

# HE HAS FLOWN *Through the Air*

By B. L. Wiggin

And so, late in August, I returned to Harris Hill feeling highly flattered at the request of the Army Air Corps which brought me back, and eager to assist in their glider training program. Everything went smoothly—morning classes met on time, the weather was ideal, and the officer-students were very much interested in their meteorological work.

Then on September 13, Floyd—I mean Lieutenant Sweet, the officer in charge—said simply: "Let's go on a cross-country today, Barney—that is, if conditions are as good as you say they are. If you think we could make Washington, let's try it."

It kind of hit me, coming so abruptly. My thoughts spun around to a character I once knew years ago who was manager of a city airport. When the airline company which was developing the territory brought around a big ship to give free familiarization hops to the local big-wigs, this fellow was invited to go along too. Backing away in haste from the group of officials, he muttered: "You ain't going to get me in one of those damn things. My job don't call for that—."

Of course, I accepted Floyd's offer. Because the freezing level was near 6,500 feet above sea level, I borrowed several pants from Parker Leonard and a sweater or two here and there—keeping them in place with the parachute harness. On the advice of Parker I arranged myself for eventualities. (The Schweizer boys should build in more space in that rear cockpit.)

In order that I might not miss anything of significance Floyd gave me a sensitive altimeter which I held in my right hand, and a Pioneer rate of climb which I held in my left hand. A movie camera in my lap and a clipboard on which to make notes under my right arm, and navigation charts spread out between us, completed these elaborate and thoughtful preparations.

Jay Buxton towed us off, direct auto tow. He thought it was a pulley tow, however, and we had all of fifty feet when we cut directly over him.

The ridge wind was there, however; and the hour, 11:30 a. m., was sufficiently advanced to give us occasional thermals. We cruised the ridge for twenty minutes and spiraled away in a thermal which took us to the legal limit of 3,500 feet! It also took us over Elmira. Just southeast of the city we picked another, whereupon Floyd got himself oriented in what we thought would be the region of lift—to the lee side of the rising column which was capped by a healthy young cloud. The right spot, all right!

My rate of climb began to show—5, 6, 8, 10, 15, 20 feet a second lift as we spiraled under this growing cloud. It began to get quite cold, and we could see our breath as Floyd pushed the nose down to bring our speed up to 70 miles an hour. We kept on rising and Floyd looked back with a big question mark on his face—wondering how I was taking it, I suppose.

"Let's go into it," was my reply, "The top can't exceed 7,000 sea level because there is a very strong inversion there." We could see that—for the clouds would only

build to a certain height, then spread out laterally, later to dissolve.

"No compass in this ship," Floyd said, "and no turn bank, either!"

But we kept on climbing and slid into the grey mass of the cloud base. The pitch of the wind increased quite a bit, but I never did know what the air speed rose to. The spoilers came on and we shimmied. I had fun. We still climbed, however, at about 8 feet per second. The flow of power from the latent heat of condensation within the cloud was just about what I had expected and had always hoped to experience.

"Going to spin out," said Floyd as the altimeter hit some figure around 5,000. And he did.

Just as the spin got started, off flew my cowling. I made a lunge for it, dropping my camera in the effort. I just managed to get a hold on the edge of it but could not pull it down. In fact, I couldn't move at all on account of the force of the spin which held me in place. It has been reported since that my unremembered reaction to all this could be reduced to unprintable copy. I wouldn't know. Anyway, the manoeuver was good and we hit clear air again.

We discussed the experience a bit until we suddenly realized that we were in a big area of blue sky with a sink of fifteen coming up on the rate of climb. Heading for South Mountain (Pa.), we reached it at 600 feet, 100 below the ridge. Floyd flew directly at it, aiming, as I thought at the time, at a big beech tree about half way up the slope. It was good flying, for the ridge was normal to the surface wind flow. We got a deserved break, for in addition to picking up the ridge lift we also caught a thermal at the same time and away we went, staying with it until we were back up to 4,200.

There are times, when conditions of instability and wind shear are right, that long rolls will form in the air with rising currents on one side and descending currents on the other. That is in general. Actually, there are turbulent zones which destroy the uniformity of such circulations, especially over rough terrain. The arrangement of clouds attendant on this kind of circulation is known to most all of you. You call it a cloud street.

I had noticed that as the clouds built up to the inversion, and in a few cases had actually penetrated it to some extent, the shear effect from the stronger winds in the warmer air was setting up cloud streets. Pointing out one that we could reach and explaining why I would like to see Floyd make a try at it took more time than it did to fly over it. Conditions were ideal and all according to our liking. With nose down, airspeed up to 70, we batted along at zero sink over hill, over dale, over what we later learned was the most populous area of Pennsylvania from point of view of bears, panthers, and other wild animals. Nary a field below us just woods, and woods, and woods. One road traversed them.

Coming to the end of the street, we still had 4,200 above our point of release at Harris Hill. Below us was

(Continued on page 11)