Class Distinction For The National Soaring Contest

WE have been pondering long and loud the proposal made by Hal Cronkhite that the contestants at the 17th National be divided into three classes, A, B, and C, according to the type of sailplane flown. He suggests that a champion be selected for each class, but that the National Champ be the winner of the greatest number of points—all contestants flying by the same rules.

Regardless of how the classes are distinguished this procedure merely makes room for several more champs at the Nationals. Whether this is a desirable feature at this time or not depends on our general aims for the Soaring cause. If it is the purpose of the National Contest to select the National Champ, then there is no room for class distinction, but if it is the aim of the sponsoring agencies to foster a more wide-spread participation and to encourage beginners and youngsters to come to the Nationals, then the idea of class distinction has definite merit.

The Texas Soaring Association has many times in the past demonstrated its sincerity in bringing new recruits into our all too small membership. We need not then question their purpose in recommending soaring class distinction. The real question appears to be whether this separation of contestants will achieve its aim. For the answer to this question we need merely to look back into the history of our sport to the period when utility gliders and performance sailplanes competed at Elmira. The rules did not interfere with the selection of the National Champ from among the pilots of the three or four high performance sailplanes. On the other hand, there were quite a number of utilities polishing the ridge for hours on end. At one time the spectators had a splendid view of some 18 ships cruising back and forth before them. Each of the utility pilots enjoyed himself and gained valuable experience so that he could later on compete with the "hot shots."

Later on a junior class was substituted for the utility class. The age of the entrant was used to determine his classification. The spirit of this ruling also brought in a few new members. However, in soaring it is not the age of the contestant that really distinguishes an expert from a beginner. It is really his soaring age or experience which counts toward his ability to compete. Therefore some of us are mere infants when we must stack our experience up against the 2000 hour boys.

Now we have a return to the class distinction based only on the sailplane. In other words, we will be content to have a beginner compete with the hot shots if he has a ship capable of keeping up with them.

This is Hal Cronkhite's proposal—let us take the known performance of sailplanes and from these data divide the field into three classes. Hal made the suggestion that the criterion for the classes be the product of the best glide ratio and the speed at which it occurs divided by the minimum sinking speed. If this factor be examined it will be seen that it becomes glide ratio squared times the speed at which best glide is obtained. This factor puts too much emphasis on the maximum glide ratio and tends to clutter up Class B. A simpler and more even distribution is obtained if the cross-country soaring factor is taken as maximum glide ratio times the speed at which the maximum glide occurs. If this is done the following class distribution results:

Ship	Best Glide Ratio	Speed (mph) of Best Glide	Factor
	Class A		
RJ-5	35	48	1700
1-21	26.5	55	1460
Weihe	31.5	44	1390
Zanonia	28.8	46	1330
Orlik	29.0	44.5	1290
Rigid Midget	22	55	1210
Flat Top	26	40	1040
1-23	23.5	42	990
TG-4A (molded nose)	24	41	980
Olympia	25.6	36	920
	CLASS B		
TG-32	22	40	880
TG-3A	22	39.8	875
TG-4A	22	39.5	870
TG-2A	19	42.5	810
	CLASS C		
Kite	21.6	35	760
Baby Bowlus	20	35	700
Baby Grunau	17	37	630
BG-6		----	-----
1-19		-	-----

It will be seen that the classes have been divided according to this plan:

Class A Factor exceeding 900
Class B Factor between 800 and 900
Class C Factor below 800

In considering the two-place ships the single-place performance was taken since it gives a lower factor. The contestant then has a chance of flying two-place in the lower category. It should also be optional whether a Class C owner wishes to compete in Class B or even Class A but the higher class ships must not be permitted to fly in the lower classes. (After all, some of the boys in Class C need a pair of boots too!)

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