

14 kg. instead of 16 it stood to receive an extra of eight points per 100 km. on top of the 10 points, or 18 points altogether. This is the extent, in fact, to which Capt. Broad was able to save his fuel.

The rating for the smaller machines was 10 points for a fuel consumption not exceeding 11 kg. per 100 km. and one additional point for every 175 grams consumed less than 11 kg. The maximum number of points that could be obtained was limited to 30. Wonders were accomplished in the matter of fuel saving. Plonczynski, the Polish pilot, on his Salmson-powered RWD 'plane, affected the greatest saving. He only used 15.8 kg. of fuel. His machine belongs to the second category. He won 30 points on this stunt—you cannot really call this feat by any other name—*i.e.*, the same number as Morzik, who used 22.36 kg. The Polish machines appear to possess particularly good air-sailing qualities, for Plonczynski's partner, Wieckowski, on an exactly similar machine, achieved an almost identical saving in fuel consumption, for he only used 16.14 kg. It is stated these machines only averaged 38½ miles an hour on the consumption trial, but I was not able to verify this yet. The only German flier to attain a similarly low consumption was the well-known sail-flier Dinort, who on his Argus-powered Klemm used 19.34 kg. for the total distance, which measures not quite 192 miles. All the engines of these competitors were, of course, thoroughly tuned down to this low consumption, and for this reason I do not consider this consumption test is really of very much practical value. No private owner flying a machine and finding himself short of fuel will be able to make alterations to his carburettor during flight and attain a fuel saving anywhere near these figures. What, therefore, is the use of these tests? Most of the machines, that otherwise take off very readily from the ground, taxied almost the whole length of the field to get into the air at all, so small were the jets put into the carburettors.

Monday, August 4, it was intended to carry through the take-off and landing tests over an obstruction 8 m. (26 ft.) high; but the weather was again rather inclement, and the international sports committee decided to employ the day in rating the building features and equipment of the machines. The results of this rating will not become known before the afternoon of Tuesday, but they are likely to affect the number of points gained by the various competitors, of whom now only 32 are left, to a very considerable extent. In view of the many comfort features of German 'planes, it is quite conceivable they will gain an ascendancy over the British machines.

If one considers the technical tendencies evident in the competing machines this year, one is struck with the now almost general adoption of wheel brakes and of more powerful engines. It was only a few years back aeroplanes with 35-h.p. and even 20-h.p. motors were met in such events. That now is entirely a matter of history and even in Germany, where quite a number of Klemm 'planes with 20-h.p. Daimler-Benz motors used to fly, the owners have mostly preferred to install stronger engines. A certain Italian make of engine, that two years back was quite a favourite, has disappeared almost entirely. The only engines met in this contest are "Gipsies," "Cirrus," "Genet" of British make, "Argus" (in large numbers), Siemens and Halske SH13a, and two new BMW's of German make, Salmson and Renault of French make, an American Warner on Carberry's American "Mono Special" and two or three Czecho-Slovakian Walter engines. And the lowest powered of them all is the Salmson, which normally is rated at 40-h.p., but is known to be capable of about an extra 10-h.p.

The weights of the machines form quite an interesting study. Most of the competitors, of course, made the best possible use of the margin of 15 per cent. allowed them over the permissible weights of 400 kg. for machines of the first category, and 280 kg. for those of the second. Whatever

Position of Competitors on August 2

Competition No.	Country	Pilot	Class	Points
K3	GB	Capt. H. S. Broad	I	292
B3	Gn	Morzik	II	288
B8	"	Poss	II	287
C1	"	Notz	II	286
K8	GB	Miss Spooner	I	284
C7	Gn	von Massenbach	II	281
F2	"	Polte	II	281
E8	"	E. Krüger	II	281
B9	"	O. Dinort	II	274
C5	"	von Köppen	II	273
K7	GB	J. E. Carberry	I	273
K1	"	S. A. Thorn	I	252
B7	Gn	Osterkamp	II	250
P3	P	Plonczynski	II	244
P4	"	Wieckowski	II	244
A2	Gn	Lusser	I	239
A9	"	J. Risztics	I	239
M1	F	Finat	I	229
C9	Gn	Peschke	I	225
L3	F	Arrachart	I	212
D1	Gn	Dr. Pasewaldt	I	201
E2	"	Gothe	I	192
E6	"	Siebel	I	192
C6	"	von Waldau	II	191
D5	"	W. Spengler	I	181
E1	"	H. Benz	I	181
C3	"	von Freyberg	II	174
A8	"	Roeder	I	166
T5	Sp	Archduke Habsburg-Bourbon	I	162
K6	GB	Lady Bailey	I	156
P2	P	J. Bajan	I	125
O1	"	J. Gedgowd	I	106
K4	GB	H. J. Andrews	I	73

GB = Great Britain. Gn = Germany.
P = Poland. F = France. Sp = Spain.

Machines in Class I are allowed a tare weight of 400 kg. plus 15 per cent. Those in Class II a tare weight of 280 kg. plus 15 per cent.

weight there was to spare was utilized to install extra equipment and comfort to gain points on that score. Capt. Broad's machine, which at the utmost was allowed to weigh 460 kg., actually weighed 454.5 kg., *i.e.*, he was only 5.5 kg. on the safe side. Morzik almost had 10 kg. to the good. His machine might have weighed 322 kg., but it actually only scaled 312.3. The third man on the list, Poss, allowed his Klemm-Argust to weigh as much as 320.8 kg. But closer still to the limit came Fauvel's, the French pilot's, Mauboussin, which approached the limit to within 100 g., weighing 321.9 kg. His machine, however, is out of the contest. As yet it is, unfortunately, not possible to get full particulars of the reasons that led to so many competitors dropping out. As we already reported, quite a number of failures are to be attributed to propeller defects. Most failures, however, are probably due to engine, carburettor and magneto defects, which is not surprising considering the exceedingly wet weather the competitors had to face in the air tour. The organisers intend making a full technical report later on after the competition is over, when they will be able to gather all the particulars from the various stops of the air tour. That will be more important than the whole contest, as it will give manufacturers the necessary clues for further improvements that have to be effected.

(To be continued.)

