other factors which give a clue to performance made under competitive conditions. For example, the circling speed of a sailplane in an upcurrent, even though this is purely a subjective figure, does give an indication as to how well a plane might do in very tight conditions. These speeds as given by the pilots at one time or another for the planes with which we are most familiar are as follows.

Breguet 901—	41 M.P.H.
RJ5—	45 M.P.H.
Jennie Mae—	55 M.P.H.
1-23D—	40 M.P.H.

The terminal velocity of the RJ5 is 130 M.P.H., while that of the Breguet 901 is 80 M.P.H. As a result, the landing of the Breguet in a tiny field is no more difficult than the landing of a 1-23D. The landing of the RJ5 must be treated with a great deal of respect even at the sacrifice of a certain amount of distance. Landing in a small field with the Jennie Mae is a nerve wracking experience according to Maxey.

The other figure is the rate of sink at high speeds of 90 to 100 M.P.H. My figures for this are so questionable I will not quote them until I have further verification.

The last event cannot be used for any comparison since the amount of turbulence experienced varied so tremendously with the different pilots. Seven planes finished. All were high performance laminar flow planes except one—the Olympia flown by Fedderson. MacCready saved his neck when he got in that terrific pocket of turbulence because he was able to keep the speed of the Brequet 901 down. Ten M.P.H. faster and it might have gone to pieces. The Elfe M. landed at its goal, but it took ten men to pull the wings off the fuselage, as its fittings had sprung. Ivans was not quite able to make the goal and you can judge the turbulence he was in from the accident he had while landing. Completion of the task would have boosted his place one more in the final rating. Wills has written vividly of the turbulence he was in[3]. Yet the Olympia finished. So what can you conclude?

The Meteor was the highest performance plane in the Internationals with a glide ratio of 40 to 1. If the radio antenna (Yugoslavic regulations) was eliminated its glide ratio might go up to 44 to 1, which has been stated several places. With equal pilots, the RJ5 would probably beat it in competition—which statement will undoubtedly raise some discussion. The Meteor was built for Texas conditions. The only way a real comparison can be made is for Texas to offer to sponsor the next Internationals with all expenses for all the pilots paid in toto. The foreign pilots have read repeatedly of the tremendous distances possible in Texas. Typical headlines—"403 Miles was Practice." Texas propaganda has reached such proportions that our foreign friends would hardly consider any other spot in the U. S. no matter what its advantages. Texas has certainly talked itself into a deal and there is only one way they can save "face." Will they do it and can they stage an International without booboos?

References 1. 2 & 3. Sailplane and Gliding Oct. 1956.

PERFORMANCE CHART

Planes with Laminar Flow Airfoil	Span feet	Wing Area sq. ft.	Wing Loading lbs./sq. ft.	Aspect Ratio	Flying Weight	Maximum Glide Ratio	at m.p.h.	Minimum Sinking Speed ft./sec.	at m.p.h.	Maximum Speed
Meteor (Orao III)	65.6	172	6.3	25	1111	42	56	1.9	48	155
R J 5	55	123.5	5.4	24.5	692	40	50	1.82	46	
Elfe M	57.5	142	6.83	23.1	887	40	60	1.75	42	
Jennie Mae	48	99.6	7.8	23	725	40	60	2.3	56	150
Breguet 901	56.8	161	5.6	20	913	35	47	2.1	43	136
Skylark III	58.5	173	4.4	20.5	789	32	46	1.8	40	124
Eon Olympia IV	54.6	161	4.7	17.7	568	36	51	2.17	47	
Zugvogel	52	149.4	4.9	18.3	759	34	49	1.8	40	124
V.M.S. Demant 40	58.5	172	4.8	20	858	34	54	2.17	42	149
Planes Without Laminar Flow Airfoil										
1-23D	50	160	4.36	15.6	700	29	52	2.1	40	132
Sky	58.5	185.6	4.2	18.7	798	30	46	1.9	39	116
Orao II	61.7	191	5.0	20.3	1001	37	51	1.9	47	136
Jaskolka Z	52	146	4.8	18.8	666	27	50	2.4	42	155
Olympia	49.3	161	3.7	15	565	25	41	2.3	34	130
Weihe	59.1	198	3.73	17.7	738	31.5	47	2.0	40	133

INTERESTING GLIDERS

by PETER M. BOWERS

One of the most interesting of the experimental cargo gliders produced for the U. S. Army during WW-II was the Laister-Kaufman XCG-10A "Trojan Horse." The name was rather appropriate, in that it was built mainly of wood, and was intended as a troop carrier.

Two ships were built, one as the XCG-10 and the second as XCG-10A, with capacity for 30 armed troops or 5 tons of cargo. The first was later redesignated as XCG-10A and the interior was revised to accommodate 42 troops. The cargo area was essentially the same in both ships, however, and was 30 feet long, 7 feet wide, and 8½ feet high, large enough to hold either a 155mm howitzer or a 2½-ton truck.

The configuration differed considerably from the Waco CC-4A in general use. Instead of having the forward part of the cabin hinged to open to permit entry of crew and cargo, the King-size L-K loaded cargo from the rear through clamshell doors. The tail surfaces were carried at the end of a thin fuselage extension that looked almost like the tubular boom of a Bowlus Baby when compared to the bulk of the cabin section. The 105-foot wing was of wooden cantilever construction with fabric covering, and was fitted with Fowler flaps. The fuselage and/or boom was likewise of wooden construction, but plywood covered.

This type of construction did not lend itself to easy mass-production, and the design was not considered to be expendable as were the boxy Wacos. While the prototypes proved to be efficient at the work for which they were designed, the construction was somewhat of a handicap, and production orders were placed for only 100 of the type. This order was canceled following the end of hostilities, and only three in addition to the two prototypes were flown.