

7000 Feet in a SECONDARY GLIDER

by Harland Ross

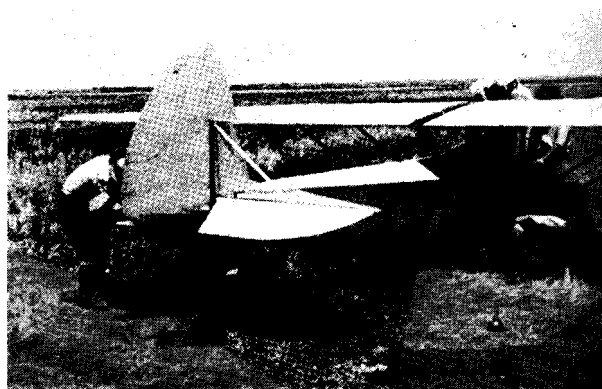
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On the morning of August 21st, several members of the Wichita Falls Soaring Club journeyed to the gliding field, a short distance from the city. From a pasture about one mile square in this level country of the great plains, we have been putting up some nice flights. Starts are from automobile tow, using a number twelve gauge telephone wire about 1,200 feet long, which gives a maximum height of 600 feet before releasing.

On this day, the sky was very hazy, due to the presence of a high pressure area which had a temperature inversion at about one thousand feet altitude. The ground temperature was 104° maximum, with 60% relative humidity. About one o'clock we noticed, in the far south at high altitude, a few cumulus clouds that were moving slowly toward us.

Since my brother, Vernon, was the only other pilot of the group far enough advanced to do high towing, the two of us took turns trying to contact ground thermals. Throughout the summer we have been able to encounter thermals about every third flight, after a tow to five or six hundred feet. However, this day the thermals were

The Author with the RS-1



Assembling the ship in the broiling sun J. Begley

very weak, registering only one to two feet per second on our home-made climb indicator. Only by very careful spiralling could we prolong the flights for about ten minutes.

After a dozen failures to get up, we had almost decided to stop for the day. A few cumulus clouds had drifted over, but they appeared flat and stringy through the haze. It was after four o'clock, but a few spectators were still around, hoping something would happen, so I decided to give it one more try. Towing up to 400 feet, I released while in a weak thermal. The climb indicator showed a little more life than usual, so, working very hard, I drifted slowly across the field, climbing about 100 feet per minute. Passing through the inversion level at a thousand feet, the climb suddenly jumped to 4 ft./sec., and I shouted, "Hurrah, free at last!"

From then on, the ship tossed and pitched as the gusts grew stronger with altitude. Chasing two buzzards around and around, we soon passed the 4,000 foot level, where the lift weakened. A couple of miles to the west, a flat looking cumulus indicated some lift, so I flew in that direction. When the climb indicator registered 5 ft./sec., another spiral was started, and soon the altimeter showed 5,500 ft. By this time I had drifted about eight miles north of the take-off point and, as the lift died out, I glided over the state line, which is the Red River, toward another large, flat cumulus in Oklahoma.

I now realized that the base of the clouds were at least 8,000 ft. above the ground, and sensed the possibility of exceeding the official American altitude record, 6,804 ft., held by Richard duPont. I remember that Lewin Barringer had found his best lift over the rivers on his cross-country flights. With this in mind, I started my spiral upon entering the lift of the cloud. The ship was soon carried to 7,400 ft. above the ground, or 7,000 ft. above the point of release, where the air became very turbulent and the ship was tossed about. While making a left turn, I was thrown completely over into a vertical right turn by the violent gusts. Without a parachute or blind flying instruments, I decided against trying to enter the cloud base a few hundred feet above, and left the updraft on my glide back to the take-off point, a distance of 12 miles. How I wished for a Ross R-2 sailplane, equipped with a barograph!

In the meantime, the ground crew had followed along with the trailer, but retraced their route upon seeing the ship turn back toward the take-off point. Arriving over the field at 3,000 ft., I flew a few miles west to the airport, where I intended to lose some altitude but soon

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