

# OUTLOOK FOR STANDARD CLASS SAILPLANES

by BORIS CIJAN

The Standard Class came to maturity in the FAI World Championships which took place in Leszno and Butzweiler and can now stand by itself. Of a total of 61 sailplanes at Leszno 39% were Standard Class, and Standard Class designs and at Butzweiler 63% were Standard Class. At Leszno there were eleven different Standard Class designs and at Butzweiler twelve different designs, and of these five were sailplanes which had not hitherto been seen.

New designs are being built to the FAI Specification and efforts are being made to minimize the fuselage cross-section but still keep within the requirements. Even so, one still has to stuff a 1.9 metre man into such a super cockpit, assuming the normal cockpit as that in the Weihe. The "Draft Specification for FAI Standard Class Gliders" defines no limitations on cockpit dimensions and, for example, the Polish "Foka" was within its rights in competing in the Standard Class despite its low narrow cockpit. But the FAI Specification does recommend as follows:

"Design and construction to be cheap, safe and easy to maintain and repair, in an effort to encourage soaring throughout the world,"

so here is some sort of technical inconsistency. To what extent should one try to improve the performance and produce a racing machine only for World Championship purposes? The "Foka" which appeared at Butzweiler can, in journalistic jargon, be considered to be a "Super-Kite," but from the technical point of view it is certainly a positive effort to see what one can actually achieve. This positive effort must be superimposed upon the idea of the Standard Sailplane and one could develop from the "Super-Kite" an "FAI Kite" which would have a far better performance than, for example the "Olympia." The positive merits of all these super machines should have their applications to the simpler types.

The deviation which the designers of the "Foka" made in connection with the fuselage cross-section as far as the FAI Specification is concerned

must be rated as "Super." Where is the border between the design of a "Super-Kite" and a normal Standard Class sailplane? The answer is simply a more precise definition in the FAI/OSTIV Specification, but there is another question. Should one rush in with administrative rules and immediately make limitations on the fuselage cross-section instead of recommendations? People believe that the Open Class should be used for unlimited technical developments in new aircraft and one tends to forget that there is no reason why such freedom of development should not be given to the Standard Class, and for this reason we should not rush in with modifications of the specification in order to clarify the differences between the Super and the normal types. Today we have in many countries very superior Standard Class sailplanes which are in every way consistent with the Standard Class idea. The Ka-6 and the Standard Austria which have gained design prizes, and the Breguet 905# "Fauvette," the "Zugvogel IV," the "Skylark II," the "Pik-3C," the Italian aircraft M.100 S and E/C 39, the Mucha Standard and American SGS 1-23H-15 and many other 15 meter aircraft are already not only outstanding all-round club aircraft for high-performance flying and training, but also outstanding contest aircraft. If one considers that in the case of all these aircraft, there are still many improvements that can be made in performance, then the C.V.S.M. and OSTIV have achieved what was desired. The technical development must be encouraged and a few "Super-Kites" will stimulate and influence this development.

During the OSTIV General Conference in Cologne, a proposal for a monotype (one-design) sailplane was made by the Polish Aero Club. The idea was that everybody would fly under the same technical conditions in order that one could evaluate purely sporting performances. This well-known Olympic idea will come to pass one of these days. The introduction of a One-Design Class would mean, however, the immediate end of the Open Class. In Cologne we had several illustrative examples. Two

outstanding Standard Class sailplanes — the Ka-6's flown by Jensen (Denmark) and Tandefelt (Finland) operated in the Open Class and Jensen actually came 7th. This does give some indication that, from the purely sporting standpoint, the Open Class has lost importance. If in addition we take, for example, Witek with the "Foka" as if he were flying in the Open Class, to which nobody could object, he could have been the absolute World Champion (Hossinger gained 5102.9 points and Witek 5201.9 points, although they were in different racing categories), but according to the FAI requirements, the "Foka" was entirely within the requirements for the Standard Class.

In "Sailplane and Gliding" for April, 1960, R. E. Schreder (USA) proposed that during the World Contests all competing sailplanes should be evaluated under the same points system, and that there should be only one World Champion who would have the highest number of points, quite regardless of class of aircraft he flew. This suggestion is basically sound, not only from the technical but also from the sporting point of view, and it would be wise for the C.V.S.M. to give careful consideration to the suggestion for the next World Championships. If they accepted it, it would be a further step forward in the direction of preparation for a One-Design Class. If we could gather a background of statistical information, it would ease the problem for the selection of the best design for a One-Design Class.

This automatically raises the question: When should the decision on a One-Design Class be expected? We know that the optimum aircraft is a function of the state of technical and meteorological development. If in the year 1938 the "DFS-MEISE" (Olympia) with 15 meter span had a gliding angle of about 1:25, we now find that a present-day aircraft of the same span has a gliding angle of 1:35. One must therefore realize that a given optimum is only valid over a certain time interval. In the year 1957 it was publicly suggested by a number of people that it was too early for the first Standard Class World Championships to be held in 1958, but in fact it was not too early. Even in the year 1958, suitable new designs were at the starting line, and proved themselves as worthy performers in the World Championships.

In the year 1962 the percentage of  
(Concluded on page 18)