

Civil Aviation.

By NORMAN J HULBERT

THE rapid progress which civil aviation has made during its short life is, when we consider the difficulties it has had to overcome, little short of marvellous

In 1909 M Bleriot made his epoch-making flight of 25 miles across the English Channel Ten years later the North Atlantic was first spanned by air by two British airmen—the late Sir John Alcock and Sir Arthur Whitten Brown, for which flight they won the *Daily Mail* prize of £10,000 and received the honour of knighthood

A year later witnessed the first flight from England to Australia and the first flight from England to South Africa

In all these flights the same type of machine was used, namely, a Vickers-Vimy-Rolls

All these flights were brilliant achievements, but they were not commercial propositions in the strict sense of the word, in so far as they carried no paying load, but their main value was undoubtedly that they brought the possibilities of aerial transport before the public to a very great extent

Coming to commercial aviation, this country has not made as much progress as many of us would have liked This possibly is due to our geographical position, for, being a small country with good ground communications, we do not feel the same need for establishing air lines as larger countries with poor railroad communications do, and the time saved by air transport when the journey time from city to aerodrome is taken into account, does not show the advantage that long aerial routes do

Unfortunately, British civil air routes have not in the past been able to carry on without a Government subsidy, which amounts to only £137,000 a year, which is a very small proportion of the total air vote, which is in the neighbourhood of £20,000,000 per annum Other countries have realised the value of building up a national civil aviation service, and have been very generous in giving subsidies As an example, the German Government grant subsidies amounting to £750,000 per annum, to the Deutsche Lufthansa, which is the German Air Transport Company recently formed to amalgamate the Deutsche Aero Lloyd, the Junkers Company, and others, while France, about whose impoverished state much is written and spoken, manages to allocate nearly half a million sterling to civil aviation

Commencing this month, the first stage of the All-Red air route from London to Australia will be inaugurated with the opening of the Cairo-Karachi section, covering a distance of about 2,000 miles This is possibly the most important development that has ever occurred in British aviation This service will connect with the sailings of the P and O liners, and will consequently save about seven days in the journey between England and India

Also, this month will see the opening of another Empire air route, namely, from Khartoum to Kisumu in Kenya Colony. This will be a seaplane service, and will follow the valley of the Nile down to Lake Victoria—a distance of 1,200 miles, which distance will be covered in approximately 14 hours.

So much for the development of civil aviation, but let me just refer to its future.

Unfortunately, there is considerable public apathy to-day to adopting aerial transport. For one reason, it is very expensive, but, primarily, the public regard it as dangerous, and anyone who flies is usually looked upon either as a hero or a hare-brained lunatic.

There are only two possible solutions to the first objection, they are (1) increased Government subsidies, which, in view of the present state of national finance, seems improbable, or (2) increased popularity of air transport, and consequently increased paying load. The latter will not be achieved until the terrific advantages of air transport, both from the point of view of business and pleasure, are brought to the notice of the country at large, and the public are educated up to acquiring an air sense, which latter is of very great importance if England is going to obtain supremacy in the air as in the past she has obtained supremacy on the sea.

As regards the dangers of flying, I would only point out that British subsidised air services have during the last two years carried about 30,000 passengers between England and the Continent without a single accident, and that the problem of safe flying is receiving the continuous attention of the Government and of every aircraft designer in the country.

The main reason for accidents of aircraft has in the past been attributed to the pilot "stalling" his machine, but with the advent of such devices as the Handley-Page slotted wings and the Savage-Bramson anti-stall gear, accidents under this heading will gradually be eliminated, and I prophesy that before long air transport will be regarded in the same way that trains and boats are to-day, and not as dangerous and objectionable means of transport.

In conclusion I would only say that in my opinion there is a vast future for air transport, even only on economic grounds, as it is not dependent on the contour of the country, and, unlike railroads, it has no expensive permanent way, bridges or tunnels to maintain, while it has the added advantage of speed.

I think it is a matter of regret that this country, situated geographically as it is, has not developed the flying boat to a greater extent, as the flying boat has great advantages for long trans-marine services, and its ratio of speed over sea-going craft is greater than that of the aeroplane over railroads. By this I mean that, whereas a liner's speed is, say, 20 m p h as compared with the flying boat's 100 m p h, and the express train's speed is 50 m p h against an aeroplane's 100 m p h, it is admitted by the experts that the economic speed of the liner has practically reached its maximum, but I think it will be agreed that this is not the case of the flying boat, so that in the future we may see that the ratio of speed increase between the two forms of transport above mentioned will become considerably greater.

(To be continued)