

estimate that an experienced crew of three could get the ship set up to fly in about three minutes without difficulty.

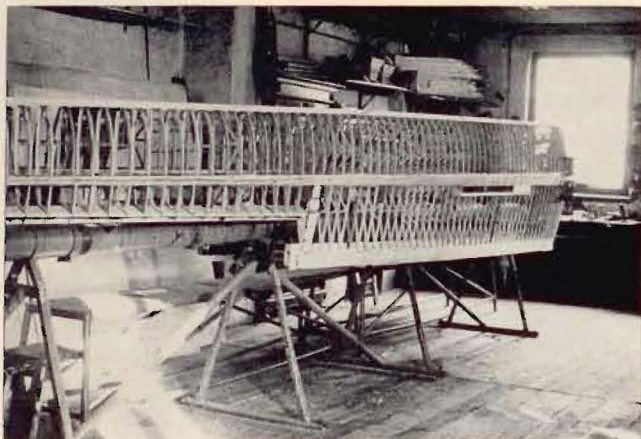


Photo by George Kern

Wing of the SF-27 showing extremely close rib spacing.

### Performance

A brief summary of the SF-27's performance characteristics is evident from the curve shown on the adjoining page. In general, this machine is very definitely in the high performance category, well-suited to both competition and cross-country soaring usage. The published figures on L/D vary from 32:1 to 34:1, and probably reflect Mr. Scheibe's conservatism. One look at the excellent workmanship, the careful attention to detail, and the close control of the trueness of its Wortmann profile through the close rib spacing and heavy plywood skin suggests that its performance is probably at least 34 to 1. The performance curves (see Figure 1) indicate not only the 34 to 1 L/D, but also show the excellent high speed performance as evidenced by the 2 meter sink rate at 94 mph! As to cockpit visibility, placement of controls, and seat comfort, these are second to none.

### L-SPATZ III

The L-Spatz III is an improved version of the L-Spatz 55. The Spatz is very popular in Europe as an economical single-place sailplane for practice and pleasure flying. The new L-Spatz III retains the good performance of the earlier machines: best L/D of about 28:1 and minimum sink of around 2.1 fps at 39 mph. In addition, improvements in stability, stalling behavior, and handling characteristics have been made.

The L-Spatz III has a high-performance wing planform: aspect ratio is 19 and span is 15 meters. With its low wing loading (4.6 lbs./sq. ft.), low induced drag, and tight turning radius, the L-Spatz III can climb in the weakest lift. This, coupled with its pleasant and safe flying qualities, make it an excellent sailplane to fly for fun and with which to develop skill.

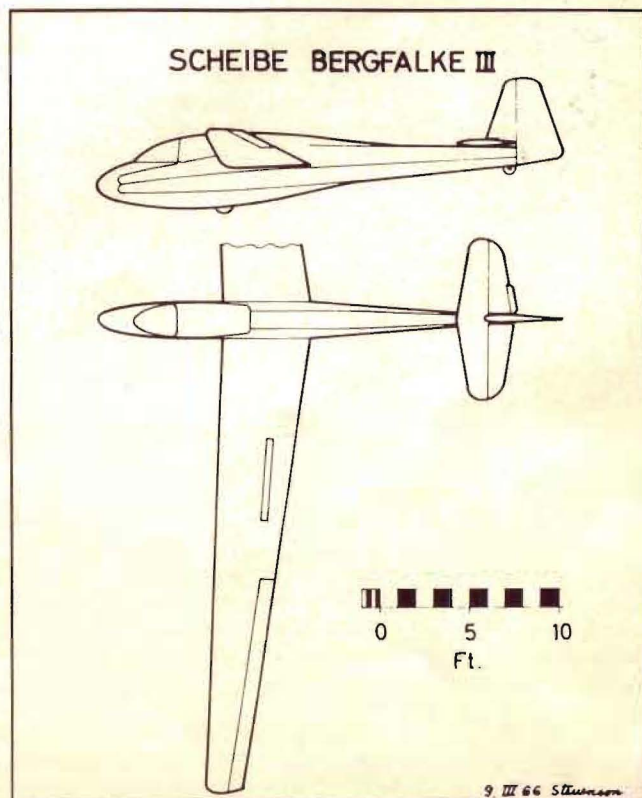
Specific improvements which have been made in the L-Spatz III include reduction in fuselage height and frontal area for better appearance and reduced drag, incorporation of adjustable rudder pedals, enlargement of airbrakes for better landing control, enlargement of both horizontal and vertical tail surfaces for improved stability and handling characteristics, addition of an elevator trim tab, and incorporation of slight wing twist to improve stalling behavior.

### BERGFALKE III

The Bergfalke is one of the most popular training sailplanes in the world. Among the reasons for this are economical operation, good flying characteristics, the large comfortable cockpit with excellent visibility from both seats, and the extra-strong structure. The Bergfalke III incorporates many improvements over the Bergfalke II/55, the most important of which are a strengthened wing spar allowing greater loading (about 419 lbs.), reduced fuselage height and frontal area, increased vertical-tail aspect ratio for improved control co-ordination, and addition of an eight-inch tailwheel for easier ground handling.

As would be expected from the large high-aspect-ratio wing with its distinctive sweepforward and freedom from drag-producing struts, performance is very good for a trainer. Minimum sinking speed is about 2.4 fps at 44 mph with two persons aboard (about 2.1 fps at 39 mph solo), and thus it is possible to soar with the Bergfalke III even in weak thermals. The low sink also allows longer flying time when automobile or winch launching is used. The Bergfalke's handling qualities are such that the student can make the transition to other types without difficulty. Particularly noteworthy is the Bergfalke's extremely gradual stall, with good aileron control throughout. Instructors especially appreciate the roomy cockpit with adjustable pedals, excellent visibility, and the shock-absorbing suspension of both wheel and skid.

Other noteworthy features of the Bergfalke III include provision of an elevator trim tab, separate couplings for winch and airplane tow, wheelbrake, and hinged canopy opening to the side. As with all these new Scheibe models, the two wing elements are coupled at the center by a single vertically oriented bolt, and assembly is very easily accomplished.



Three-view by David Stevenson