on a flight, question if it is sensible to proceed. Do not proceed on the basis of: “Wait to see what happens” or: “It'll be all right”.

Resignation

With so many different factors to contend with when flying, it's sometimes tempting to believe that you have no influence on outcomes, and that fate will run its course regardless of what you do.

Actually, many GA accidents and incidents would not have happened if more positive decisions had been made before or during the flight.

When your confidence is shot, like for example if you've got lost, don't just resign yourself to failure; think clearly and take action. Call your ATCU or 121.5. Get help. Squawk 0030. If non-radio, carry out a precautionary landing.

Continuation bias

It's a fancy name for “get-there-itis” – an unconscious cognitive bias to continue the original plan in spite of changing conditions, and it can be deadly for general aviation pilots.

The problem is in how it can manifest itself. It becomes stronger as you near completion of the activity (eg approach your destination).

It essentially impedes pilots from recognising that they need to change their course of action, and because it's unconscious, it often goes undetected. It can also block subtle cues that conditions have changed.

Situational awareness can become compromised in these scenarios, blinding the pilot from the outcome he is rapidly marching toward. It can cause critical decision-making breakdowns, like the resistance to divert to an alternate airport or the refusal to go around.

When things change, re-evaluate the situation and consider a different course of action. Don't hesitate to modify your plan to reduce risk.

I could summarise by saying: “Make sure you've got your pilot head on – and keep it on until you switch off!”

Remember – you are the captain and master of your own destiny. Take positive, decisive action to achieve a safe outcome. □

Further reading

CAA Skybrary; Eurocontrol Guidance Notes for Pilots, No. 6 Visual Navigation. skybrary.aero/bookshelves/books/721.pdf

The Skyway Code p119, Pilot Competence – Hazardous attitudes. pp120-121, Decision Making.

Let the training take the strain

Just because you don't need a licence for a sub-70kg microlight doesn't mean you don't need to learn how to fly them, says **Rob Grimwood**

AT the BMAA we often get asked for clarification on new aviation regulations.

The most common questions at the moment are: “Do I need a licence to fly the new sub-70kg microlights?” and: “Do I need to take training?”

Strictly speaking these aircraft are termed self-propelled hang gliders (SPHG). In April 2017 the CAA issued an exemption allowing them to be fitted with wheels.

Before then, all takeoffs had to be by foot, hence the term footlaunched aircraft. These wheeled SPHG aircraft are defined as follows:

An aircraft comprising an aerofoil wing and a mechanical propulsion device which:

- (a) has a stall speed or minimum steady flight speed in the landing configuration not exceeding 20kt calibrated airspeed;
- (b) has a maximum unladen mass, including full fuel, of 70kg, or 75kg if the aircraft is equipped with an emergency parachute recovery system.

The aircraft must not fly with more than one person on board.

These aircraft are exempt from registration, and in answer to that first question, the pilot does not require a pilot's licence to fly them.

However, although you don't require a licence, you will obviously need some training to enable you to fly the aircraft safely and properly, and the BMAA strongly advises that you take this ▸



You don't need to be a world champion like David Broom to fly machines like the Eurofly Snake, but you do need training