

lift was found over the hangars at 1200 feet; I released in a thermal of five to eight feet per second. I had been on the tow for five minutes. The time of release was 11:35.

The hangar area proved to be a consistent thermal producer throughout the encampment, apparently due to the large area of roofing. After release the flight was fairly smooth, the lift, which varied from three to eight feet per second in the turns, being fairly constant throughout. I kept with the thermal until I had reached 5800 feet. From then on the flight was a matter of flying under a cloud, going up to cloud base at 6000 feet, then losing height before picking up another cloud to go up again. The lift was good, ten feet per second in the centers of thermals and very smooth at cloud base.

My maximum height varied, one strong thermal taking me above the base of surrounding clouds to a height of 6400 feet. At this time I happened to glance at the meterograph and saw that the clock had stopped. This annoyed me, so I flew with left hand while I hit it with my right. Fortunately it started again. For an hour or more I was not below 4500 feet and the air was quite warm at this level, while at 6,000 feet it was very cold. So at times I was glad to get down to lower levels.

After two hours, because the conditions were so good, I decided to go for the five hour Silver 'C' qualification. Forty-five minutes later conditions were not so good. I had dropped down to 3000 feet and was nearing 2,500 feet and had found no lift.

When you have been to 6000 feet and you drop down to 2000 feet it seems so low that you feel like making an approach. At 1500 feet I found a small thermal, but not big enough to go up in. Eight hundred feet and I started downwind across the field preparatory to making a crosswind leg and landing. I was trying to stretch the flight out as I had been in the air two hours and fifty-five minutes and was hoping to get three hours. Then I saw my fellow member Reg McConnell (in the Blue *Grunau*) over to my right at about 1000 feet and going up—an annoying sight from 600 feet. I had been skeptical about the possibility of getting a thermal at 600 feet, but now I connected.

Up she went, and at 3000 feet I caught up with Reg. After this we both climbed to approximately the same height (although in different thermals) until we reached 6000 feet together. After circling at this level for some minutes I became aware that I was watching the airspeed indicator and variometer too much (nearly all the time) and was not keeping a look out for Reg. Having no desire to run into him I decided to move out of his area.

Then I saw The Cloud. It was in the southeast and dropping rain over a strip approximately three miles wide. As it was so localized I took little notice. There was very little rain on the aerodrome and the center of the cloud was about four miles from the field.

The conditions had obviously altered. Where earlier in the day there was a fair percentage of blue sky, the clouds had now closed together, almost covering the sky. I flew north away from the field and, after gaining and losing, was down to 4000 feet. I had now lost sight of Reg.

The rain cloud was now east of the drome and on my right. It had a dirty look, but as several other

clouds had darkened up and I had been under them with no ill effects I took no notice. I thought I would use the cloud to gain some additional height before going back to the field, so I moved underneath.

It was then that Reg McConnell, who was in the vicinity, although unknown to me, made radio contact with the ground crew. He had a radio in his machine with which ground-to-air communications were being tested. The ground observers being in the position to see the formation and vertical development of the cloud could see its danger. We could only see its base. The advice from the ground was for Reg to get away from the cloud and return to the drome and land. However, due to bad reception, he understood that they said "to have a look at a cloud." He moved under the cloud, and although he was 1500 feet below it, it caught hold of him. It was then that Reg, with his wider experience, realized what had happened. He started to dive at 50 mph and was still going up at 60 mph. Finally, at 65 mph, he started to pull away. He was highly pleased to get clear as he had reached the stage where, in the grip of the mightily updraft, he was becoming really worried about his safety. He returned to the drome and landed.

Underneath the cloud the lift was eight to sixteen feet per second, but smooth. I reached 7000 feet and headed forward again. I was still below cloud base, but as I went forward I saw that the forward edge of the cloud was below me and rain was falling from its rear part. And I was still going up! My aim was then to fly straight forward on the compass into the side of the cloud and come out through the other side. I bumped up the speed and centered the cloud. There was a queer feeling of quiet, due apparently to the visual effect of being able to see nothing but a swirling grey mist. I believe that if I had been able to see the field at this stage I would have observed a lot of ant-like figures running around. From their point of view it was obvious that I was being sucked up into what was a cumulo-nimbus cloud and a very dangerous situation to be sure. As someone remarked, "It looks like a brolly job" and what with the two seater and the *Grunau* wrecked?

As an item of interest I must mention here that the instruments in the Grey *Grunau* consisted of an airspeed indicator, altimeter (Smith) ball bank, vario-meter, and compass. Level flying in the cloud lasted about a half a minute, then the fun started! Down went the wing, up went the speed, and the game was on. Back with the stick and it settled off. Down again, and this time I tried to anticipate the stall by putting the stick forward before the speed fell too low, but this had the effect of building up the speed again. Even at this stage I still expected to come out of the side of the cloud. A few more minutes and I knew that things were not so good.

More stalling and diving, then I caught a glimpse of the ground—at an angle of 45 degrees and spinning rapidly. Ah! in a spiral dive. Good, this will get me out of the cloud. Then the cloud closed in—another glimpse of the ground—then the cloud closed over for good.

Time passed and I began to think. What is the best thing to do? How long could this stalling and diving and spiraling last? Would the *Grunau* break up? How high would I go? I thought I would eventually