The Grunau Baby II

The Grunau Baby II has become one of the most popular machines in Germany for training in the several varieties of soaring flight, which are thermal and towed flights.

The basic idea for this type of ship, certainly well proven, are cheapness, simplicity, and ease of repair, which have been carefully regarded and applied.

The single strutted wing is in two parts, single-sparred, with torsion-resisting plywood nose, and it has a 44.3 feet span with a surface of 153 square feet. The employment of a single strut instead of "V" or "A" strut has proved itself successful in the old BABY and in the STANAVO and is also retained on aerodynamical grounds. For safety considerations (with respect to club-building of machines), the wing is attached to the fuselage, for the purpose of taking distorting strains at three points. In order to attain the desired controllability, the wing profile is flattened at the extremities about 3 per cent, becoming symmetrical at the end. The ailerons are held rigid mainly by a plywood box and "space-diagonals." The wing has an incidence of 2½ degrees. The wing tips are made especially light, in order to diminish the moment of inertia about the longitudinal axis.

The fuselage is hexagonal in section and is constructed in the well-known way, with plywood. Parachute space and quick-release hook for towed flight are fitted.

The first machine of this type was tested by Wolf Hirth and other well known pilots. Flight Instructor Stienig carried out the first loopings and other aerobatics. Only with difficulty can the ship be put into a spin.

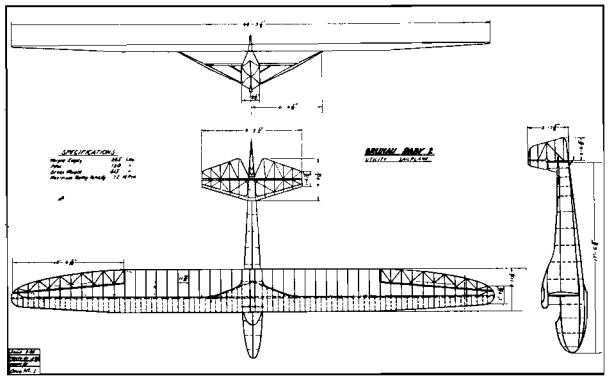

Diagram of Grunau Baby II

A Picture

It is midnight. Your editor is sitting at his desk—weary, but determined. Before him is material for the next issue of SOARING. It's good stuff, written and sent in by experts. That's fine. But—this is what is wrinkling his brow and setting his mouth into grim, harsh lines. WHERE ARE THE NEWS ITEMS FROM MEMBERS OF THE SSOA? What are they doing in Kansas and Virginia and Texas and California? Or up in New York State? Or down in Florida? And in all the other places where gliding enthusiasts meet?

SEND US SOME NEWS! FOR THE NEXT ISSUE!

The Belly-Slider Glider

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utilizing most efficiently the lift in the core of the thermal. With a Belly-Slider glider, however, the blood is not driven from the head and as a result the pilot could spiral tightly for long periods of time without getting sick. In the FS17 glider experiments which were referred to previously, tests were made with accelerations as high as 8 times that of gravity without the pilot suffering any blackout effects.

From the viewpoint of pilot comfort then, a Belly-Slider has everything in its favor save the slightly reduced angle of upward vision. By a suitable training program, a glider pilot would become as much at home in his Belly-Slider as are birds in their domain. It might not be remiss here to point out that many sailplane pilots who expressed adverse opinions on prone flying might have done so because they were trained in conventional ships. The influence of habits formed while flying present-day sailplanes must not be overlooked when analyzing arguments on this controversial subject. Perhaps our first landings in a Belly-Slider might give us that queer sensation we often experienced when we were about to make a bellywhopper in the old swimming hole.

While reading this discussion, you have been led through a few new concepts and have seen stress placed upon details which may, until now, have seemed trivial. Right now it would be wise to ask what can be achieved practically by such a radical design. We can point out the aerodynamical gains due to reduced parasitic resistance, to lowered skin friction and to almost entirely eliminated resistance. The pilot would enjoy a more comfortable posture, an especially desirable factor on long cross-country flights. At the same time the soaring pilot would be able to climb in smaller thermals without experiencing air-sickness due to reduced blood supply to the brain. In the final choice of design of a Belly-Slider, there would be two alternatives—a super performance sailplane with the conventional wing span of 50-60 feet, or a midget sailplane having a span of 36 feet and a performance as good as today's high performance jobs. The midget sailplane would, in addition, have a unique advantage in high maneuverability. It is not the intention of the author to go into the design details of Belly-Sliders but it was hoped that the details mentioned above would emphasize other important advantages of the Belly-Slider glider; namely, reduced structure and its concurrent reduced cost. In other words, a Belly-Slider will give you more performance and more comfort and consequently more miles per dollar than our present ships.

Through Courtesy of "Air Trails."

Hazard of Windshift In Landing

(*Continued from page 1*)

ranged so that cross-country flights are delayed or local flights grounded when the wind-shift of strong or questionable intensity is expected to cross the airport at or near schedule time of landing. Control tower operators, weather observers, dispatchers, station agents, airport managers and pilots should be on the alert to report approaching wind shifts to pilots in the air as well as on interphone and teletype circuits.