

There is an irrational element to sailplane flying; ships that look almost exactly alike on paper fly very differently indeed. A few years ago the Schweizers published curves on the 1-23 and K-6 which showed the former at least the equal of the latter on all points. Yet in the Nationals four K-6s finished in the first 10, seven in the first 20, out of 19 entered. Only one 1-23 out of nine finished better than 35th. These figures are not intended as a slight to The Old Tin Bird but merely to show that the K-6 is one of the phenomena of the gliding world. This deceptively ordinary, relatively inexpensive, far from modern looking design continues to win and win. One wonders if the Six won't become the DC-3 of soaring.

All this leads up to the point that there are new things in the K-6 world. The new E model, which finished first and sixth this year, has a number of refinements, notably the longer canopy, lowered fuselage, Wortman wing and all-flying tail. There is no question that these improvements, together with other less obvious ones which have brought the price up to the Austria-Dart level of about \$6000 delivered, have given the old girl some new performance. Fortunately I had considerable opportunity to fly with both Rudy Mozer and Hans Warner Grosse during the Nationals so as to estimate performance. First, there is no question that the penetration is better on the new ship. I would guess that Rudy could fly some seven miles an hour faster than Wally Scott in his beautifully finished CR model for the same rate of sink. However, I felt that I had about the same margin on the E with my Austria SH. In climb there was little difference between the three types although I would guess that the E was a little inferior to the other two. I don't feel that I was doing justice to the Austria, having had only two brief flights in it before going to Adrian and could doubtless do a better job of thermalling now. Given a choice between the three ships, I would say the E was slightly better than the CR but not so good as the Austria for typical American conditions. Hans Werner Grosse, the winner, told me he agreed.

I cannot report on the handling of the E since I haven't had a chance to fly one, but everyone who has agrees that it has the same fine characteristics of the earlier model and is, if anything, improved. I did sit in Rudy's ship and found the cockpit distinctly cramped for my lanky six feet two. Headroom is definitely off compared to the higher CR model. Frankly I have always found the K-6s cramped for flights of over three hours, particularly when compared to the lounge chair comfort of the Austria. Missing too, are such conveniences as the self-connecting controls, adjustable-in-flight rudder pedals and superfine finish that have made the Austria the new standard for production sailplanes. Still, the E is a very potent ship and will certainly win a lot of contests.

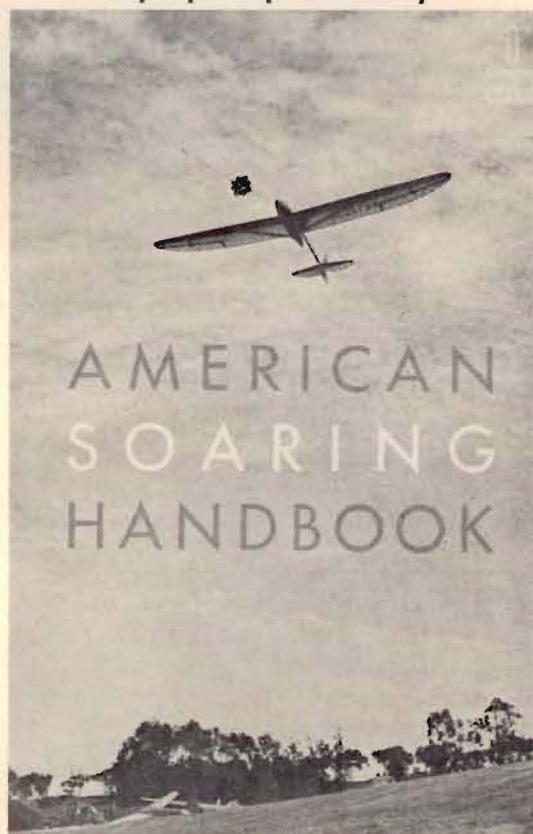
One problem with the E, shared by the less exotic K-6s and the Dart, is the relatively low placard speed both for rough and smooth air. On these ships the magic numbers are 87 mph for rough air and 125 mph for smooth. The SH allows 155 for smooth air although retaining a very conservative 87 mph for rough. Since the German criteria for rough-air placard is that speed which will allow the ship to withstand a sharp-edged gust of 2000 fpm most of us don't

take the rough-air-speed placard very seriously. A study made a year or two ago in England indicated that most sailplanes were reasonably safe at speeds up to 20 mph less than the smooth-air placard but fairly unsafe at the placard speed in strong turbulence. Some will doubtless ask why anyone would want to fly a sailplane at 130 mph or above. The answer is that modern ships with their extremely flat glides make it very difficult to judge the final glide so closely that one doesn't have a little extra altitude to use up at the last moment. With contest points worth about six per minute on the average task most of us find ourselves concentrating on aiming the nose right at the line and carefully ignoring the telltale airspeed. At the Nationals I never crossed start or finish at less than 130 mph and have been as high as 160 when strong lift was encountered on the final glide. This is only nervous in the exceptionally strong Austria but would be downright panicky in a K-6 or Dart. Then too, contest committees all too often still set finish lines that require high-G pull ups or turns at these speeds in order to finish in the right direction. All of this is a little less thrilling in a stronger ship

Recently, thanks to the kindness of US distributor Ken Livingstone of Washington, D. C., I had the opportunity to fly the French C-30S Edelweiss, runner

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