

FLIGHT

There are many more phases of the stability problem that were discussed at this most interesting meeting, but space precludes a full reference to all of them. There is the all-important query of stability *versus* control, for example, and under this head Mr. Dunne made a very good point anent the popular supposition that inherent stability implies absence of sensitiveness to personal control. As he remarked, why should it be supposed that instability and controllability go hand in hand, and on what grounds should a stable aeroplane be expected to be less sensitive to control than an unstable system?

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ROBERT B. SLACK.

PILOT.

ALTHOUGH the subject of our portrait this week had started work at the Blériot school at Hendon early in 1911, it was not until June of last year that he came prominently before the public eye. Robert B. Slack was born at Nottingham, on April 14th, 1886, as he puts it, through no fault of his own, and when schooling was over he was apprenticed to motor engineering, and spent about nine years in Nottingham and Glasgow. This fact doubtless accounts for the success which has attended Slack as a pilot of aeroplanes, especially in making cross-country journeys. It was in June of last year that Slack started off from Hendon on a Blériot monoplane for a 1,200 miles tour of England and Scotland in the interests of the International Correspondence Schools. Among other places visited during the tour were Leicester, Nottingham, Birmingham, Manchester, Southport, Morecambe,

In the limit, the safety of any vehicle depends on the driver, and for our own part we believe stability and control to be inseparably connected as fields of research. An aeroplane is different to a kite; it is required to obey the will of the pilot, and any stabilising system that ignores the problem of voluntary control fails to take account of the most important point of all. In so far as the factor represented by personal control resolves itself into steering the machine, the factor represented by stability resolves itself it seems to us, into being able to continue the steering movement with fixed controls indefinitely without danger.

Wigtown, Carlisle, &c. This journey safely concluded, Slack then embarked upon a further trip of 700 miles in the same interests, this time round the south-east of England. Subsequently the Blériot machine was presented to the War Office by the International Correspondence Schools, and it is now doing good service with No. 3 Squadron of the Royal Flying Corps at Netheravon, on Salisbury Plain.

Not so very long ago, Slack was engaged by the Grahame-White Aviation Co. as pilot and assistant engineer, and he has recently been doing a deal of flying on the Morane-Saulnier machines, two of which he has brought over from France to Hendon by the aerial way. In addition to the Blériot and Morane monoplanes, Slack is familiar with the handling of the Nieuport monoplane and the Caudron biplane. "THE HAWK."

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"DAILY MAIL" WATERPLANE CIRCUIT OF BRITAIN.

At 6 a.m. to-day, Saturday, the competition opens, and entrants may start thereafter at any time so long as they complete the prescribed course, within the maximum time—72 hours—from starting, by 6 p.m. on Saturday, August 30th. The official starting line will be in close proximity to the "Enchantress," the former Admiralty yacht, which is now the floating club-house of the Royal Motor Yacht Club, and is moored in Southampton Water, off Netley Abbey. It will serve as the headquarters of the officials, while the Admiralty have granted the use of the accommodation at the Calshot Naval Station for the housing of the competitors' machines.

THE COURSE.

As Spithead is a prohibited area under the Aerial Navigation Act, special permission has been granted by the Home Office for the competitors to fly over it. The machines will be steered between the Calshot and Calshot Spit lightships, then in a direct line to the Horse Sand Fort, and so out into the English Channel. Round the south coast, past Brighton and Folkestone, the pilots will make their way on their 144-mile journey to the first control—Ramsgate—being careful to pass Dover at a distance of more than 800 yards from the end of Admiralty Pier, and keeping under the 300 ft. height-limit fixed in the special permit granted by the Government. From Ramsgate there will be the shortest stage—only 96 miles—past Harwich and Lowestoft to Yarmouth. Then on past Cromer, crossing The Wash and the mouth of the Humber to Scarborough, a distance of 150 miles. As the circuit progresses the stages tend to become longer, so the next control is not reached until 218 miles have been covered past Whitby, Sunderland, Berwick, across the Firth of Forth, past Dundee and Montrose to Aberdeen. Then follows a comparatively short stage of 134 miles past Peterhead and Banff to Cromarty, in the Moray Firth. The next stage is the shortest of all, 94 miles over the Caledonian Canal to Oban. From there the homeward journey will be continued down the Sound of Jura to the north-east coast of Ireland, and skirting this the 222-mile stage will finish at Dublin. The next stage is the longest of all, 280 miles. After crossing St. George's Channel to Milford Haven, the Bristol Channel will be passed on the way to The Lizard, and so round the foot of England to Falmouth. The last stage of all is 202 miles, and, passing Plymouth, Torquay and Weymouth, reaches to St. Catherine's Point, in the south of the Isle of Wight, then round to the Nab Lightship, and so back to the starting-point off Netley.

THE STAGES.

Summarised, the nine stages of the race are:—

Southampton to Ramsgate	...	...	144 miles
Ramsgate to Yarmouth	...	...	96 "
Yarmouth to Scarborough	...	...	150 "
Scarborough to Aberdeen	...	...	218 "
Aberdeen to Cromarty	...	...	134 "
Cromarty to Oban	...	...	94 "
Oban to Dublin	...	...	222 "
Dublin to Falmouth	...	...	280 "
Falmouth to Southampton	...	...	202 "
Total...	...	...	1,540 "

The officials and headquarters at the various controls appear in the Royal Aero Club Official Notices, p. 892.

THE COMPETITORS.

Those taking part in the competition are:—

No.	Pilot.	Passenger.	Machine.	Engine. h.p.
1	H. G. Hawker	H. Kaufer	Sopwith	100 Green
3*	James Radley...	G. England	Radley-England	150 Sunbeam
4	F. K. McClean	Gus Smith	Short	100 Green

* Now withdrawn.

All the competing machines are biplanes, and descriptions with scale drawings of the two first, as well as of the ill-fated Cody machine, which was to have taken part, will be found elsewhere in this issue. It is with great regret that we are unable to include particulars of the Short machine entered by Mr. Frank McClean. We hoped to have been in a position to have given details of all the machines entered for the race, but although we have been at some pains to obtain the necessary information, both from the builders, Messrs. Short Brothers, and the owner, it was not found possible to enable us to include the particulars in this issue with the others.

WHAT THE COMPETITORS MUST AND MUST NOT DO.

Entrants and pilots must be British subjects.
A passenger must be carried throughout the flight, and the combined weight of pilot and passenger must not be less than 264 lbs., any deficiency being made up with ballast.
Pilot or passenger may be changed during the contest.
Machines must be entirely British built, including engine.