THE SAILPLANES OF EGON SCHEIBE

Photo by George Uveges

by George Kern

To best understand and appreciate Egon Scheibe's work, we should first get a brief glimpse of the man, his accomplishments, and philosophy. In a nutshell, Mr. Scheibe has devoted more than 30 years to the development and production of sailplanes, starting in the early 30's at the Munich Akaflieg where he helped establish a design tradition which he still continues today. This is evidenced by the high-aspect-ratio single-spar wooden wing with anti-torsion D-nose which was pioneered on the Wasserkuppe in the 1920's. As fuselage structure, he chose the efficient and rugged welded-tubular-steel truss, rounded out with wooden longerons and covered with fabric. The result was a long line of inexpensive, strong, easily repaired, and aerodynamically efficient sailplanes.

One of Scheibe's early designs, the Milan, an extremely advanced two-seater, now rests in a place of honor alongside the Vampyr glider in the German National Museum. Despite their long history, however,

The Milan, an early Scheibe design, now in the German Museum.

Scheibe's designs have remained modern. The successful competition sailplane, the Zugvogel, was one of the world's first production sailplanes with a laminar wing profile. Although he produces no all-fiberglass sailplanes, Scheibe takes full advantage of fiberglass for non-critical parts to form aerodynamically smooth shells such as forward fuselage sections, wing tips with faired skids, stabilizer and rudder tips, and wing-fuselage covers. Further, the Wortmann FX-61 series of wing profiles used in his latest creation, the high-performance SF-27, are generally regarded as the most advanced laminar sections for non-flapped sailplanes yet developed. Also, his company is a leader in the development of powered sailplanes, having produced a considerable number of single and two-place versions such as the Motorspatz and Motorfalke.

When questioned concerning the impact of the newer construction techniques such as fiberglass monocoque, fiberglass sandwich, honeycomb with fiberglass, or metal skins, Mr. Scheibe pointed out that despite their advantages he still feels that the average enthusiast's interest and pocketbook is perhaps better served by machines built using conventional wood and steel-tube structural members with fabric covering that can be easily, quickly and economically repaired either by the owner or by readily available skills. Although I am never at a loss for words in German, his succinct statement on this point left me no choice but to say, "Ja, Stimmt."

The success of Scheibe's formula can best be judged by the fact that, of sailplane manufacturers outside the Iron Curtain, he ranks as second only to Schleicher in volume of production since WWII. In 15 years Scheibe has built over 20 different types of sailplanes, powered sailplanes, and powerplanes, the SF-27 being the 27th Scheibe design. Most of these have been produced in quantities of 50 or more, and some, such as the Bergfalke II/55 and L-Spatz-55, have been built by the hundreds. The best evidence of their ability to withstand hard usage is reflected by the fact that the majority of these are in service in German gliding clubs. Needless to say, this is the type of market that looks to sailplanes which are good practical machines, are safe to fly, are economical to purchase and maintain, and which also have good performance and handling characteristics.

In the remainder of this article I shall give a brief description of the sailplanes Scheibe is presently producing, a detailed description of the new high-performance SF-27, and conclude with an account of a flight made in the two-place Motorfalke.