

## LETTERS (cont.)

lates to the U.K. and is thought to be representative of soaring weather. But the data were obtained from aeroplane operations and may not be accurately applicable to sailplanes: it happened to be the best data available at the time.

The result of the calculation was that if every pilot always crossed start and finish lines at the never-exceed speed, there would be about one incident per championship in which one out of about 8 sailplanes exceeded its proof load factors. This frequency seemed far too high, so it became necessary to choose a speed which would give an acceptable frequency of achieving proof load under contest conditions. 15 knots below the never-exceed speed would lead to about one exceedance of proof load per 100 championships (i.e. one such occurrence per 8000 contest-participations). On this rather arbitrary basis, competitors were advised that such a speed was reasonable. Whilst the basis for this figure is by no means as firm as one would like, it has the following merits:

(i) It is obviously appreciably safer than flying at the never-exceed speed;

(ii) It looks reasonable to most pilots and is therefore likely to be respected;

(iii) It is better to produce some rough advice of this sort, which seems to confer adequate safety, rather than try to enforce a ruling that pilots should not exceed the maximum rough-air speed in order to achieve almost complete safety. Most pilots would regard such a ruling as being excessively restrictive under contest conditions and would tend to ignore it.

The important features of all this discussion are that it only applies to gliders designed to BCAR, operating under assumed U.K. conditions, and it was only intended as *advice* to pilots engaged in contest flying. It does not necessarily apply to gliders designed to other requirements, and it would certainly not apply in the presence of Texas-style thermals. Also, it is most important to appreciate that whilst the rough-air speed confers a very high degree of safety (in that the glider usually stalls before damage occurs), the risk increases very rapidly as the speed is raised towards the never-exceed figure. So unless one has some pretty good statistical gust data for the region in which one is flying, it pays to respect the rough-air figure rather more than George Moffat implies.

There are various consequences of this discussion. First of all, it looks as if design requirements ought to take more account of the higher speeds at which sailplanes are required to operate under current conditions. The never-exceed speed used to be a figure approached only with some trepidation by masochistic persons engaged in aerobatics. Now, one wishes to use high speeds under normal operating conditions. Secondly, more research into the spectrum of turbulence actually encountered by sailplanes seems to be necessary. The recent OSTIV papers from Poland and the USSR represent useful steps in the right direction.

What was originally intended to be a letter seems to have turned into a considerable article, but I cannot forbear a comment on Mr. Moffat's observations on the "Dart." I should first declare my

interest, being part-owner of a new 17R. This has a two-piece wing, as opposed to the four-piece wing of N-88966 in its 17m. configuration. So the ailerons run out almost to the tips, and give a much better roll rate than those of the 15-17 version flown with the tips attached. Also, the rudder chord is increased by three inches, so the overall handling qualities of the 17 now truly match those of the 15m. version, about which Mr. Moffat is rightly ecstatic. Nor is it necessary to have canopy hinges looking like vortex generators: the customer can have flush hinges if he so desires. There are sundry other improvements since "4E" emerged from Kirlymoorside. It is, of course, difficult to avoid a "starved-horse" effect on wooden machines, but the ultimate test is the achieved performance. Measured best glide ratio is around 37, and although the scatter on the test results is more than we would like, this figure is more representative than some of the starry-eyed "calculated" figures which one sees quoted as gospel. This year's British Nationals ought to be very interesting indeed.

FRANK C. IRVING  
(Chairman, BGA Technical Committee)

## Clarifications

Sir:

In all fairness, I believe the information given under News Notes in the April issue regarding the Foka series sailplanes to be in error and requires clarification in order that readers will not be sitting idly by awaiting a new model of this famous sailplane.

The future of the Foka is entirely dependent upon the future of the Standard Class within FAI. If Standard Class is retained, the Foka Four (presently in production) will continue to be the Standard-Class machine of the PZL line for quite some time. Of course changes will undoubtedly be made in the future, but none are planned at the present time.

If the Standard Class is discontinued it is expected that a new Foka design will evolve which will be of increased span and higher performance and will possibly incorporate the T-tail and other changes which were mentioned in News Notes. However this evolution has not even reached the drawing-board stage as yet, and is certainly well in the future as far as production and ATC goes.

The last sentence is correct, the SZD-30, a club-type sailplane with T-tail and performance ranging somewhere between the K-6 class and the current Foka Four will probably go into production and be available in this country sometime next year. It will be lower in cost than the Foka Four and is designed to meet the needs of the club and less-serious pilot.

In addition Type-Certification work is progressing rapidly on the Bocian, the Polish two-seater trainer and cross-country ship. This should be available in the U.S. early next year with full ATC and it is expected to fill a big gap which exists in the availability of good two-place ships for training and moderate cross-country flying. The price on this has not yet been set, but it will probably fall considerably lower than the ships available now such as the K-7 and Blaznik.

As distributors for this fine line of sailplanes we feel that this information is the very latest correct picture and will be more than pleased to advise you of any changes in current plans which differ from the above.

JOHN RYAN  
President, RAINCO

Phoenix, Arizona

Sir:

I have read George Moffat's article in the March issue with great pleasure. In the interest of facts, however, I find it necessary to correct George on several points concerning the K-6E.

The K-6E does not belong in the class of the \$6000 sailplanes because it costs a great deal less. In fact \$1150 less than the next lowest priced sailplane described in the article. It is therefore the outstanding exponent of the Standard Class. As we recall this class was devised to provide the soaring pilot with reasonably priced sailplanes that nevertheless have the potential to win national and international contests. The K-6 in both the CR version of earlier years and the E version of 1965 vintage pretty well fits that description. For this reason it is of only secondary interest if the microwaviness of the K-6 finish matches that of the fabled RJ-5 or not. The perfectionist can always match the best commercial surface finish by investing approximately \$50 in microballoons and epoxy as well as about two months of his spare time. There are three such microballooned K-6's in the Greater Detroit area. As to the roominess of the cockpit. There are two types of seats available, the normal seat as seen in both K-6E's at Adrian and the deep seat for tall pilots. The latter will accommodate 6-ft. 4-in. pilots like Heinz Huth, who is known in Germany by the nickname "Der Lange."

Generally I feel that George overrates the contributions of his mount in the Nationals while not giving enough credit to his own accomplishments as a pilot. In my opinion George flew a bold and brilliant contest. He knew just how far to go when taking a calculated risk and on all days but the last things came up right for him.

RUDOLPH W. MOZER  
Warren, Michigan

## Voice of Dissent

Sir:

Seems as if you need some advice on how to put out the magazine, at least that is what the mailing shows. So here is some. Keep up the good work!

I don't agree with the people who think I should pay X bucks a year so some club member can see his name in print. The CLUB NEWS is important to a degree, of course, and should be in very small type condensed in the rear of the magazine. If he wants to see his name he can do it, and support *Soaring* at the same time, by running a classified ad carrying his name. This is relatively inexpensive. Or break some records. Or write a good article.

Let's encourage ads like Rainco's that are good reading and tell us what we want to hear. Even ads can be interesting.

Let's have more hairy I-Learned-Never-To-Get-Out-Of-Bed-From-That-Type features. I propose a new feature