

Storm flying

From *The Story of Gliding* by Ann Welch. Published by John Murray ISBN 0 7195-3659-6

This is a fascinating book for those who enjoy gliding, full-size or model. Knowledge of thermal and wave lift is surprisingly recent and Welch's book describes the rapid development of knowledge, flying skill and gliders during the 1930s. Above all she writes about the bravery of the pilots. The following account from the book shows some of the dangers.

Thunderstorms on the Wasserkuppe in August [1938] were likely, and in new strong gliders, with instruments and parachutes, there would be a good chance of a record too. All was prepared, and after a few days the weather came just right; the air was hot and sultry, and during the afternoon pink thunderheads emerged imperceptibly from the haze.

As the storm brewed, so the pilots waited, looking past the Monument to the Fallen Fliers out to the dark windward distance. Already the first rumbles of thunder could be heard. As the storm overwhelmed the sky, gliders were pulled out and made ready, crews rushed about in the sticky heat while the pilots watched the ominous darkness closing in. Then the wind dropped. A little lightning flickered out in the valley; there was some shouting, then, one by one, quickly into this moment of time the gliders were launched; one after the other they flew out to contact the storm. Drops of rain, sudden and chilling hit the watchers. Some of the gliders disappeared, rising up towards the dark cloud without turning, like dust to a vacuum cleaner.

The storm was of unexpected ferocity, the courage of the German pilots unquestioned. In gusts of wind, gliders which had failed to connect with the storm landed back and were hurried into shelter before the rain or the hail spoiled their polished skins. But those who knew the interior of such a storm were afraid. What had been done? Slowly the oppressive darkness passed overhead, and the cloud became grey and weepy with the remnants of the freezing rain; the wind dropped light in the flat air. Glimmerings of pale clearance appeared on the horizon. But that was all. No gliders could be seen either in the air or on the ground, and none returned to land on the Wasserkuppe. It was some time before the reckoning could be made.

On the plus side there was a world height record. Captain Drechsel, of the new Luftwaffe, had gained 6,687 metres (21,400 ft). The up-current had reached 100 ft/sec. with down-currents of similar strength, and he had found the turbulence extreme, particularly in the narrow junction between the two. Several pilots had exceeded 5,500 metres, battling with the beginnings of anoxia in the wild air, with ice on their wings. Some of them landed in fields safely, thankful to be alive. Others were not so lucky.

Several gliders broke up inside the storm. Fantastically, all the pilots were able to get out by parachute, in spite of the enormous possibility of injury caused by the violent behaviour of the splintering aircraft. All but three of these landed safely. These three, Lemm, Schultz and, in a Horten, Bleh, unknown to each other, but possibly quite

close together, must have hit extreme turbulence high in the cloud, in sub-zero temperatures, and fierce lift. Freeing themselves from the wreckage, they had leapt into the darkness and the piercing hail, static lines pulling open their parachute canopies. The relief of knowing that they would soon be out of the biting cold, the terrifying thunder, and the fierce stabs of the lightning must have been great. It will never be known how soon they realised that they were not coming down because the lift in the storm was too strong; enough to bear their parachutes higher and higher. Perhaps they never knew even this; when their bodies were ultimately found, one had been charred by lightning, the other two frozen to death.

The meeting went on, the thunderstorm research was continued, and within a year those left were at war. The Rhongeist was dead.

This moment in time passed almost without notice, for the sport which had sprung from the Wasserkuppe mountain was now thriving all over the world. The Americans were developing their own brand of gliding; in Poland a centre had been set up at Bezmiechowe in the Carpathians. The Poles brought a technical approach to their sport, and thought it right that money should be spent on research: their first soaring flight was in 1928, and in the '80s were making many long thermal flights with gliders of Polish design. In France, Italy, and even as far away as Australia and South America there were active gliding clubs.