



Dan Santee, his kit-built K-8, and an inviting Arizona sky.

## K-8 FROM A KIT — Don Santee

The editor of *Soaring* has remarked on the fact that the do-it-yourselfers are usually too busy doing to write reports on their projects. Sad, but true! I might add that after the building comes the flying—and sitting down to write is just as difficult.

The story of my K-8 began in late September, 1964, on a wharf at Portland, Oregon. Here the large shipping box was delivered into my eagerly awaiting hands and soon, with all papers signed, we were headed south on the freeway bound for Salem.

The cost of the kit was approximately \$2700.00, including all charges. Dope, fabric, glue, and instruments were purchased separately. The time I spent in assembly of the kit might have been considerably reduced by a more experienced mechanic, or by someone who is just naturally faster. A project of this nature is most enjoyable to me and I savored every moment of shop time. A total of 600 hours of spare time was invested in N 93000. This included some extra effort to achieve smooth surfaces and the setback which resulted from moving my family the 1,200 miles from Salem to Phoenix, Arizona.

Opening the substantial overseas shipping box was a most interesting experience. Weatherproof paper protected the contents, which were separately encased in large tubes of polyethylene film. The first element to be unwrapped was the steel-tube fuselage, resplendent in gray enamel. The seat and all controls were in place, including both nose and center-of-gravity towhooks. After a thorough inspection the fuselage was stored for the winter in the covered trailer, as there was very little to be done on it prior to covering.

Now the D-tubes for the wing were unwrapped. These were completely finished with all metal parts

attached and painted. As in all the wood joints throughout the kit, resorcinol resin was used for bonding. Materials and workmanship were of the best quality.

There remained a sizeable pile of smaller units, metal parts, aileron spars, dive brakes, and the prefabricated ribs for the airfoils. Looking at this collection of good things occupied the balance of the afternoon, after which the D-tubes and all the rest were carefully passed through the narrow basement window into the improvised workshop.

It was mid-October before work commenced on the tail surfaces. Assembly proceeded without any problems and the metric system of measurement proved to be simple and rapid for layout work. Aero-lite glue was used for small area joints, while epoxy resin was employed for applying plywood skins. Epoxy gives long curing times and allows the builder more freedom from the fear of a dry joint than he might have with conventional adhesives. In addition, smoother plycovered surfaces result from the lack of shrinkage, which is a most desirable attribute of the epoxies.

In November the D-tubes were secured in simple wooden jigs and measurements transferred from the plans to the spars, preparatory to gluing the ribs in place. Everything proceeded without difficulty for the most part and any problems that arose were promptly and courteously answered by return air mail from Martin Schempp.

The installation of the push-pull tubes completed the wings, except for building the ailerons and applying various plywood skin pieces. Ailerons were assembled in place on the wing without a jig of any sort and turned out to be very rigid and strong, when covered with the thin 45-degree plywood.