



# HEAD IN THE CLOUDS

## Mark Lewis describes his experiences under the hood while achieving his IMC rating

Like a good many private pilots, I was taught to treat clouds like floating mountains of granite. Best avoided in the air and a source of frustration on the ground while waiting for them to clear.

I'm from California, where clouds are something we read about in books. Learning to fly in the UK gave me an up-front and personal appreciation for perpetually unpredictable weather. Dozens of days spent glancing between TAFS and leaden grey skies convinced me that if I was ever to get out of the circuit on a marginal day I had best learn how to use all the dials in the cockpit, not just the ones I look at when its CAVOK.

Having neither commercial aspirations nor a wealthy sponsor, I judged a full IR to be a bit of an extravagance. Thankfully the CAA provides a middle ground in the form of an IR (Restricted), or as it is better known, the IMC. Fifteen hours, a skills test, one written exam and the clouds that once seemed so daunting become an inconvenience rather than an impediment.

That said, there is a reason that an IMC is considered a "get out of trouble" rating rather than an all-weather pass. At 15 hours, the instruction time is less than half that required for a full-IR. Additionally, the IMC is only valid in UK and Channel Island airspace.

The course itself hits the sweet-spot between challenging and immensely fun but you don't get to see much along the way. From reaching 800 feet on the climb out to 800 feet before the threshold on the return, your world-view is limited to the inside of a grey visor and the instrument panel. It sounds terrifying at first but after a very short while you become accustomed to this new perspective and it becomes oddly peaceful.

In the beginning, IMC training is something of a refresher. There's time spent flying straight and level, turning, climbing and descending; all the while getting used to looking only at, and fully trusting, your instruments. Things get interesting when you start to practice recoveries from stalls and spiral dives. The lead up to both can look surprisingly similar while under the hood.

Without a doubt, the navigation and instrument landing components of the IMC are the most satisfyingly demanding. Acquiring proficiency in NDB and VOR tracking as well as ILS procedures are essential to pass both the practical and written exams. They are also the nav aids you will rely on during actual IMC conditions in the UK.

In an age where a tablet running SkyDemon is a ubiquitous component of every flight-bag, there is something uniquely rewarding about tracking along the beam of a VOR; entering an NDB hold and carrying out an ILS procedure, all the while using technology that predates the Beatles.



MARK UNDER THE HOOD

Later in the training, after navigating by compass alone, with gyro instruments covered, I developed a renewed respect for pilots who crossed continents and oceans with only the most meagre of instrumentation.

Two-months after receiving my IMC rating, I found myself five miles south east of Stapleford telling Southend, for the first time ever, I was IFR. Being alone in the clouds vs. under the hood with an instructor in the right-seat feels like the difference between hitting a few balls at the driving range and teeing off on the 18th hole of The Masters during a tie-break. A sharp intake of breath followed by an inner voice saying, "you can do this."

Just past Sittingbourne I climbed through the muck and was temporarily blinded by a startling azure sky. I was alone between a sea of candyfloss and a canopy of blue. The radio was quiet, the wind calm. Of all the times I'd been in the air, this was the first time I felt I understood what it was like to actually fly.

## SUCCESS STORIES

Congratulations to all students who have flown their first solo and to those who have recently achieved their PPL and wishing them all the best for their future flying.

**First Solo:** Ken Martlew, Kurt Servet, Vivian Yuen.

**Skill Test:** Okan Caylak, James Greenwood, Cesar Mascaraque, Farzana Panchbhaya, Adar Shapira.



KEN MARTLEW

### Ken Martlew reflects on soloing in his seventies

Two years ago, I met the wonderful Petula, and we were married last September. She took me for a flight in G-GUSS, and a whole new exciting world opened up. Notwithstanding being in my mid-seventies, the watchword was *carpe diem* (seize the day). I signed up for lessons with excellent and charming instructor, Anelli, and started pouring my life savings and optimism into the black hole that is flying.

I have always loved driving, also playing the church organ (a surprisingly similar operation), and felt I took to the basics of flying reasonably quickly. After about 15 hours Anelli even mentioned the possibility of going solo before long. That was over a year ago! The Jetstream and the winter came in, and weeks or months at a time would go by without any flying. The hardest lesson to learn was patience – so much waiting and frustration.

I had a bit of a problem with landings – control of the flare and hold-off. Every time I thought I had cracked it with some good ones, there would be another weather break, then back to rubbish touch-downs. How I admire the patience of my instructors (now James) who are prepared to risk life and limb teaching us!

In the summer the day came when Roy said he would have let me go solo had the weather been better – wow! But it was not until several months later that the first opportunity arrived – a beautiful day at last, all systems go, just three good ones in a row needed. Alas, the gremlins were out, and nothing would go right.

The next opportunity was not until some six months and 30 hours flying later. The instructors must have had

discussions what to do with this problem student, because I ended up having some sessions with the Senior Man, Tony. He explained it all brilliantly, kindly, sat back from the controls looking relaxed, and was always very encouraging. When the weather smiled, that hat-trick of good-enough landings finally came together.

“How did it feel?” many ask. Well, I felt ready for it – thrilled, focussed rather than nervous, free to concentrate on flying the plane rather than listening to an instructor as well. Just treat it as playing a Bach fugue. And what a satisfaction afterwards (the fugue or the flying)!

That was 17 February. Now the pressure is on to finish that PPL before my theory exams run out in July. After that – the sky’s the limit, as it were. But I would love to have a few years to tour with Petula before Dr Orton rings up time on the frailties of *Anno Domini*...

## CLOSE ENCOUNTERS WITH AIRFIELD HARES

### Elizabeth Wehrfritz recounts some hare-y experiences on the runway

Thrown in with flying lessons as a Stapleford ‘freebie’ are close-up sightings of the airfield hares. Normally acutely alert to the slightest movement from possible predators, and without burrows for refuge, hares will freeze invisibly in foliage or streak off at 30 mph.



AN AIRFIELD HARE ON THE LOOK OUT FOR TRAFFIC

But the Stapleford hares seem totally unfazed by moving aircraft. Taxiing to the 03 hold you can get within a few feet before they casually lollop off, giving a clear view of their distinctive shape: ears longer than rabbits’, bodies leaner, curving, more graceful.

And Stapleford hares don’t seem to realise the brown hare is reputed to be largely nocturnal, those I’ve seen having been around early afternoon in broad daylight – the time I usually fly. Nor do they seem to know it is only in spring they are expected to be more visible and “as mad as a March hare”.

In July, I’ve seen them break cover from long grass or crops beside the taxiway and, intent on their own affairs, dart straight in front of my moving aircraft, or sit in full view



Instructors' remarks have been reassuring, "They won't get hurt", or pragmatic, "There's lunch!"

**Editor's note:** Coming back from an IMC training flight approaching runway 21 I was horrified to see a baby hare stationary on the runway just as I was about to flare. I added power, cleared the hare and landed late on the runway none too smoothly. I was ticked off by my instructor for endangering plane and passengers.

On final on a previous PPL training flight with a more animal-friendly instructor, as young hares chased each other across the runway. he had shouted: "No, no baby bunnies - run back to mummy!" On that occasion, I went around!

## AND NOW FOR SOMETHING COMPLETELY DIFFERENT...

It's not just the hares that come out in the spring and early summer. It is also a great time for Stapleford's Cub – the distinctive green and white PA 18-150 tail wheeler, G-BIJB.

Maurice James, proud owner of the Cub says: "Flying the Cub all boils down to re-learning and honing basic flying skills which, once mastered will increase confidence and the sheer pleasure of being in full control of a flying machine, while ensuring that you disembark with that silly grin!"

Stapleford PPLs, Vish and Kiran Seunarine are among the keen "Cub Club" flyers, Kiran has been signed off to fly the Cub and highly recommends the experience: "Not only do you get to fly a fantastic aircraft, but it's a great way to brush up on all the basics we are taught at the start of our PPL training. The Cub is a joy to fly, but demands coordination and good technique. I found flying the Cub improved my flying in several other ways.



VISH AND KIRAN

"Flying an aircraft with basic instrumentation provides a great opportunity to further build confidence in traditional navigation techniques and encourages you to look outside the cabin."

Conversion courses are offered for £166 per hour dual, with £145 solo and £112 PPL hire – the same as the C152. The Cub courses are taught by Maurice James and Stapleford Instructors, Adrian Oliver and Robert Lough, both Cub enthusiasts. The price may be the same, but the experience is different from taxiing onwards – and upwards.

## UP, UP AND AWAY

Plans are afoot for an overnight fly-out to Guernsey in July, provided there is sufficient interest from club members and their passengers. This is part of Stapleford's popular programme of monthly fly-outs. The destination for the next flyout on June 13 will be Kortrijk in Belgium.

Near perfect flying conditions set the scene for an excellent first fly-out of the season, with 17 happy pilots – PPLs, students, instructors – making the cross-Channel trip to Le Touquet in April. Weather had intervened to prevent the fly-out scheduled for March.



FLY-OUTERS ENJOYING THE BEACH AT LE TOUQUET

Some cycled, others walked into the town centre for a lunch at Le Matisse, followed by a stroll along the beach, ice creams and some wine purchases before returning to Stapleford.

In May fly-outers ventured farther afield with a thoroughly enjoyable visit to Rouen in Normandy flying into clear blue skies across the Channel, and lurching out of doors in a Bistro close to the airport.

The plan for the overnight trip to Guernsey would be to fly down the French coast and pilots can expect to log three hours flying time each way, with the possibility of flying longer legs for hour builders if required.

James Lee and Steve Evans, the Instructors in charge of fly-outs, will shortly circulate details of the June trip to Kortrijk and July overnighter to Guernsey via the group email: [flyoutssfc@gmail.com](mailto:flyoutssfc@gmail.com). Please contact James and Steve via this email address if you are not already on the mailing list.

Fly-outs are for all Stapleford Club members, including



COASTING OUT OVER THE WHITE CLIFFS OF DOVER: PHOTO: PHILIP SINGH

private owners and hour-building students. Instructors are available to fly with anyone requiring a Cross Channel check or currency check. Obligatory Lifejackets for Cross Channel trips and spare headsets are available for hire at Stapleford.

James and Steve provide a briefing at Stapleford at 19.00 hours on the previous evening and assist with filing flight plans and GAR (General Aviation Report) forms. Fly-outers are encouraged to download the CAA Safety Sense Leaflet 20c VFR Flight Plans: [www.caa.co.uk/safetysense](http://www.caa.co.uk/safetysense)

## FROM THE RIGHT-HAND SEAT

**Roy Copperwaite continues his series of articles with advice on dealing with engine failure, engine fire and engine failure after take-off**

We are all aware of the procedures for engine failure, engine fire and engine failure after take-off – or should be. All the procedures are printed in the red emergency section of your checklist and at the last count there were nine options – and that’s just for a C152.

Some emergencies command immediate action. However, others are not life threatening e.g. radio failure and electrical failure which can be covered by using your checklist in the air. In other words, fly the aircraft first then sort the problem out.

Let us consider a few problems that may occur at any time:

- **Gradual loss of power.** In a naturally aspirated (carbureted) engine, put the carb heat on, but never for less than 15-20 seconds, as a short burst of carb heat i.e. 3 - 5 seconds can lead to partial melting followed by re-freezing and a greater build-up of ice.

- **A rough running engine.** Immediately consider a diversion to the nearest airfield and land as soon as possible. Avoid flying over built up areas. During the diversion monitor any fields that could be used for a forced landing. Make a PAN call (121.5).

Emergency actions may be different from one aircraft type to another, so familiarise yourself with the check list and POH (Pilot Operating Handbook) for the aircraft you are flying.

## PRIME ADVICE FOR STARTERS

**Alan Turner, who is often called upon to assist when engines fail to start, passes on advice from Lycoming on starting aeroplanes in warmer weather as well as in winter**

Probably the most important factor in starting an engine is achieving a fuel/air mixture that is satisfactory for combustion. Since the engine usually starts very easily, many pilots are unaware of or ignore the change of starting procedure needed to successfully start under varying temperature conditions.

In warmer weather, the air is less dense and therefore must be mixed with a lesser amount of fuel than in cold weather. In warm weather, the fuel will vaporise readily and make starting easier.

The amount of fuel must be varied with the temperature but it also needs time to vaporise. When it is warm 30 – 45 seconds is enough time. When it’s cold wait up to one minute. Experts suggest one prime then go through the prestart checklist.

Using this method, the engine starts cleaner. Pull the primer out slowly and give it time to fill before pushing it in. Do not pump the throttle to prime. If after you have primed using the primer, you feel compelled to pump the throttle, only do it 1 or 2 times maximum and the engine must be cranking. If it still does not start, stop and wait.

When an engine does not start easily, it can be frustrating. This can occur at any time of the year and it is very tempting to just keep grinding away with the starter to get it going. Should this happen, relax. Take care of the starter or it may fail. The general rule for starters is that they should only be operated for short periods and then allowed to cool.

If engine start has not occurred after three 10 second periods of operation with a pause between each, a five-minute cooling off period is required. Without this time limit for operation and an adequate cooling off period, the starter will overheat and is likely to be damaged or fail completely.

TAKE OFF is edited by Sue Rose ([suerose.pr@hotmail.co.uk](mailto:suerose.pr@hotmail.co.uk)) and designed by John Pasche. Please do send us your stories, your photos and your ideas.

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