

with Batavia at a distance of about 7,000 miles was still possible. The signals of the P.H.A.G.A. were heard in the Dutch East Indies when the machine was over Djash in the Persian Gulf. At the same time it came in touch with Schiphol Aerodrome.

As the long wave equipment is necessary for short-distance communication and for navigation purposes, it might be possible to carry in the future a relatively light long wave set, combined with a short wave transmitter and receiver. It will be realised that such equipment implies the use of a larger machine than the Fokker F VIIb, and also more ground stations than exist at present.

The K.L.M. are considering the use of larger and faster machines. Three types will be available, and a choice is to be made. The first of these is the Fokker F IX already mentioned. It is an 18-seater, similar in general appearance to the F VII 3m., with three Jupiter Series VI engines, and has a cruising speed of 109 m.p.h.

The second type is the Fokker F XII, a 15-seater similar to the F VIII at present used between Amsterdam and Croydon. It is fitted with three Pratt and Whitney Wasp engines, and it is expected to have a top speed of 140 m.p.h. Its cruising speed will be 120 m.p.h., but Mr. Guilonard anticipates that this could be increased to 125 m.p.h. by the use of Townsend rings and wheel fairings. Its ceiling when fully loaded will be 6,000 ft. on any two engines. The first F XII, which is nearly complete, will be flown next February.

The third alternative is the Fokker F-32, a much bigger machine to carry 30-32 passengers, with four Pratt and Whitney Hornet engines of 525 h.p. This type has been developed in America, and is employed on certain air lines out there.

Though the pay load of these machines is good and compares with any other commercial type available, it is not the only consideration. As Mr. Guilonard remarked, "Speed pays always. Pay load only pays when you can sell it."

Long Service

CAPT. H. S. LEVERTON, London Manager of K.L.M., completed 10 years' service with them on January 1 last. This constitutes, we believe, the longest period of continuous service with one air transport firm.

Improved Swedish Air Transport

AIR travellers from Sweden to the Continent will be able to have their breakfast in Malmö, the central terminus of the continental air routes in south Sweden, and to take tea in London or Paris seven hours later with only one intermediate landing in Amsterdam, where time for luncheon will be allowed. Capt. Florman, the director of the Swedish Aero-transport Company, announced that the service on the continental lines to Sweden in general will be improved and

Mr. Plesman drew my attention to the reduction in time which had already been achieved. In the first period of 1928 an average of 13 days was taken on the outward trips and 12 days on the homeward. In 1929 these figures were reduced to 12 days and 11 days respectively. They have now come down to 11½ days and 10½ days. The services, he says, must be run in 10 days regularly, with eight hours' flying per day. Night flying is not contemplated at the moment, though it may eventually be used to reduce the time to a week each way.

Owing to the higher initial cost and maintenance of flying-boats, land machines will be used throughout. The same aircraft and crew will do the round trip from end to end of the route. This centralises the staff of pilots, who naturally prefer a home base. And it requires only small depots of spare parts along the route to keep the machines in service.

With regard to the maintenance of the Fokker aircraft used, Mr. Guilonard gave me some interesting facts. Eight single-engined Fokker F VIIa machines have between them flown 20,516 hours. The first of these, which has been in service since September, 1925, had flown 3,620 hours without any repairs being necessary. The whole eight machines have cost a negligible amount, and most of them still have the original fabric on the fuselage. The same is true of five machines of the Fokker F VIII type, which have done 10,208 hours between them, whilst four of the type F VIIb have done 5,476 hours. The first of this last kind has totalled 1,776 hours without anything more than the replacement of an aileron cable being necessary. This particular machine, PH-AEN, has made five trips to Batavia. Mr. Guilonard thus has facts to support his opinion that the Fokker equipment of the K.L.M. has an infinite life. Many machines of earlier types, 10 years old, have been sold to other companies who are still operating successfully with them. This point is well worth the attention of those academic designers who strive after a theoretically efficient structure which takes little account of economic efficiency.

speeded up during the coming flying season, which is to begin as early as March 15. Both the Dutch and Belgian aviation companies have manifested great interest in increasing their service to Sweden. As soon as the Stockholm flying field at Bromma is perfected and equipped to meet the international demand for landing facilities, the continental lines will be extended to Stockholm. Plans for the further perfection of the air mail service are being completed, and at a recent conference between the directors of some leading European aviation companies it was decided, on the initiative of the Scandinavian representatives, to submit to the postal authorities of the European countries a proposal to eliminate the extra aviation postage fees for first-class mail for the time being.

CROYDON WEEKLY NOTES

WE said last week that the opening date of the Imperial route to the Cape was still uncertain. It has now been decided that the first section from Cairo to Mwanza will open on Thursday, March 5. Mwanza lies on Lake Victoria, and the distance is 2,670 miles. It will be reached by the first machine on March 9. This connects up with the service leaving London on February 28. The portion of the route between Khartoum and Mwanza will be operated by Short "Calcutta" flying-boats, the Nile and the lakes forming better aerodromes than any which could be prepared. Imperial Airways hope to have the whole service to the Cape in full operation some two to three months later.

They are also pushing on with their preparations for attracting more passengers on to all their routes during the coming season. An arrangement has been made with the White Star Line whereby the pursers of all their big passenger boats will act as booking agents for Imperial Airways, both for the regular services and for special charter work.

An agreement has also been reached with the Southern Railway for special "joy-ride" excursions from London. Parties of twenty or more will be met at either Waddon or East Croydon stations, taken to the aerodrome and given a 15-minute flight. The cost, not including the Southern Railway ticket, will be seven shillings a head.

Capt. J. J. Flynn ("Paddy") is making a wonderful recovery and he persists in being cheerful. His high spirits

are really inspiring and make one forget the little troubles and irritations of this workaday existence. It is extremely doubtful if he will ever be able to fly again. But his vast experience of flying and his knowledge of its people should not be lost to aviation—it is much too valuable. He has always been one of the most popular pilots, not only at Croydon, but over all of England and most of Europe.

A new transport company was recently started at Croydon by Mr. W. A. Rollason and operates under the name of the Rollason Aviation Co., Ltd. The equipment consists of a Desoutter, a Moth and two Avros, with which they do taxi work, instruction and joy riding. During the coming year it is hoped that the fleet will be increased considerably, especially for taxi work. Only very experienced pilots will fly for the Company, and Mr. Rollason has himself inspected 148 aerodromes in England which they can use. A scale of charges has been worked out from London to all these places and intermediate rates can quickly be quoted.

We hear from Mr. Olney that Cirrus Aero Engines, Ltd., have booked further repeat orders from both Japan and Poland—the latter being for the Inverted Hermes. This engine is now establishing itself all over the world and doing much to maintain the prestige of British engineering.

The traffic figures for the Air Port during the last ten days of the year 1930 were 407 passengers and 34 tons of freight.

M. L.