

# MORE MODERN SAILPLANES

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Last year's Nationals and Internationals showed all too plainly that sailplane design has come a long way in a very few years. The interest in such exotics as the D-36 tends to obscure the emergence of a whole new breed of competitive sailplanes—ones that you can buy off the shelf, like the Austria SH and SHK, the Edelweiss, the new K-6E and the Dart. Of the leaders in both contests none were flying in the 1950's and few existed even so short a while ago as the Internationals of 1963. Even the Sisu, so recently the last word in sophistication, seemed edged by the newer ships.

What are these new ships like? How do they fly? How do they perform against such standard measuring sticks of the last few years as the K-6 and Skylarks? In this article I have left out the one-of-a-kind super ships like the D-36 and SB-7 to concentrate on sailplanes that anyone can buy—if he happens to have

The K-6E, most recent variation of the famous Schleicher design.



\$6000 handy. Of these, the Austrias (SH and SHK), the Dart, the new K-6E and the Edelweiss seem of particular interest.

At the outset I might as well admit to some prejudice. I think that the Austria SH and SHK are the best of the lot—the best performing and best constructed sailplanes available today. As proof of performance take the fact that three out of five of the SH's finished in the first ten in the last Nationals as compared to one Sisu out of five and four K-6's out of 19 entered. Two of the Austrias finished third and fourth overall, one trailing the National Champion by only nine points. An Austria led on every day of the contest but the last.

Illustration of the Austria's all-around ability may be seen from this last contest day when the task was a 161-mile triangle followed by free distance, flown in weak to moderate weather. The first two ships to complete the triangle, my Austria and John Firth's arrived back at Adrian at three in the afternoon, over half an hour ahead of the next ship, Grosse's K-6E and forty minutes ahead of Dean Svec's beautifully flown Sisu. Only the rapidly deteriorating conditions downwind to the East, which shot down all the leaders in practically the same bean patch regardless of time, and my disastrous attempt to escape to the better weather to the south prevented this day from being another clean-up for the SH's. Austrias won three out of seven contests days, Sisis won two; a K-6E and the HP-12 getting the other two.

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In Marfa, at the 1965 soaring camp, with two Austria SH's, several Sisis and a Dart, among others, the Austria's winning ways continued. Much to everyone's surprise, here in Sisu country, the Austrias continued to put up the best times around the many 500-km triangles that Ben Greene, Dean Svec and I flew. In general, flying the same triangle and keeping in touch by radio, Ben and I averaged around 56 mph with the Sisu coming in at just over 50 mph. On one day when I flew a slightly different course, the Austria averaged 64.8 mph—just short of the South African world record. Numerous comparison flights with Dean's and Red Wright's Sisis showed that the Austria was very slightly better in climb in good lift and very slightly worse in glide at speeds up to 100 mph. Flying in close formation we found that ten to fifteen miles of flying were necessary before vertical separations exceeded five feet. These figures do not agree with the published polars which show the Sisu very much superior. Our feeling was that the Sisu seemed very sensitive to turbulence in both climb and level flight, dropping noticeably as each gust was encountered. Weights of pilot and equipment were similar within fifteen pounds for these runs, which were repeated frequently at various speeds. In short, from a performance point of view, the Austria SH sets a new standard for fifteen-meter ships.