

away four of the engines were got going, but in spite of this the airship was blown backwards for nearly two hours. Then the remaining two engines were brought into operation, and, thanks to the extraordinary skill of Capt. Anton Heinen—the old Zeppelin test pilot—who was in charge, and to a lessening of the gale, the "Shenandoah" was slowly but surely brought back to Lakehurst after a hard fight lasting about nine hours and safely housed in the shed. An examination showed that little damage had been done, but this incident demonstrated that airships possessed some practical qualities after all.

Progress in airship development during 1924 has also to be recorded in favour of Italy—where, as a matter of fact, airships have always made good. In the summer a remarkable airship was produced, designed by Eng. Nobile. This ship, known as the "Mr," was the smallest semi-rigid airship ever constructed. The "Mr" had a capacity of only 960 cubic m. (33,000 cubic ft.), a length of 32 m. (105 ft.) and a useful load (including pilot and passenger) of 450 kgs. (992 lbs.), or 42.5 per cent. of the total lift—a truly extraordinary figure. Its speed was 65 km.p.h. (40 m.p.h.), and its engine was of 40 h.p. This little airship was described in FLIGHT for September 4.

Civil aviation has been making fair advance during the past twelve months. Several new services came into operation, both at home and abroad, but the question of flying over Germany together with that of modifying the restrictions laid down by the Versailles Treaty as to the construction of aircraft in Germany, still remains to be settled satisfactorily. Civil aviation in this country started on a new era in 1924, when Imperial Airways, Ltd.—the "Million Pound Monopoly Company"—came into being, and, after a slight hitch at the commencement, made rapid progress in establishing what is now undoubtedly the most efficient air transport concern in the world. It is a thousand pities that, just as its first year was drawing to a close, a serious accident to one of its machines, resulting in the death of the pilot and seven passengers, should mar its otherwise successful operations.

The formation of Imperial Airways, Ltd., was the outcome of the recommendations of the Hambling Committee of 1923. Briefly, the salient features of the scheme may be stated as follows: The new company was to combine or take over the four air transport companies then operating the air services. It was to receive a subsidy of £1,000,000 spread over a period of 10 years, during which time it was to operate, from April 1, an efficient air service for the transport of passengers, mails and freight, over the existing routes and any further routes which, in the opinion of the directors of the company, might be considered advisable.

On April 1 the new company took over the air services, etc., of the four separate companies (Daimler Airways, Handley Page, Ltd., Instone Air Line and the British Marine Air Navigation Company). Unfortunately, however, owing to a disagreement between the company and the pilots and ground staff on the subject of management and pay, operations did not commence right away as expected. In fact, it was over a month before a settlement was reached and the British air services, which had in the meanwhile remained idle, were resumed. Although much was promised as regards new services, during the nine months of its existence, Imperial Airways has only carried on with those services previously operated by the four separate companies. It must be admitted, however, that it has accomplished this work well. During April and May 47,940 miles were flown, the ton-miles amounting to 25,630. In June the mileage rose to 99,710, or 47,353 ton-miles, while July showed a still further increase—146,840 miles or 72,827 ton-miles. Figures for the remaining part of the year are not available, but it may be said that the services maintained a similar high standard in accordance with varying conditions of season, weather, etc.

As regards other air services in this country, one or two attempts were made by private enterprise, with more or less success, to run special passenger or newspaper services. On April 30 an air mail service was inaugurated between Belfast and Liverpool, being operated by D.H.50 machines. This service ran for a short time, but was eventually suspended on account of very bad weather conditions and the unsuitable nature of the terminal aerodromes. It was replaced, however, in June by another daily service between Belfast and Glasgow, the D.H.50 again being employed. Then in September Northern Air Lines inaugurated a newspapers and mail air service between Belfast and Carlisle.

Generally speaking, commercial aviation was somewhat more lively abroad during the past year. In Europe several new services, or extensions to existing routes, came into

operation, while in America the trans-Continental air mail service, which had been in successful operation, during daylight only, since 1921, was extended so as to run day and night, with the result that mails could be carried between New York and San Francisco in about 28 hours. The new service came into operation on July 1, and has so far proved extremely successful. In Canada the Laurentide Air Service established an air line between Angliers, Quebec and the gold mining area in north-western Quebec, which has, we believe, proved fairly successful. Aerial survey work was also carried out with some considerable success in various parts of the world. In the summer the Air Ministry at the request of the Scottish Fishery Board, detailed three flying boats for the purpose of carrying out the experiment of locating from the air herring shoals, while the Oxford University Arctic Expedition made good use of an Avro (Armstrong-Siddeley "Lynx") seaplane in their operations.

The sporting side of Aviation (including air records, etc.) during 1924 was not particularly brilliant so far as Great Britain was concerned. The few big aviation events that did take place in this country were, we think, somewhat disappointing—except, perhaps, in the case of the R.A.F. Aerial Pageant, which was as good as ever. While as regards air records, not a single one was secured by Great Britain, America and France between them holding a "ding-dong" contest for the honour of securing nearly all of these.

The Aerial Derby—hitherto one of our biggest annual events—was abandoned on account of the extremely small entry of really high-speed machines. It had been hoped that the King's Cup Race (or "Circuit of Britain") for 1924 would be a seaplane event, but as the only suitable machines for such an event were Service ones and the Air Ministry did not see its way to allow these to take part, this race resolved itself into a sort of "go-as-you-please-with-any-type" handicap. Although it was open to both sea- and land-planes, out of the ten machines entered only one belonged to the former type—a Fairey (Napier "Lion") III D. There were, however, two Supermarine "Seagull" ("Lion") amphibians, but these associated themselves for the greater part with the land-planes. The course, of about 950 miles, did not, this time, possess any "controls," only turning points (situated at Leith, Dumbarton and Falmouth), and the start and finish were located at Martlesham Heath and Felixstowe, and Lee-on-Solent respectively. The 1924 winner was undoubtedly a popular one—Alan J. Cobham, on a D.H.50 (230 h.p. Siddeley "Puma") biplane.

Other big events in this country were the Two-seater Light Plane Competitions and the Grosvenor Cup Race (also for light planes), both held at Lympne in September-October. These light plane competitions were undoubtedly the best of our sporting events, and they were extremely interesting. No fewer than 19 machines were entered, all excellent examples of aero design and construction. Unfortunately, for various reasons, a large number of the entries "eliminated" before the actual trials, but those that survived put up good performances. The Air Ministry's first prize of £2,000 was won by M. Piercey on the Beardmore "Wee Bee I" monoplane, fitted with a Bristol "Cherub" engine; while second place (£1,000) was secured by Uwins on a Bristol "Brownie" monoplane ("Cherub"). Before leaving this subject we would like to refer to the special issues of FLIGHT issued in connection with the Light Plane Competitions. In the issue of September 25, 1924, detailed descriptions, with general arrangement drawings, of all the competing machines were given, whilst in the two following issues (October 2 and 9) there appeared full, illustrated, reports on the actual competitions.

The one and only British representative for the International Schneider Cup Seaplane Race—which was to have taken place in America—a promising machine built by the Gloucestershire Aircraft Co., Ltd., was crashed during its first trials, and as the Italian entry was withdrawn, the National Aeronautic Association of U.S.A. very sportingly cancelled the race for 1924.

One feature of the year's work in the sporting branch of aviation stands out rather prominently, viz., a series of big flights—successful and otherwise—which will undoubtedly have to be recorded amongst the great events in the history of aviation. These events—the successful American round-the-world flight and the unsuccessful, but none the less glorious, British attempt, D'Oisy's Paris-Tokio dash, the Portuguese Lisbon-Macao, the two round Australia, the Argentine Amsterdam-Tokio, the Dutch Amsterdam-Batavia flights, Cobham's London-Africa and back trip, and, finally, the crossing of the Atlantic by Zeppelin Z.R.3, previously referred to—have all, in one way or another, been of great service in furthering the progress of aviation.