

THE 1-26 COMMUNITY SERVICE PROJECT

"It's So Easy a Child Can Put It Together."

by JACK H. LAMBIE

Take a group of boys, ages 8 to 17, add 1-26 kit parts slowly, stir for 11 months and come up with a sleek sailplane and a great sense of achievement for all involved. This is the story of how Bruce Carmichael's 1-26 Schweizer sailplane was built by a group of schoolboys and myself in the Elsinore High School shop as a Community Service Project.

Bruce had ordered a 1-26 kit and was too busy on his boundary layer research to build it. After we had worked out an arrangement for my building his kit for expenses and flying time I rounded up the group of boys who hang around the Elsinore Gliderport of which I was caretaker. I asked them if they would be interested in building the ship and they were very enthusiastic. Back in Illinois I had built and flown a hang glider with a group of 5 to 13 year old boys so I knew the great capabilities of kids on a project of this kind. We made a shop in the shed alongside the big hanger and awaited the parts.

Finally the tail kit came. None of us had ever driven a rivet or even seen one driven but after carefully reading the instructions we put a few in by hand. This only proved how impossible it would be to build the whole ship this way.

The Elsinore High School shop had several unused war surplus rivet guns and a good compressor so we took the parts over during the twice-a-week evening shop classes. With no experience at riveting it took all night to get a dozen rivets in. The evening shop sessions were crowded and we were continually interrupted to explain what we were doing to interested spectators. We didn't mind this too much but in 6 weeks of continual attendance at the evening shop we had just finished the tail assembly when the rest of the kit was to arrive. We had to have more time to ourselves in the shop.

I approached the superintendent of the Elsinore High School and asked if we could use the shop during the weekends, explaining that I would

carefully supervise the group of local high school boys who were helping. He said that this would not be possible but if we could get the whole thing qualified as a Community Service Project perhaps the school board would allow us to use the shop. I worked out a letter explaining our project, the boys working on it, and the estimated hours of shop time that it would need. The superintendent



Mr. and Mrs. Jack Lambie with daughter Suzy and the 1-26 at Elsinore.

submitted this to the board and they allotted so much per hour to the school for electricity and maintenance cost from a special fund for such projects. The school board was very happy to approve our project so we were able to use the shop any time we wished. I became good friends with the shop teacher and simply dropped by his house to pick up the keys to the shop whenever we had a work session. Another great help about this time was the assistance of Rohr Aircraft's Riverside plant. They loaned us several dozen latest model cleco's and pliers and some excellent rivet sets and dimplers.

After a break in the work of about two weeks while waiting for the rest of the kit the great day arrived and the big box was dumped at the gliderport. The huge pile of parts, plans, and instructions seemed like they would never be mastered. We had thought the tail section quite an accomplishment and by now we were fully aware of the time involved in producing the wing and fuselage assemblies.

We started on the right wing with confidence and patience. By now our riveting had improved considerably. I won't admit how many rivets we drilled out on the tail sections. Some of the boys had developed into excellent buckers and riveters and were developing a pretty good idea of reading blueprints. We put the ribs and the rear spar sections in very quickly but the spoiler section took about twice as much time as all the rest of the wing. The skin over this area is almost heartbreaking to rivet. The aluminum is so thin that the slightest slip makes a dent or ripple. After our work sessions we pulled the wing up to the ceiling so it would be out of the way for the school shop classes. The wings are very light and this was a one-man operation.

In between wings we sanded, polished, and primed the fuselage frame. Not an easy job as ours was somewhat rusty. By this time school was out and we were hardly half finished. I wrote another letter to the schools superintendent asking for the shop during the summer. Our cause was aided by some very good pictures and publicity in the Riverside papers. We obtained use of the shop during the summer.

The left wing went fairly quickly, especially the spoiler area. We had worked out a pre-assembly plan that saved hours. It seemed incredible to have both wings finished. A few months ago it was only a dream of the future to actually get this far. I took the wings in to the CAA designee in Riverside to see how we were doing. He had been following