

Heathrow Airport Opened

ON Tuesday, January 1st, Heathrow airport was officially handed over by the Air Ministry to the Ministry of Civil Aviation, to be developed for civil aviation as the main terminal airport for London. The first flight was made in a Lancastrian aircraft "Starlight," piloted by Air Vice-Marshal Bennett. This

3000 yards, is now completed, and the second runway, extending from north-west to south-east, is expected to be complete in February. The arrival and departure apron together with the temporary terminal buildings shown in the accompanying engraving, is also complete. The installation of plant, and the completion

airport, which will be capable of accommodating the largest aircraft now contemplated, but in due course it is planned to extend the area and increase the number of runways. Detailed plans cannot yet be announced, because they are subject to revision, but a thorough study of the neighbourhood has been made in order to safeguard the land and avoid unnecessary interference with dwelling-houses and ancient buildings. It is not anticipated that the number of persons who will be displaced from their homes will be large, and there will be no displacement within the next five or six years, by which time it is expected that the housing position will be easier.

Finally, brief reference may be made to the progress of the work. It was begun in May, 1944. The main work during the first summer and winter was the pumping out of the pools and disposal of 100 million gallons of water, the removal of half a million cubic yards of silt, and bulk excavation over the area of the first runway and its perimeter track. Then followed the filling of the ponds and the making up of levels for the laying of the runway and track. Concurrently, 13 miles of large concrete pipes were laid for disposing of collected rainwater. Four 54in. diameter pipes run side by side to a gravel pit about a mile from the site, which serves as a balancing reservoir; 2 million tons of earth and gravel were excavated during the first summer and winter; some 12,000 yards of multiple ducting for electric cables were laid, and 60 miles of wire were drawn through the ducts. On the main runway the concrete is 12in. thick. The laying of this mass concrete paving was started in 1945, and was completed in 3½ months. Special care was taken with the ingredients, and their quality, grading, and cleanliness, and the most modern plant for mixing was employed on the largest scale, hitherto used for aerodrome work. Daily tests of quality and strength of the concrete showed, we are informed, an average strength of 30 per cent. above the very high strength demanded by the specification. At no time were there more than 700 heavy labourers employed at Heathrow, the average being about 400. The equipment used comprised 200 lorries, 40 mechanical excavators, 50 bulldozers and



HEATHROW AIRPORT

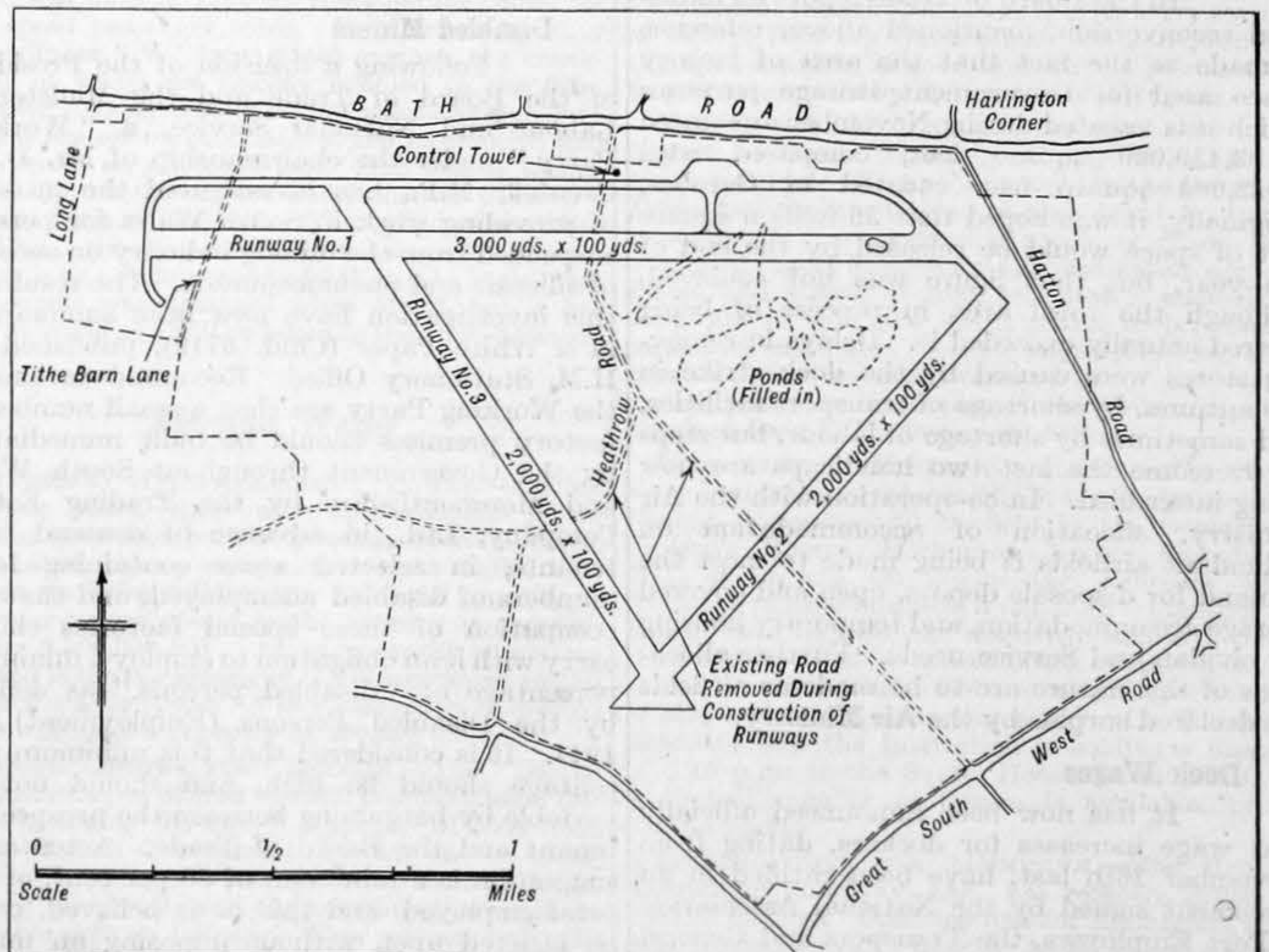
successful flight was a proving flight, preparatory to the inauguration of regular passenger and freight services between this country and South America. The route taken was by way of Lisbon, Bathurst, Natal, Rio de Janiero, Montevideo, and Buenos Aires.

The origin of Heathrow was the need of the Royal Air Force for an airfield near London capable of handling the heaviest types of aircraft, especially in the closing stages of the war in the Far East as it was expected to develop. In planning, it was taken into account that such an airfield could be subsequently developed for civil aviation. Heathrow is only 14 miles from the centre of London. It is outside the built-up area, and is capable of further development without extensive demolition of private property. As shown by the accompanying plan, the airport lies between the main Bath road and the Staines—Great South-West Road. These are two of the best approaches to London, and, in addition, the site is well served by train services, being only 2 miles from the Waterloo and Staines section of the Southern Railway and the same distance from Hounslow West Underground Station. The question of a direct service of trains is being considered.

The area selected originally included about 70 acres of ponds and disused gravel workings, and it will be seen that a portion of the main runway has to traverse the site of these ponds, and also crosses the site of a former Celtic camp. Special drainage problems had to be met, and, in particular, the discharge of immense quantities of water had to be regulated so that the flooding of adjoining land was avoided. The work was carried out by George Wimpey and Co., Ltd. Many difficulties had to be solved, besides the drainage problem referred to, and by April, 1944, plans were completed for an airfield, with three-runways having lengths of 3000, 2000, and 2000 yards, with a perimeter track of 8330 yards, connecting the ends of the runways. The width of the runways is 100 yards, and that of the perimeter track about 33 yards. The runways are so sited that they will be capable of extension to 5000, 3000, and 3000 yards respectively.

The main east-to-west runway, with a length of

of the third runway, extending from the south-west to the north-east, will proceed without delay, and the airport should be ready to accommodate regular passenger services in the



PLAN OF HEATHROW AIRPORT

summer. Heathrow will be the main London airport for transoceanic traffic. The internal and European services will make use of the Croydon and Northolt airports, though eventually some of these services may also be accommodated at Heathrow.

The three-runway airport we have briefly described will in itself give London a first-class

tractor-drawn excavators, besides the concreting plant.

THE MINISTER OF SUPPLY has agreed to the release of Mr. R. A. Davis from his post as Deputy Director-General of Royal Engineer Equipment.