

The assembly is fast and easy with main wing pin, stabilizer screw and two aileron-push-rod pins to install. The flaps and spoilers hook up automatically. With a practiced crew assembly time should be about four to five minutes.

The cockpit layout I found satisfactory after a few flights. The spoiler handle is to the left of the left knee and the tow release is to the right of the right knee. These are partially hidden by one's pants' leg but this has proved to be no problem. The flap handle is on the left side of the fuselage and has nine positions; four plus and four negative. By marking the flap settings on the face of the airspeed indicator, flap changes become quite automatic after a few hours. The markings on the flap position indicator are rather hard to see but one develops a feel for them and seldom looks at the indicator.



Photo by A. C. Williams
Ted Chandler flying his Libelle near San Antonio, Texas.

Having received a briefing from Bob Salvo and Ed McClanahan (both Libelle owners) I was ready for my first flight. As I had been warned, the right wing tried to spank the ground when the propwash hit me. I caught it that time, but on several occasions since it has touched momentarily. According to some local pundits who should know, this characteristic is shared by several high-performance ships. Once in the air the Libelle is the most docile ship I have flown with the exception of the Sisü. When trimmed it follows the towplane hands off for some time. The gear retracts smoothly by pulling the gear handle aft about a foot.

Once off tow one notices the very low sink, about

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two ft/sec. at 46 knots with a 5.9-lb. wing loading. Subsequent flights make me believe that all published performance figures are quite accurate.

Upon entering a thermal I found that an earlier conclusion, drawn when looking at the dimensions, is well founded. The ship needs a longer fuselage or more fin and rudder. Yaw due to roll is quite noticeable when entering a steep, rapid turn. Once established in the thermal the rudder is adequate except for small, rough thermals. I thermal at speeds from 43 to 48 knots depending on the size and roughness of the thermal. I find that the high rate of roll, coupled with back stick pressure, will compensate for the rudder in a rough thermal. The aforementioned rudder problem does not prevent the Libelle from climbing on equal terms with the Austria S and Dart 17R in small thermals.

When leaving a thermal the Libelle accelerates quite rapidly and has a very flat glide angle and wrinkle-free wing. Keeping the yaw string centered is no problem. The fuselage is always within one or two degrees of level due to the constantly changing flap positions, thus one notices no change in attitude whether at 40 or 100 kots. Due to the very quiet cockpit the airspeed indicator is the only real indication of your speed.

Ventilation is achieved by opening the canopy any desired amount up to about two inches. At first I found this unacceptable aerodynamically, but after 30 hours in the ship I can find no perceptible increase in sink rate when the canopy is raised enough for ventilation. It is by far the most efficient de-fog and ventilation system I have ever used on a sailplane.

Approach and landing present no problems. The gear lowers smoothly by rotating the handle and letting it slide forward and lock. The spoilers, while not powerful, are adequate. The ship can be slipped sharply with both flaps and spoilers extended. After landing, as on the start of takeoff roll, one must use some care to keep the wings level.

I have made several launches by auto tow and the ship behaves very nicely. Where three or four thousand feet of runway is available this is a lot cheaper than aerotowing. We use 1,200 feet of 1/4-inch polyethelene rope and the Libelle gets at least the length of the rope in altitude on a 4,000-ft. run. I have managed to climb out from as low as 250 feet and have made several recoveries from 500 and 800 feet. The ship has no tendency to roll or spin when stalled, so working low in thermals is not particularly terrifying.

—TED CHANDLER