

that we had developed some ideas of our own as to how gliders should be built. With the help of Dudley Cunningham, our local airport manager, and an excellent airplane mechanic, we revised the plans in a minor way and started on Mattley No. 2. We rounded the wing tips and tail surfaces. We increased the size of the ailerons. Hard wire gave way to cable bracing and the skid was strengthened in spots and lightened in others. The plywood on the leading edge was strengthened and run back over the curve to prevent excessive cupping of the fabric. The Livermore Glider Club had flown their McGill Primary into the side of a hill and were without means of repairing the damage. We offered to do the work for them and, as they were bringing the wreckage to us on a trailer, a gust of wind turned trailer and glider over into a ditch. One rib and two spars remained undamaged in one wing and you could still see how the skid was supposed to look. We completed both jobs that year and the Livermore Club broke up, giving us their glider. Then we had three primaries and our advanced boys continued from where they had left off the year before.

The revised Mattley No. 2 flew well. It turned with less loss of altitude and glided at a flatter angle. My time was devoted to the beginners who used the old Mattley No. 1 and we followed the same routine as before with the same success. The McGill was inferior to the Mattley 1 and 2 and was flown only if one of the others was in the shop for repairs. The advantage of a wheel soon became apparent and through the kindness of the Boeing School, we obtained the plans for a steel tube primary so equipped. Summer school again closed our flying log for the year, but it was decided that at the opening of school we would resume our flying outside of school hours instead of waiting until spring when our shop work was completed. The flying had been limited by the administration until such a time as the course of study and shop work had been completed. It was to be a reward for good scholarship for the year. Under the new plan, any student who was doing satisfactory work could fly as long as his work remained satisfactory and he had a signed request from his parents for that instruction.

The fourth year of our venture was at hand and as projects we had the plans for the steel tube primary and a college kit from the Baker McMillen Co. Hard luck

dogged us that year. The spars for the Baker McMillen refused to enjoy the sunny California climate and warped to the point of uselessness. The Boeing primary was shelved and, by putting in much overtime, we did finish the Cadet. We were overjoyed at the way it flew and had no trouble with the transition from primary to secondary. We simply started over again towing below flying speed, low flights the length of the field, and finally higher flights, turns, and landings.

We started our fifth year with a new principal, Mr. Pedro Osuna, who has been with us ever since and has been a most staunch friend of our work. Three primaries and the Cadet were in flying condition and a fourth primary well started. We completed the fourth primary and, since our old Mattley was getting along in years as well as hours in the air, we dismantled it for the last time. Shortly after that our second crackup occurred. The Cadet spun in from a hundred feet. Again it was an airplane pilot who had inveigled us into letting him take a hop. It was decided then and there that regardless of name or fame no one else was going to fly our gliders unless he was willing to go through the same training we imposed on ourselves. That rule stands today.

We started rebuilding the Cadet and that year we also rebuilt a Travelair 2000 that belonged to the local flying club. Both jobs were finished in early spring and we devoted much time to flying.

At the close of school for the summer, the primaries were stored and the instructor began working with Hawley Bowlus again. From him we obtained a Grunau 8 two-seater fuselage which had been built by the Frank Wiggins Trade School, together with the plans for the wing.

Our sixth year was spent on the Grunau. We started collecting instruments and had high hopes for the work we could do with this ship. It was the greatest disappointment we have had in the way of performance. Because we are in flat country, any soaring must be thermal soaring. This ship is too sluggish and has too

(Continued on Page 13)

Four advanced students and instructor with the revised Cadet

