

An afternoon on top of the world

A glider pilot's view of the clouds

It had looked like being a blue day. I had flown for the previous eight days in a row, both solo in my own glider and cross-country training in the two-seat Acro belonging to the Club, but on this day I had more or less decided to take a rest. I went to Bicester to get Fiona's camera fixed, and also to rent a video for Mum. The video was *Fly Away Home*, a cheerful tale of an orphan family of Canada geese being introduced to their ancestral migration route by following a microlight plane.

After a picnic lunch at the Club, clouds began to form in the hot blue sky and I decided to fly after all. My beautiful Mini-Nimbus, its dazzling white carbon fibre wings flashing with pinpoints of sun as they flexed slightly in the wind, was already rigged as my partner Tom had flown it the previous day. I towed it out to the launch point about 3:15 but due to delays in the launch queue it was after 5pm by the time I got off the ground. The first thermal took me slowly but steadily to cloudbase at 5000ft. I could hear Graham Barrett and Mike Randle on the radio talking about big clouds over the Cotswolds.

The visibility was poor in the early evening sun as I cruised towards Enstone looking for another thermal. South of Enstone there was a mass of cloud gradually coming into view which had a nice flat base but was otherwise rather shapeless. I wandered around underneath it for a while until good lift was contacted near the front sunny edge. At cloudbase once more the lift was 8 knots and I powered up the artificial horizon and entered the gloom above. Lift was steady up to 8,000ft at which height I straightened up to head west as I knew that I was still underneath controlled airspace.

The view as I came out of this cloud was somewhat gloomy, but this was due to an even bigger cloud further west which was casting a gigantic shadow across Oxfordshire. Threading my way through grey wispy bits, I gradually rounded an intervening foothill of fog. Then I spied the next target - a huge crisp cauliflower with a silver lining and with sunbeams radiating from the top of it, situated some way beyond Chipping Norton in exactly the right place to be clear of the airway.

For several miles I cruised on a steady compass heading of 260 degrees towards an imaginary spot in the mass of cloud that was directly below the peak of the billowing head. After a while the top of

the cloud disappeared from view because I was underneath the outlying fragments, but I knew I had to continue flying on the same course towards it. I was still well above cloudbase and it was not easy to keep track of my position due to smaller clouds and generally misty conditions below me, but I did manage to spot Little Rissington hangars to the left and the lakes at Bourton-on-the-Water some distance ahead, before preparing to enter the cloud.

The artificial horizon was wound up and settled by the time I plunged into the side of the cloud at about 6,500ft. I was attempting to fly straight and level in the hope that I would contact the lift underneath the tallest part of the cloud. The vario was showing confused readings, mostly down or *strongly* down, for some time and the cloud began to get lighter in colour as if I was about to burst out into sunshine on the other side. Then I felt a strong shove from a giant hand beneath, the vario began indicating strongly up and I began circling to the right to stay within the confines of the rising air.

Flying in circles inside a cloud is potentially very disorienting for the human balance mechanism of the inner ear, and the problem is aggravated if you move your head around. You can get strong but completely false feelings of turning the wrong way or even flying backwards or upside down. Consequently when I am inside cloud I tend to fix my head in position and just move my eyeballs around the instrument panel. There's nothing to see outside anyway – just grey fog.

At first the cloud was really bright but as I climbed higher it got darker and darker. The lift was smooth, and soon the vario needle became stationary against the upper stop at 10 knots up, which meant I was gaining height at the rate of at least 12mph, perhaps more. My whole world shrank to the size of the little window in the artificial horizon as I concentrated on keeping the glider turning at a constant rate. In the damp darkness, the most comforting thing was the whine from the electric motor in the artificial horizon, throbbing and warbling to itself in the gloom. The altimeter wound steadily round and round – seven thousand feet, eight thousand, nine thousand. The Club record of 9,200ft for the current season was soon shattered.

The cloud became blacker still, and somewhat bumpy, with a few taps on the airframe as I hit scattered hailstones. The front cockpit vent was open, and a large blob of ice began to form on the inside of the perspex canopy just behind the compass. From time to time, showers of very fine ice crystals were blowing through the vent and

landing on my face and arms, which actually I found very refreshing. The weather had been so hot and sticky at ground level.

Above 10,000ft the cloud began to get very rough. The vario system became erratic for a while as if it had a bubble of water in the tubes somewhere. The airspeed was more difficult to control but I was able to re-centre the climb by watching the movements of the altimeter. Approaching 11,000ft the cloud was tossing me up and down like a feather in a gale and my stomach was turning over. I was still trying to centre my circles in the strong upward gusts. From previous experience I knew that I must be very close to the top of the cloud.

The last altimeter reading I noticed was 11,400ft before the bottom dropped out of my world. In clouds the adage *what goes up must come down* is all too true and I had blundered into one of the sink channels around the edge of the cloud. I was falling into greyness, pushing the stick forward to regain control in a shallow dive, then suddenly bursting out of the cloud into dazzling sunshine. The view that met my eyes was quite stupendous, and worth every frightening moment that I had spent in the big dark monster behind me.

Over two miles high, I was flying in sparkling clear air above a perfectly flat top on a thick layer of mist and dust which must have been a couple of thousand feet below. The sky was pure, deep unruffled blue, paler down towards the horizon and I could see forever. Cumulus tops brilliantly lit by the sun were poking upwards through the misty tabletop like hideously deformed chessmen, their heads all leaning to one side, irregularly spaced into the distance as far as the eye could see. The precise mathematical flatness of the dust layer, and its apparent solidity, was fascinating. I was suspended above an endless futuristic game board.

It was so calm, the glider was flying itself. Such was the wonder of it, I cruised with my hands and feet off the controls for several miles, not knowing or caring where I was going. The ground was almost invisible at this time due to sunlight on the dust layer below which had a pronounced sandy colour to it. The air was crisp and very cold like a sunny winter's morning after a hard frost. I noticed that the leading edges of my wings were decorated with a knobbly layer of ice which was gradually melting as I descended into less cold air.

Then I started to play with the clouds, hopping over awe-inspiring mountain passes, floating across sunlit snowfields with the glider's shadow centred in a circular rainbow, steering carefully through a

vast arched portal followed by a winding canyon with blinding white cliffs on one side and grey shadows on the other. The sides of the canyon went down, down, down until they were lost in a dark nothingness. Above me, the sunny edges of some clouds were in constant agitated motion, giving rise to wispy fragments which became detached from the main mass of the cloud, scintillating up and down, dissolving in a few seconds but twinkling and twisting like Christmas decorations as they went. I had never seen anything quite so beautiful.

All too soon the images were fading and I was sinking earthwards, recognising Moreton-in-Marsh down below and setting course for home. I had to fly through another bank of cloud on the way but there was no appreciable lift inside it. Eventually I emerged on the dark side of this cloud and could see my way home ahead. I landed back on the airfield about 7pm in a very cold glider dripping with condensation. The air was warm and muggy as I opened the canopy and climbed out onto the grass, feelings gradually returning to my numb feet.

It was a pleasant communal evening with friends at the Club. We had a chinese takeaway meal with chilled rosé wine and ice cream. But my thoughts were far away in that other world up there. A world that is clear, cold and beautiful, uninhabited and separate from the world around us. I know because I have seen it. I can't wait to see it again.

*Phil Hawkins, Oxford Gliding Club
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Footnote:

In many countries of the world cloud flying by glider pilots is prohibited. The right we have in the UK to do this is a precious thing, which must not be lost. Provided you stay within the law and do it *outside* controlled airspace, the risks are so minimal. Commercial aircraft generally speaking are restricted to controlled airspace, and pilots of light aircraft tend to avoid cumulus clouds because they are so rough. Many private pilots do not have the necessary rating for blind flying. A special radio frequency (130.4Mhz) is reserved for glider pilots flying in cloud to communicate with each other in order to avoid conflict. It is an operational regulation of the British Gliding Association that parachutes must be worn when flying in cloud, but in the entire history of UK gliding collisions in cloud have been extremely rare events. There are many activities that statistically are far more dangerous, for example crossing the road to buy a newspaper.