

turned up on its side and gave me the impression that I was going to fly right into it. Everything was on an angle and sliding beneath me. I got to thinking that the wings are made for maneuverability only when the air is flowing over them from front to rear at a certain, regulated speed. When this ceases you might just as well be flying a barn door. Here I was in a glider with no motor to pull me around the turn. Gently but steadily I pushed the stick forward, the ground came up to meet me very fast. At last the moment arrived when I either pulled out or smacked into the ground. I pulled the stick back in a quick motion, and luckily I pulled out smoothly enough not to zoom and landed. This was another time when I had a good scare. I have never unintentionally dived in a turn since.

This is another point that proves glider flying is not only the safest way to fly, but it makes very good pilots. My instructor had nothing to say as he knew that I was aware of my mistake, but just told me to make another turn, only to the right. This I proceeded to do just as I had done the previous one, but continued on around the turn and leveled out for a straight glide and landing. I made two more turns—one to the right and one to the left, and two one hundred and eighty degree turns. My last one hundred and eighty degree turn made thirty-one flights in all.

My instructor, Mr. Kunz, said that I was ready for 'winch-towing,' which amounts to being towed by an engine driven 'spool' with about four thousand feet of cable. The cable is drawn out by a tow car and hooked onto the glider, which is as far away from the winch as the cable will permit. The cable is then reeled in at about fifty miles per hour, thus providing a very convenient means for a take-off.

The glider may go as high as about one-fourth the length of the cable, or about one thousand feet. On my first winch-tow I went up to about three hundred feet, but that, compared to one hundred feet, seemed plenty high enough for me. One of the wonderful conveniences of winch-towing is the fact that the winch is stationary, thus eliminating the dust, which makes take-offs most uncomfortable, especially when the ship you are flying is an open cockpit model such as ours.

Another advantage of winch-towing is speed, which gives full control. On an average tow the glider will leave the ground in less than fifty feet. It has taken only ten feet on windy days. This speed is very necessary in gaining altitude rapidly before an excess of cable has been reeled in.

After a couple of flights at about three hundred feet, I went on up to a little over five hundred feet. I made my release and then a 'one-eighty' degree turn. From the air things do not look the same, and when I looked for

my landing spot I could not find it. My take-off had been between two medium-sized hills, but when I looked for them at five hundred feet, they had shrunk in size and everything was stretched out before me like a checkered map. This is a most peculiar feeling.

Most everyone has seen aerial photographs, but when you view one with your own eyes, and especially by yourself, with the wind whistling in your ears in a thin, shrill tone, you imagine you are dreaming. This continues until you get worried as to the position of your landing spot. Then you look desperately to find it, and after you have, you try your best to land in the approximate vicinity. After you land you are most anxious to 'get back up there' and see it again. After this has happened two or three times you begin thinking of getting up much higher. Then you pull back a little harder on the stick and go up to eight hundred feet. This gives you enough altitude so that you have more than enough to fly straight back to the landing spot, so you make a few turns and take in the sights before you head back for a landing. Then you reach about the one thousand foot mark, where your ears start popping from altitude, and the wings give off a shriller whistle than at lower altitudes. After this has been accomplished, you still look to the clouds way above you, and begin looking for another means of getting higher! Also, you begin to wonder if there is some way to stay up a while longer and see how things look, instead of having to come back down in about five minutes and land, and whether you are over the landing spot or not, you still must come down.

These prolongations of flight and gains in altitude are possible only by means of 'thermals', or rising columns of warm air.

It is a very peculiar feeling to enter a thermal. First you are flying along calmly looking at various sights when your ship jumps as though it were being tied down and wanted to go somewhere. You feel a definite upward surge, and it feels as if someone were pushing you upward with a pole. Then you go into a series of spirals trying to get into the core of the rising thermal. As the ground tilts, and things begin to look blurred, you start to rise. Sometimes you gain only a couple of hundred feet, but at other times you may go as high as eight or ten thousand feet, which is not even near the altitude record. In this manner it is possible to go cross-country just as though you were flying a power plane, only you get a tremendously greater thrill while flying the glider.

One reason why flying never gets tiresome is the fact that no two flights are the same. There is always something that happens to present new problems or thrills. One of these thrills and problems combined is landing