



Helmut Knöpfle and Naomi Heron-Maxwell, translator of Wolf Hirth's "The Art of Soaring Flight", who was the first English girl to win the Silver C.



[Translator's Note: This incident, which occurred over the Wasserkuppe during the German national contest of last summer, should serve as a valuable object lesson. To the overly enthusiastic and inexperienced, let it be a warning to respect storm conditions by remaining on the ground, or keeping well away from violent storm centers. In the same storm, the world's altitude record was broken by Drechsel, a Lufthansa pilot. That Knöpfle's "Mini" broke up is no reflection on that craft; Drechsel was also piloting a Minimoa. The layman should understand that sailplanes are not fragile and such incidents not commonplace. It should be understood, also, that few powered aircraft are capable of withstanding the turbulence of a violent storm center, and that sailplane pilots have a far better knowledge of the structure of storms, squalls, etc., than the average power plane pilot. Even though Knöpfle has written lightly, almost carelessly, of this experience, he was far from ignorant of the circumstances. "Bimbo", as Helmut Knöpfle is best known in the soaring fraternity, is one of the outstanding pilots in Germany today. For the greatest accumulation of cross-country mileage during the winter of 1936-37 he was given a special award. He is a leading proponent of "man-made thermals" (see SOARING, June, 1937). Knöpfle is chief test pilot for Sportflugzeugbau Schempp-Hirth. He seems to take his flying lightly, but, when put to the test, he always comes up to expectations.]

After having made three miserable attempts to get away on the third of August, 1938, I took off for the fourth time by airplane tow. When, at the altitude of the Wasserkuppe I noted a weak thermal of $1\frac{1}{2}$ ft./sec., and I released. However, I noticed a cumulus cloud tower overhead which was becoming darker and blacker at its base. With even spirals I climbed higher and higher. At the same time the lift was increasing. Soon it was $6\frac{1}{2}$ ft./sec., then 10 ft./sec., and in no time I was about 2300 ft. above the Wasserkuppe and close under the cloud. A quick glance to the left and right to check my chute connections and I was in the turbulent mass.

All of my attention was centered on the bank-and-turn indicator—and then things really began to happen. Like an elevator, the ship climbed at 26 to 30 ft./sec. and while steadily circling, I was thrown out of the top of the cloud tower. There before me I saw a gigantic, lofty cloud mass. With quick decision, I noted my position and waded in. In a few seconds I was being pushed up by a terrific force. My variometers had gone crazy. One whipped up to its maximum of 16 ft./sec. and the other overlapped twice and finally indicated a climb of from 50 to 65 ft./sec. It took me 70 seconds to go from 10,000 to 13,000 feet. In spite of holding my "Minimoa 38" in a normal spiralling position, it didn't respond as in normal flight.

Dismantling A Sailplane at 16,400 Feet Altitude

by Helmut Knöpfle

Translated by Walter Setz

It was as if a giant fist were simply thrusting me up. At times I was jammed into the seat with such force that I felt as if I would break through the bottom of the fuselage. It grew darker and darker. It was blackish-gray all about me. The air speed indicator had long since packed-up. A thin sheet of ice had encased the cockpit cover and wings. Already a few hail stones were striking. The altimeter showed 15,750 ft. over point of release. I said to myself, "Watch the bank-and-turn indicator—it's my only reliable instrument now."

Suddenly I felt a terrific jolt, another, and still more. The ship danced madly. With desperate will-power I concentrated on the yellow pointer before me which oscillated from left to right like the pendulum of a clock. Suddenly I heard a whistling as the ship increased speed. I attempted to pull it out. The tone got louder—the ship began to scream. As quick as lightning I reasoned that because of the seeming reversal of controls, the ship must be inverted. Carefully I tried to bring it around.

There was another terrific jolt and a crash. I was being tossed through the cockpit cowl with tremendous force. My head ached intensely, I saw stars before my eyes and heard the rending and tearing apart of plywood—followed by silence—uncomfortable silence. Soon I collected my thoughts. My first sensation was that the parachute had not opened because I had felt no jolt or jerk. With my hands, I tried to reach through my legs to the seat pack. At the same moment I saw a loose chute strap dangling beside my head. I turned my head and saw the other one. By this time I could tell the chute had opened by the sound the wind made against it. I couldn't see because of the darkness, but I had the uncertain sensation that the chute had struck rising air currents and was ascending. Suddenly it became lighter and I saw over me the white canopy of my parachute. Then I fell into the center of a cyclone—I knew this because of the lack of condensation. I looked down as through a gigantic tube and saw a little piece of the earth which occasionally became cloud blanketed. After I had lost about 3000 ft. of altitude, I was driven side-wise into the cloud mass. To my astonishment, in a short time I found myself at the top of the cyclone cone again. This was repeated four times before I finally began to descend.

When I was thrown out of the ship, my head was badly cut and lacerated by the safety belt buckles which had been torn loose. Moreover, I must have bruised my neck severely for in a short time I couldn't turn my head. In addition, blood was streaming over my face leaving a trail of blood above me. Besides, the stomach

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