



SAFETY

Don't cloud your judgement

Flying into IMC is invariably a recipe for disaster, says **Chloe Eriksen**



The legal minima are not a good reference point for decision-making

Oh no. If only I'd read Chloe's safety article before setting off...

I PROMISED to revisit the subject of aviation meteorology after the account in last month's *MF* by one of our members of a lucky escape from inadvertent IMC.

The subject of weather is absolutely vast, and I can't begin to cover even the tip of the iceberg in this article, but what I can do is highlight some useful resources and offer some suggestions to hopefully augment your preflight planning process.

This is a bit of a heavy topic, but one of vital importance.

This year the AAIB published the report on the investigation into the fatal accident involving G-AYUH, a Piper PA-28.

The investigation found that the pilot had encountered bad weather on approach to their destination airfield. This makes for difficult reading and is a long and detailed report, but I believe the message is clear: do everything within your power to make sure you don't end up flying in cloud or fog, but have a plan in the event that you do.

An extract from the conclusion of the AAIB report states:

"The accident happened when the aircraft struck trees and terrain after departing from controlled flight. This was as a result of the aircraft entering meteorological conditions which were not compatible with VFR and were beyond the pilot's experience and capabilities. Meteorological forecasts available prior to the flight indicated the likelihood of low cloud and fog in the vicinity of the destination airfield."

Check the met

Even the most experienced pilots can get caught out by the weather, so it's vital to make sure you are as well informed as you can be on the current picture in the skies.

There's no shortage of weather data to be found online, and the Met Office provides a range of weather briefing products to support the activities of the UK general aviation communities. This service offers world leading, comprehensive and reliable weather information and crucially, once registered, is free to all who fly in the UK.

We are very fortunate to have the resources that we do in this country, and there's no better way to 'check the met' than to log on to the aviation briefing service to access the verified and accurate source data.

There are many ways to access weather information and forecast data, but a bit like we were all taught in history class at school, it's vital to check your source, and there is no better source than the Met Office.

Metform 215, or low-level aviation area forecasts, are specifically provided for general low-level aviation. I find that when considering met before a flight, one should adopt a similar approach to that of map reading; ie, go from big to small.

Just as you would use the large topographical features first in order to identify a small village when map reading, when dealing with aviation meteorology, it's important to understand the bigger picture in terms of fronts and pressure centres before you look at local area actuals and forecasts.

A basic understanding of the decode for TAFs and METARs is essential knowledge for all pilots, and if you forget or need a reminder of the meanings, you can always turn to the back pages of the *Skyway Code* for a list of weather abbreviations.

Go or no go

One of the most important considerations when deciding to fly or not will be the weather minima for VFR flight.

For guidance on the limitations, consult the Safe-

ty Sense leaflet *Flight under VFR*, published in 2022 and found on the CAA webpage, or the *Skyway Code*.

But consider the following carefully: page 39 of the *Skyway Code* states that: "For operations in Class G airspace, the VFR minima may allow an in-flight visibility as low as 1500m, provided you remain clear of cloud."

"The cloud height is often the limiting factor – in conditions of 1500m visibility, the cloud height would normally force you to fly dangerously low."

"The legal minima are not a good reference point for decision-making, because safe VFR flight normally ceases to be possible long before the visibility is that poor. They are limits, not targets."

The application of these minima should not be treated as binary. Visibility of 1500m does not mean 'good to go'. In the Army, I flew a helicopter that could be brought to a complete standstill at any point in space, and I had the benefit of many hours under the IF hood and in actual IMC conditions, and I wouldn't commit aviation in visibility that low without some kind of operational imperative.

Pressure to push on

Self-imposed pressure, or push-on-itis as I like to call it, is a factor easy to dismiss with the benefit of hindsight, as it seems strange that any of us would risk our lives for a deadline. But I'm sure we can all think of a time where we took a risk in order to save time and potentially put ourselves at risk.

The human brain is a funny thing. The example that springs to mind for me is the school run or drive to work. Many will speed on the roads or overtake when they shouldn't in an effort to 'save time'. Our ability to assess the risk in a proportional way against the need can be seriously skewed in the moment.

Please remember that nothing is worth risking your life over, and when we feel an urgent need to make a time, or reach a destination, it can be very hard to overcome the desire to push on and the fear of breaking the rules. Landing in a field, or in fact anywhere, and then facing the consequences, is still better than taking your chances in the cloud.

My recommendations to you

To borrow the advice of an AAIB investigating officer and a highly experienced aviator, "only go flying if the conditions are good".

Flying for pleasure is meant to be just that, and where is the pleasure in groping around in barely legal visibility, struggling to see anything and risking your life?

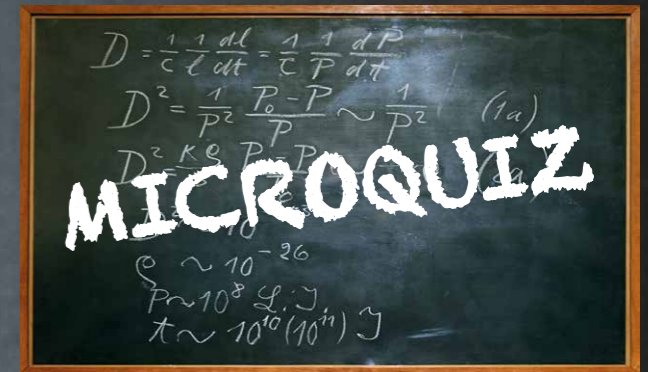
It takes a strong person to cancel a planned flight when flying days are precious and expectations are high, but flying is risky enough without adding dodgy weather conditions, so don't be swayed by the opinion of others, be strong in your own decision making and manage your own tolerance for risk.

I would say, take your time to check the conditions. It's not enough to just look out of the window if you plan to go further than the circuit.

The British weather is notoriously changeable, so arm yourself with as much knowledge and depth of understanding as possible. Know your local area, and if you don't know the area, ask someone who does. A quick call to your destination airfield might well save you a lot of hassle.

I've barely scratched the surface of the considerations for inadvertent IMC, so please take a read of the latest guidance from the CAA, *VFR Flight into IMC*, published in May last year.

Our thoughts go to all those affected by the events of 21 August 2023, especially the friends and family of the pilot of G-AYUH. □



- When instructed to "Squawk 6500", how should the code be correctly read back to ATC?
 - "Squawk Six Five Zero Zero."
 - "Squawk Six Fifty Hundred."
 - "Squawk Six Five Thousand."
- Under what circumstances is it appropriate to abbreviate your aircraft's callsign?
 - When another pilot has a similar callsign.
 - When ATC has first abbreviated your callsign.
 - When your callsign is longer than six characters.
- If you experience communication difficulties and need a message repeated, what is the correct radiotelephony phrase to use?
 - "Confirm message."
 - "Repeat message."
 - "Say again."
- What is the primary reason for including "Super" or "Heavy" after an aircraft's callsign during initial contact with ATC?
 - To indicate increased takeoff distance requirements.
 - To inform ATC and nearby pilots of the aircraft's wake turbulence category.
 - To emphasise priority handling for larger aircraft.
- What does the instruction "Hold short" mean in radiotelephony communications?
 - Stop before reaching the specified location.
 - Slow your ground speed to prepare for taxi clearance.
 - Maintain your position until given further instructions.

MF's quizmaster Lawrence Bell is the developer of QuizAero, the online groundschool for microlight student pilots, quizaero.co.uk.

Answers overleaf



GASCO, the General Aviation Safety Council, is a charity whose members are aviation organisations. Its aim is to make aviation safer through education. It presents the CAA safety evenings, runs seminars and provides safety information through its magazine and website, gasco.org.uk.



CHIRP, the Confidential Human Incident Reporting Programme, reviews and analyses reports from pilots, then publishes them so others can learn. Get the app at chirp.co.uk.