

direct ministerial, rather than official, representation. Any change in this respect would accordingly be liable to have the reverse of the effect intended; and the Air Council are not, therefore, prepared to entertain it.

Finally, it may be observed that the tenor of Reservation I as a whole appears to be mainly due to failure to appreciate the fundamental fact that the Air Ministry is not a "purely

military" department at all. Parliament has charged the Ministry with two major civil functions (civil aviation and meteorology) independently of, and in addition to, its military responsibilities; and the Government have no intention of changing a basis of air organisation which has been so successful that it has since been adopted by foreign nations such as France and Italy.

THE ENGLAND-AUSTRALIA RACE

Preparations at Allahabad, and a Survey of the Route

PREPARATIONS for the England-Australia race are in full swing at Allahabad. Every machine taking part in the race has, of necessity, to stop at this city, which is the Indian Control Point. Within thirty hours of the start one or more machines will be expected, and the other entries should arrive in quick succession. Within about thirty hours of the arrival of the first machine all the aircraft will have left the aerodrome.

Since every competing machine will require between 300 and 400 gallons of petrol in as short a time as possible, Mr. M. G. Pradhan, officer in charge of the aerodrome, is arranging to provide special pumps, and refuelling will be done from tanks kept in readiness on motor lorries. Floodlights will be provided. Mr. Pradhan is arranging with some local electrical firms to install an engine to provide electric lighting, etc., for the numerous camps which will be erected in connection with the race.

It appears that the Government will be responsible for the landing arrangements only, and the official control timing will be done by the Indian Aero Club, which is an affiliated body of the Royal Aero Club. The Indian Aero Club will also provide for the comfort of the visitors. It is confidently expected that the landing ground which measures 900 yd. by 900 yd. will give no trouble to competitors.

Although the race will take place four months hence the officer in charge of the aerodrome has received inquiries from several persons who intend to fly to Allahabad to watch the machines. No decision has been made so far whether or not outside machines will be allowed on the aerodrome for the two days when the competing machines will be expected. It is likely that the Indian Director of Civil Aviation will prohibit visiting machines, other than the racers, from landing during that period.

The landing ground is expected to be in the best possible condition by the third week in October, as usually no rain is expected at that time. Last year, however, between October 21 and 26, 5 in. of rain fell at Allahabad. This does not give cause for alarm, for even if there is some rain no harm should be done to the landing ground. A public enclosure will be put up at the aerodrome for the use of spectators at a small fee, the takings going towards the cost of entertaining the competitors. It is unlikely that the wireless direction finding station which is near the aerodrome will be requisitioned, as it is thought that not many, if any, of the competing machines will carry wireless equipment when every bit of available space will be used for carrying fuel.

The Irish Entry

Eric Watt Bonar, the co-pilot of the *Bellanca*, which will be piloted by Col. J. C. Fitzmaurice in the London-Melbourne race, has arrived back in London after making a preliminary survey of the route between London and Singapore. Mr. Watt Bonar flew by Imperial Airways, and has brought back with him what is probably one of the most complete surveys ever made of this route.

Mr. Bonar's impressions of the first hop from London to Baghdad is that it is well equipped with landmarks in the shape of roads and rivers. At the time of the race the prevailing winds will be in the competitors' favour. One of the greatest dangers is a dust-storm region outside Baghdad. Baghdad aerodrome itself is eleven miles square and 120 ft. above sea level. It is completely equipped in every way, with boundaries marked with orange lights and all obstructions clearly lit. It has wireless telephony and directional finding apparatus which should prove of immense value. The night landing equipment is by floodlighting, and it has a red neon beacon which can be seen from a considerable distance.

The hop from Baghdad to Allahabad crosses the plains of India, and is where competitors are likely to experience bad weather. After Allahabad the terrain is one of the worst of the journey—the Dawna range of mountains necessitates a

climb of 10,000 ft.—windy conditions are difficult and there are thunderstorms and electrical disturbances which render radio equipment ineffective. Here, also, are encountered the heaviest rains which force pilots to fly "blind" for sometimes as much as half-an-hour.

The distance from Allahabad to Singapore is 2,220 miles. The October monsoon is likely to cause considerable trouble, as it is actually a distribution of high winds rather than rain and cloud. Singapore is reached over a series of swampy creeks surrounded in mist.

Col. J. C. Fitzmaurice and Mr. Bonar, the Hospitals' Trust pilots, are busily engaged in charting Mr. Bonar's observations. On the 28th of this month they will leave England for America to take delivery of the *Bellanca* machine, to be named *Irish Swoop*, which is now nearing completion.



Airspeed (1934) Ltd.

As may be seen from our "New Companies" announcements, negotiations between the Tyneside Shipbuilding Company, Swan, Hunter and Wigham Richardson, Ltd., of Wallsend-on-Tyne, and Airspeed, Ltd., of Portsmouth, previously foreshadowed in *Flight*, have been completed, and a new company formed. Airspeed, Ltd., are well known to our readers, and do not, therefore, call for any introduction here, but it may be of interest to mention that Swan, Hunter and Wigham Richardson, Ltd., are one of the world's most famous shipbuilding companies, and were responsible for the construction of the *Mauretania* and other transatlantic liners. We understand that the new company will hold an interest in London, Scottish and Provincial Airways.



PUBLICATIONS RECEIVED

Canadian Military Institute Selected Papers. No. 23. The Military Publishing Co., 52, McCaul Street, Toronto.



NEW COMPANIES

AIRSPPEED (1934) LIMITED. Nominal capital, £220,000 in 640,000 6 per cent. preferred ordinary and 240,000 ordinary shares of 5s. each. Objects, to adopt an agreement with Airspeed, Ltd. (in voluntary liquidation), and Montague Vincent, to carry on, develop and turn to account the property and assets referred to therein, and to carry on the business of manufacturers of and dealers in aircraft of all kinds, manufacturers and builders of or dealers in aeroplanes, airships, gliders, motors, engines and apparatus; to inaugurate, protect and maintain air services in any part of the world, etc. The directors are: Rt. Hon. Lord Grimthorpe, Easthorpe Hall, Malton. Sir Alan J. Cobham, Grand Buildings, Trafalgar Square, W.C.2. Leonard Tetley, 32, Upper Brook Street, W.1. Nevil S. Norway, 2, Chessington, Craneswater Park, Southsea. Alfred H. Tiltman, "Gharbieh," 39, St. Johns Road, Cosham, Hants. Chas. S. Swan, Bromley Grauge, Stockfield, Northumberland. Sir Philip Wigham Richardson, Aldenholme, Weybridge, Surrey. Geo. Wigham Richardson, 7, Lowndes Court, Lowndes Square, S.W.1. Secretary: M. Vincent. Solicitors: Cameron, Kemm & Co., Gresham House, Old Broad Street, E.C.2.

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AERONAUTICAL PATENT SPECIFICATIONS

Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motors. (The numbers in brackets are those under which the Specification will be printed and abridged, etc.)

APPLIED FOR IN 1932

Published July 26, 1931

36815. **COMPER AIRCRAFT CO. LTD., and N. COMPER.** Undercarriages of aircraft. (412,593).

APPLIED FOR IN 1933

Published July 26, 1934

12289. **BENDIX AVIATION CORPORATION.** Clutch-control mechanism. (412,737).
12141. **L. R. TOWER and BOEING AIRPLANE CO.** Means for controlling aircraft. (412,740).
15378. **Y. L. MESSIER.** Suspension apparatus for aeroplane landing gear. (412,759).