



SAFETY

You can't be too careful

With flying back up to speed after Covid, we all need to make sure that our skills and machines are up to scratch, says BMAA Flight Training Liaison & Safety Officer **Chloe Eriksen**

AS we move into a new year, it feels appropriate to reflect upon the past one, and I wanted to get a better idea of our safety record as an association and establish the areas in which we can all improve.

In order to do this, I have gathered data and knowledge from across multiple organisations and tried to filter the pertinent safety lessons in order to publish them here.

The publication of the 2021 *CAA Aviation Safety Review* last year showed that occurrences had risen back to pre-pandemic levels as restrictions eased in the wake of Covid lockdowns.

Suggested reasons for this within the GA community included skill fade, airfield maintenance issues and problems with aircraft airworthiness following extended periods in storage.

Following on from this, we can see that data for 2022 from the CAA Safety Intelligence team identifies the following top-three occurrences for BMAA-registered aircraft, as you can see in the graph:

- 1 Navigational error
- 2 Airprox/alert/loss of separation/midair collision
- 3 Loss of control close to ground

These graphs are compiled using data collected from the AAIB and the CAA MOR and VOR system. It should be pointed out that SDR hours are not included and that the data can only be as good as the information we all put in.

Airprox alert

The navigational error spike is mostly down to airspace infringements, which although the highest proportion of events, have not shown much of an increase in the past five years. What is on the rise, however, is the airprox category.

The UK Airprox Board (UKAB) published its annual report for the previous year in 2022 and the full report can be found on its website, <https://www.airproxboard.org.uk/>.

Data for 2022 has yet to be completely summarised, but 2021 highlights a worrying trend in the form of a 10% year-on-year increase in airproxes.

The CAA data reflects this steady rise, and the majority of cases occur in Class G airspace under 3000ft.

Advances in the field of electric conspicuity will be crucial to reduce this type of occurrence, coupled with an effective lookout and personal responsibility for threat and error management in our increasingly congested shared airspace.

According to that UKAB annual report, between 2012 and 2021, 82% of aircraft-to-aircraft events involved a GA aircraft.

The CAA also examines the fatal or serious injury accident rate. Very sadly for the microlight community, we have seen two fatal accidents this year, and our thoughts and condolences go out to all those affected.

GASCo analyses the fatal accident rate each year, and it had been zero since 2019 for microlight pilots. One fatality in any year is one too many, and we must all strive to mitigate the chance of that happening.

Devil's in the detail

Graphs are all well and good, but we need to look at the detail to understand what is really going on, and when examining all the microlight serious incidents and accidents that made it onto the AAIB list, we can see several repeated themes.

Problems on landing come up time and time again, whether it be wind shear, bouncing down the runway or simply loss of control.

Of 42 microlight recorded accidents and incidents in 2022, exactly half of them involved BMAA-registered aircraft and of those 21, 13 were due to landing issues.

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These wonderful aircraft can be a little unforgiving of a hard landing

If we look back to previous years, we can see that this has been a continuing theme in data compiled by the BMAA as far back as 2002.

The LAA reports the same trend in its accident and incident review of 2022, reflecting a similar proportion attributed to problems with landing.

I am learning that these wonderful aircraft can be a little unforgiving of a hard landing, and often damage is extensive. It's an area that would benefit from a little focus in 2023. If in doubt, go around!

Of course, there are many incidents that do not warrant investigation by the AAIB and could therefore go unnoticed if left unreported, so I once again ask you to report or at least share these near-misses.

My email inbox at safety@bmaa.org is open to all who wish to share their experiences, and I will always check with you before sharing any details.

Thank you to those of you who have reached out to me since I started here last year. It's great to see a willingness to share and learn. Your reports provide us with a valuable insight into what is really going on, and we can watch for any emerging trends, although as yet I don't have any trends to report based on this information.

Chirping: not just for budgies

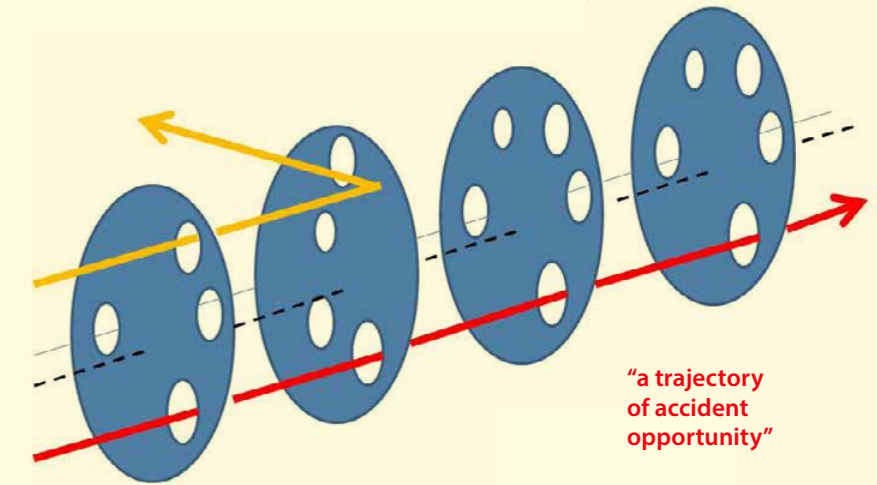
Chirp, the Confidential Human Factors Incident Reporting Programme (<https://chirp.co.uk/>), is an excellent resource for reporting incidents and providing comment and advice while ensuring confidentiality.

The latest Chirp GA feedback looked back at 2022, and although reporting was down compared to recent years, common themes and areas requiring concentration are evident:

- Application of procedures
- Airmanship and situational awareness
- Complacency
- Communication.

So where do we go from here? Well, I need your help. No one person alone can affect change, but many can achieve a great deal.

So I'm asking you to be active members of our shared safety network. I'm



“a trajectory of accident opportunity”

Swiss cheese model of accident causation

not necessarily asking you to fill in more paperwork, but I am asking you to share, and to think about flight safety at all stages of your flying.

Thorough preparation with effective threat and error management is the key to flight safety, and responsibility for flight safety at every level will be the key to our success. Sadly, although at times the machine fails, more often than not, it is the human element in the chain that has failed.

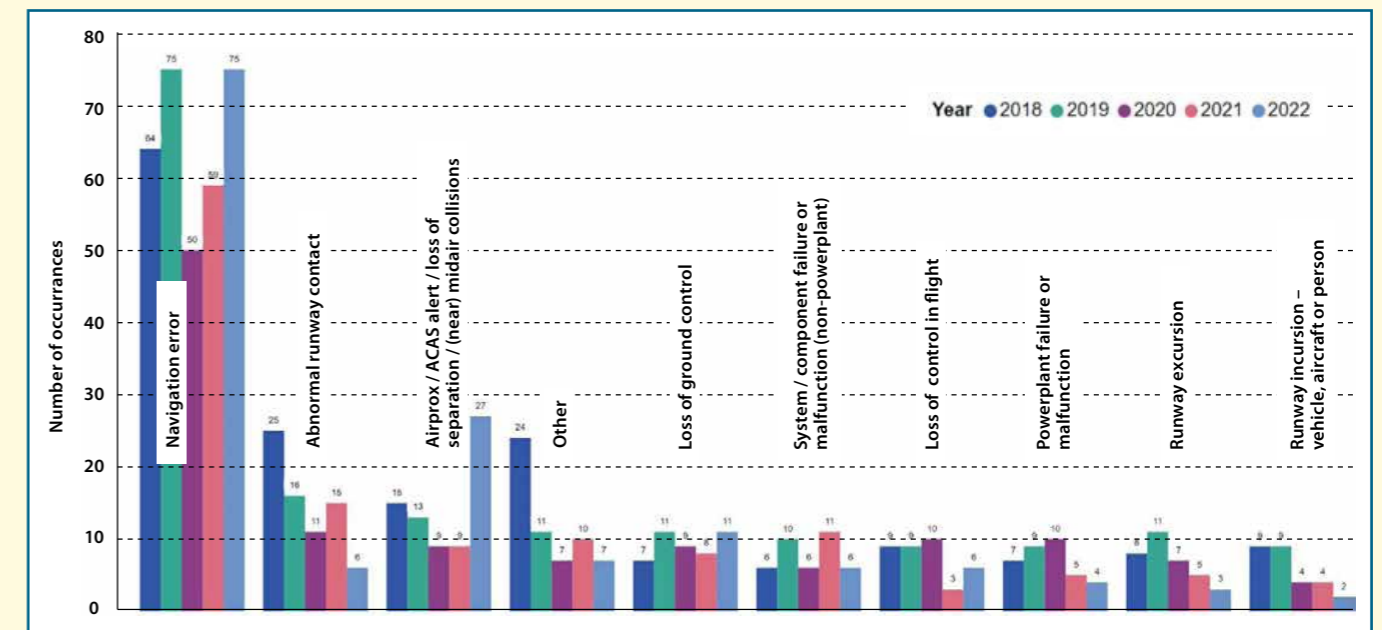
If you haven't come across the Swiss cheese model from Prof James Reason, then have a look at the image on this page. The theory is that typically there's not just one factor in an accident, but several. The slices of cheese represent indi-

vidual weaknesses in individual elements of the system, and it's these weaknesses that could occur over time without ever directly causing an accident, until the day when several of them line up.

In the coming months I'll be reaching out to flying school safety officers and inviting those key people to opt in to our own safety network. We need to create a safety culture where we can all learn from each other, and I am here to facilitate and help. The BMAA cannot enforce or investigate, but we can help and advise.

Safety culture is everyone's responsibility, and is founded on the principles of honesty and integrity.

Let's look ahead to the safe flying year of 2023! □



Top 10 occurrences categories