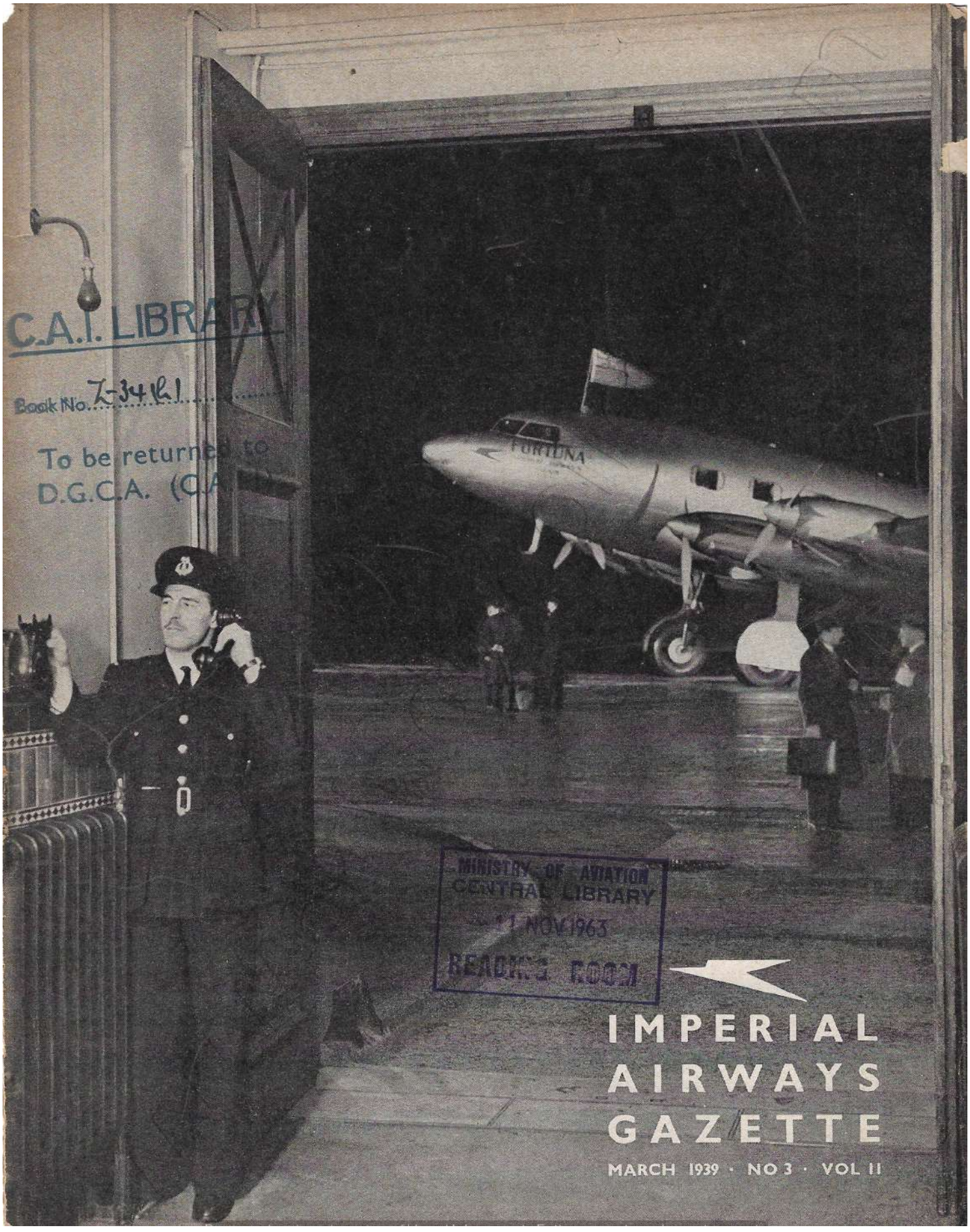

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IMPERIAL AIRWAYS GAZETTE

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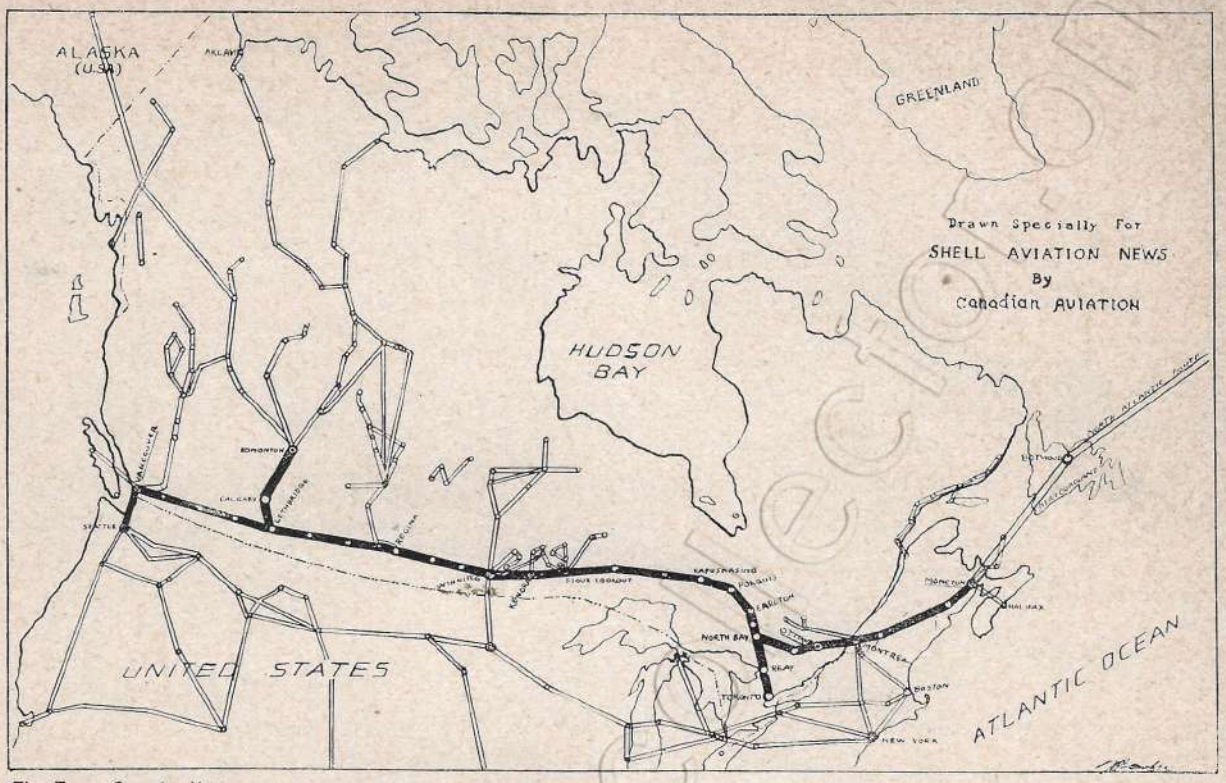
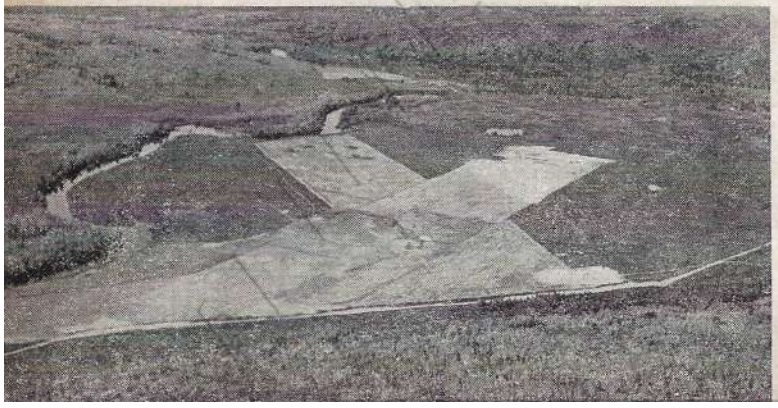


The Trans-Canada Airway

The intermediate landing ground at Madawaska, between North Bay and Ottawa. The man seen in the upper picture is running the first survey line. The lower picture is a view of the completed aerodrome



THE TRANS-CANADA AIRWAY

In the February issue we reproduced the first part of an article on the Trans-Canada Airways which was reprinted with acknowledgments to *Shell Aviation News*. We are now concluding this article which is of particular interest in view of the fact that we hope that this summer the Old and New Worlds will be linked by air mail services

' Flying on the route during the winter is done with aircraft fitted with wheels and not skis, as rolling of the snow on the hard surfaced runways permits normal wheel landings to be made by the large aircraft used on the services

' The new airport at Moncton, which is to be completed next summer, will be one of the largest and best equipped on the whole route. Two other " 100-mile " airports, one at Blissville, near Fredericton, the capital of New Brunswick, and the other near Megantic, in Quebec, also await completion and their radio range stations and other facilities ; several additional 35-mile aerodromes will have to be constructed before the maritime section of the route will be finished. In addition, part of the maritime section runs through the State of Maine, in the United States, and it is expected that arrangements will have to be made for the installation of some facilities there

' Branch lines off the main route are another consideration. The largest at the moment is the one from Lethbridge 288 miles northward to Edmonton, where connections are made with the network of air services throughout the northwest. The major and intermediate aerodromes on this branch line were constructed and equipped by the Department of Transport and the company opened a service over it in October

' The Trans-Canada main and branch lines and other air lines link Canadian services with those of the United States. There are services from the Montreal airport to the New England States operated by Boston and Maine Airways and to New York operated by Canadian Colonial Airways ; in addition, there are domestic services into the mining areas of northern Quebec

' At Winnipeg connections are made with the network of commercial routes throughout the mining areas of northern Ontario and Manitoba, and with Northwest Airlines' service to the United States. At Regina, Prairie Airways' daily service meets the Trans-Canada Air Lines aircraft and serves north central Saskatchewan, and connects with other services to the mining areas of northern Saskatchewan. The Lethbridge-Edmonton branch line links up at Edmonton the services over thousands of miles of routes throughout northern Alberta and British Columbia, the Yukon and the Northwest Territories as far north as Aklavik in the Arctic Circle. At Vancouver, the Trans-Canada Air Lines branch line to Seattle connects with United States services on the Pacific coast, and links up with the routes north through central British Columbia and the Yukon

' One of the Trans-Canada Air Lines' functions is to link all these individual services with each other and with the centres of population throughout Canada. The three days saved in the carrying of mail and express between Montreal and Vancouver is of tremendous value to business '

CLIVE STREET GOSSIP

A short, but spritely, commentary on a journey by Imperial Airways at the New Year appeared recently in *Indian Finance*. With the usual acknowledgments, we reproduce this commentary for the benefit of readers of the *Gazette*

FIRST IMPRESSIONS

' As the crow flies, only faster, I did the London-Calcutta return journey by the *Imperial* flying-boat. Mine was the first 'plane which carried passengers after the Christmas mail crush which lasted from the last week of November almost to the end of December. We were just six of us ; and it was all the happier family for it. Weather conditions were unpropitious for the best part of the journey ; and common concern about wind and tide, timing and schedule, brought the crew and passengers into more than usual intimacy. It was an exceptionally fine crew, headed by the star skipper, Captain Rogers. Efficient in the business contacts and genial in other contacts, they made the journey memorable for every one of the passengers carried. And it strikes me how the respective avocations and environments differently fashion the nature and shape the bearing of the members of the three units in national service, namely, the tommy, the sailor, and the pilot. The barrack life cries out in the talk and gait and nature of the tommy. The limitless expanse of the seas accounts for the urbanity and more genteel bearing of the sailor. The ethereal element in which the pilot lives and has his being makes of him a remarkably fine specimen of a human being. From the skipper down to the steward, every member of the crew carries himself with dignity and personifies the most engaging type of courtesy

NEW YEAR'S EVE

' At the very start, a day's delay proved unavoidable as it was the week of snowfall over all Europe and no flying-boat could take off the sea in Southampton. In hardly less difficult circumstances on the next day, the feat of taking off was essayed and successfully accomplished. Alighting in Rome was not possible at the usual site on the lake ; there was a heady storm ; and the mountainous waves transformed the lake into an angry sea. Nevertheless, the 'plane alighted at a more suitable place ; and, as we stepped out of the aircraft into an improvised waiting shed, it was shivering cold. The following night at Alexandria, the Mediterranean gave us a like turbulent welcome. The Sea of Galilee was in a similar mood and one or two repairs that had to be made to the engine couldn't be made easily as the engineer and his assistants could hardly keep their foothold on the flying-boat which was frantically tossed about. This detained us for a day in Tiberias, as romantic and picturesque a spot for forced detention as one might wish for. It was here, within a few miles of the Church of Nativity, that we rang out the Old and rang in the New Year. The hotel authorities were suddenly called upon to provide for the comforts and conveniences of a dozen stranded passengers ; and they rose to the occasion. I have hardly had a more satisfying New Year's Eve festivity than the recent one in Tiberias. Imperial Airways played the host on champagne standards. And the host and the hostess of the hotel had gathered an extremely congenial and convivial crowd of gents and ladies from all the neighbourhood, of whom I must make particular mention of Wireless Officer Wood, stationed at Tiberias. He was the life and soul of the party—the last word in efficiency at work, the last word in chivalry at play. We were all quite elated at the strange destiny that had made it possible for us to spend a good few hours of the Christmas season in the vicinity of the birthplace of the Child

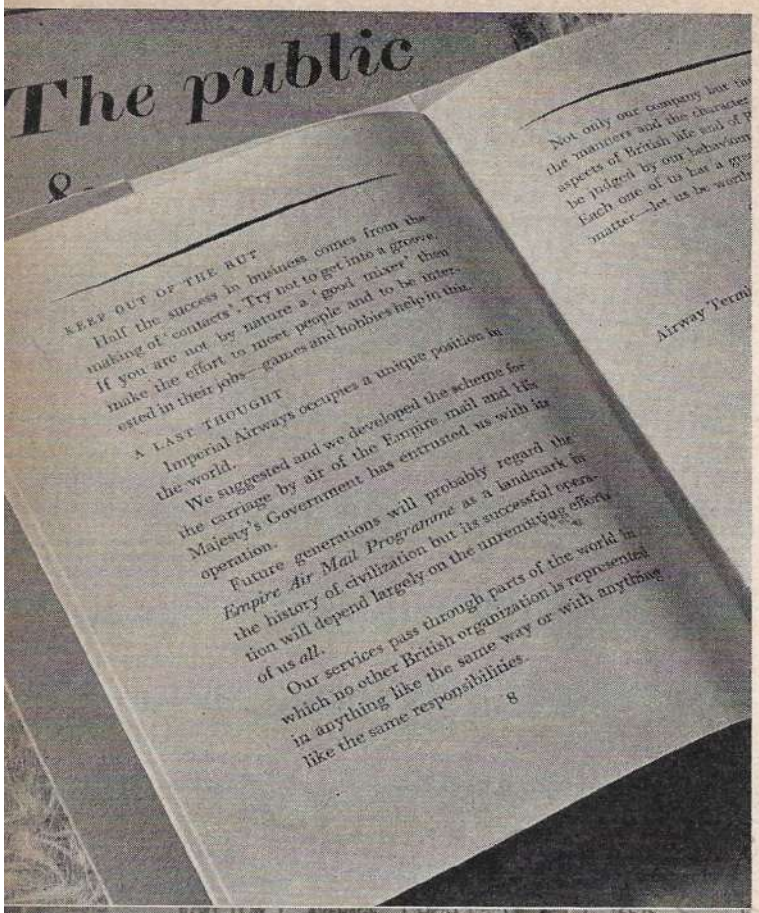
CHAMPION FOR BERMUDA

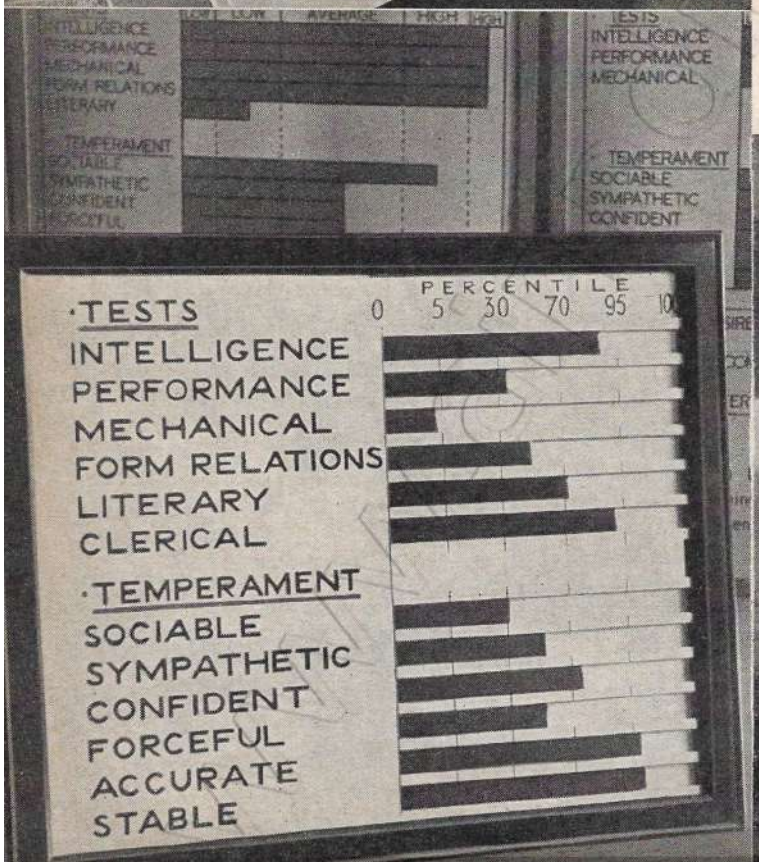
The new flying-boat, *Champion*, one of the new fleet of 8 modified *Imperial* class flying-boats is to operate the New York-Bermuda service. She is at present undergoing refitting after having been in service on the Empire routes since Christmas and will shortly cross the Atlantic to America under her own power

She will fly via the South Atlantic and West Indies to the base at Bermuda, a distance of approximately 8,300 miles. Her actual route is to be : Southampton, Lisbon, Bathurst (W. Africa), Natal (Brazil), Trinidad, Antigua and Bermuda

The *Champion* was originally designed for the New York-Bermuda service and a number of new devices were added to her equipment both to increase her operational efficiency and to provide still greater comfort for the passengers. There are to be two smoking cabins, one fore and one aft, and other innovations are a constant supply of hot water in both lavatories, new foot rests, coat hangers and luggage racks. She is also provided with facilities for steam cooking in the kitchen. Her interior decoration will be slightly different from the other flying boats of her class

' Evening Service to Paris ' is the subject of our frontispiece this month





SOME ASPECTS OF

In the last issue we showed a number of photographs in an attempt to give some idea of the multifarious aspects of the organization behind the successful operation of Imperial Airways' routes. We are continuing this series of pictures

1. THE STAFF

Everyone engaged in this business of transport sells an intangible thing—service. A thing based on an understanding; an understanding—an anticipation—of the needs of others; a comprehension rooted within the company, for a staff which interprets correctly the true relation between the public and itself will provide a service in which will grow the fruits of common good will. It is this understanding which must be fostered, encouraged and trained

2. PSYCHOLOGICAL TESTS

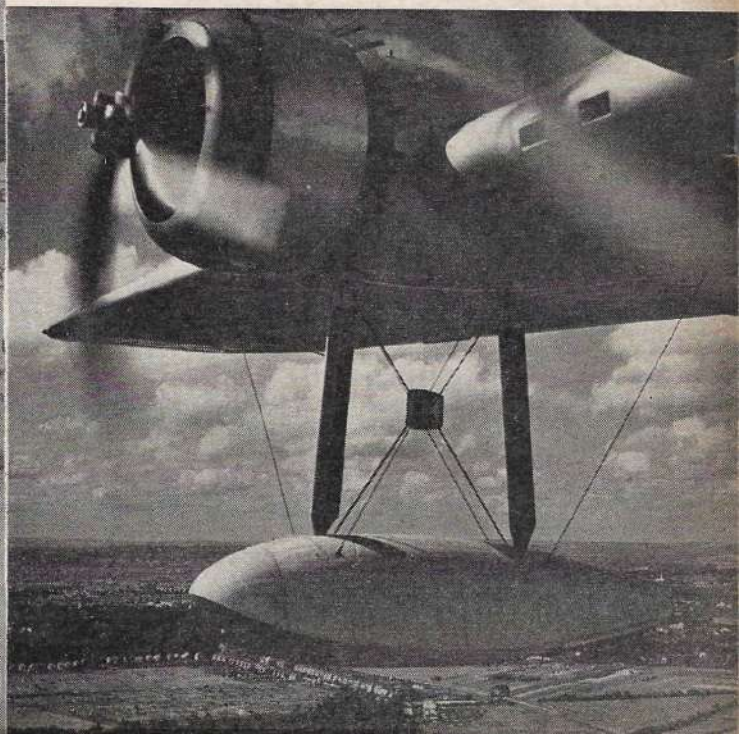
Many of the company's staff who are serving along the Empire air routes have been examined by industrial psychologists to diminish the risk of 'the square person squeezing himself into the round hole'

3. *IMPERIAL* FLYING-BOAT

4 engines developing a total horse power of 2,960 h.p.—a top speed of 200 m.p.h.—a span of 114 ft.—a length of 88 ft.—a weight when fully loaded of 18 tons, carrying Commander, First Officer, Radio Officer, Flight Clerk, and Flight Steward with accommodation for 15 passengers and over 1½ tons of mail. She can fly safely on any two engines

4. *IMPERIAL* FLYING-BOAT

Increase in the size of land aircraft presents difficulties with aerodromes and manœuvring on the ground. With



IMPERIAL AIRWAYS

flying-boats, however, increase in size gives greater seaworthiness. There is no apparent limit to the size of flying-boats and, generally speaking, they are able to re-fuel at prices obtaining at the seaboard, thus effecting great economy compared with the cost of re-fuelling at inland airports. Every increase in the size of land aircraft increases the problem of building the undercarriage and providing aerodromes to support the weight. It was, therefore, as a result of these factors that the company decided to order 28 *Imperial* flying-boats to operate the services needed for the *Empire Air Mail Programme*

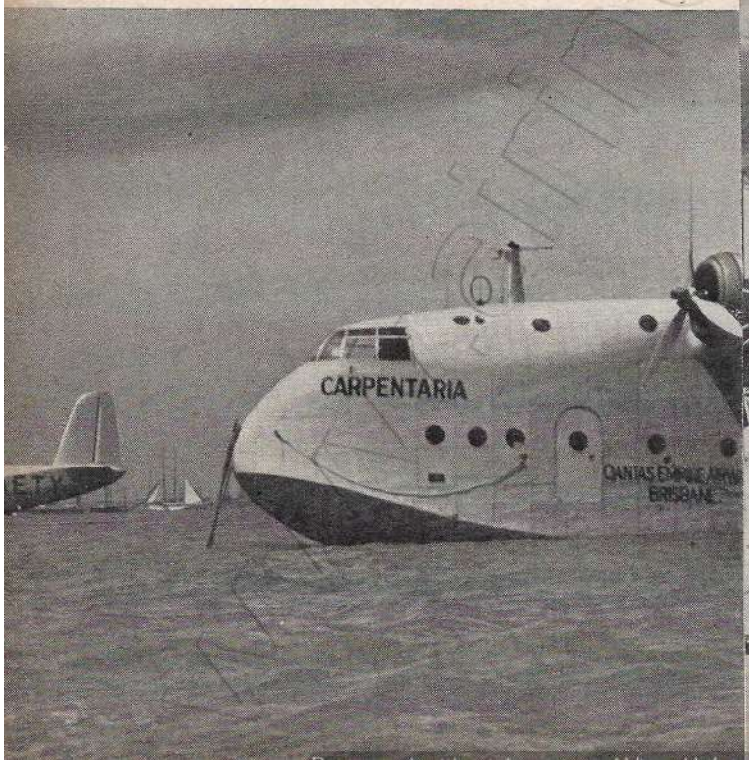
5. THE *HANNIBAL* CLASS

The *Hannibal* was a landmark in the history of transport. She was the first of a class of 8 commissioned in 1931 which were the first 4-engined passenger-carrying aeroplanes in the world, the first to provide comfort comparable with surface transport and the first to bring a feeling of confidence to the air travelling public. The fleet has flown over 8 million miles without injuring anyone

6. MAYO COMPOSITE MARINE AIRCRAFT

The purpose of the *Composite* aircraft is to launch a long-range aircraft with a heavier load of fuel, mail and freight than it can lift off the water itself. The lower component assists the long-range upper component into the air. When the required speed has been attained for the upper component to carry its load, the locking mechanism is released and the lower component returns to the base

The upper component is a four-engined float seaplane, designed to carry a load of 1,000 lb. over a range of 3,500 miles at a cruising speed of 170-180 m.p.h. The lower component is a modified form of *Imperial* flying-boat



IMPERII VIAE EXPLORATOR VOLITO

IMPERIAL AIRWAYS GAZETTE

The *Imperial Airways Gazette* is published every month for the information of the agents of the company and for others who are interested in air transport. A copy will be sent free of charge every month to *bona fide* applicants from the Traffic Manager's Office, Imperial Airways, Ltd., Airway Terminus, London, S.W.1. School children must make their application through their Schoolmaster or Schoolmistress

THE SERVICES OF IMPERIAL AIRWAYS

Full information about the services of Imperial Airways, of its associated companies and those for which it acts as agents, viz. the Belgian Air Lines (S.A.B.E.N.A.), the German Airways (D.L.H.), Swissair, and the following air transport companies in the United States of America: American Air Lines, Inc., Transcontinental and Western Air, Inc., and United Air Lines, may be obtained from Imperial Airways, Ltd., Airway Terminus, London, S.W.1, or from Airways House, Charles Street, S.W.1. Telephone: VICtoria 2323. Telegrams: 'Impairlim, Telex, London,' or from any office of the company. Airway Terminus is open day and night. The principal travel agents can also supply details of the times and fares of the services operated by these and other air transport companies

AS OTHERS SEE US

With acknowledgments, we reproduce the following editorial tribute to Imperial Airways which appeared in the *East African Standard* of 20 January 1939.

'There has lately been a deal of uninformed talk about the Imperial Airways Service to East Africa, and I feel, very strongly, that Imperial Airways does not get a square deal from the public mind. It is a curious fact that the British people delight in decrying their own achievements. We build the "Queen Mary" and the usual comment about that magnificent ship is that the vibration is terrific, a statement which I believe to be untrue. We build the fastest air fighter in the world and the common gossip is that it is so fast that it is perfectly useless for aerial fighting. We build the finest long-distance bombers in the world and somebody devises a reason for assuming that they can do everything except bomb. And so it goes on. I have heard all sorts of comments about Imperial Airways flying-boats, but I have heard very few people point out that, in actual fact, they are the finest flying-boats operating anywhere in the world to-day. It is significant that that fact has been far more widely recognised in America than within the Empire. Moreover, 18 months ago the present Viceroy of Abyssinia told me that he had flown on nearly every commercial air line in Europe, and a good many in other parts of the world, and that, in his opinion, there was nothing to touch the Imperial Airways flying-boats. From my own experience of them I can well believe that is true. There is no doubt that they are growing in popularity for the figures speak for themselves. Last May Imperial Airways carried 100 passengers, northbound out of East Africa; and I am told that there are already advance bookings for every one of the forty-two services which will leave Kisumu between now and 20 April. Most of us have a tremendous grouse whenever the air mail is delayed, but we never minded very much when the sea mail came in two or three days late! The air mail carries both mails and passengers and that, in itself, complicates matters. There is an axiom that a passenger can be delayed but never lost; and a mail can be lost but never delayed. Now Imperial Airways, in order to achieve the highest standard of passenger safety, insists that if the wireless set is, through some minor default, not working efficiently, the flying-boat must at once return to the nearest base. It is quite possible for a service to be delayed five or six hours for this reason alone, although every other part of the machine is in perfect order. I am writing entirely as a layman who is completely ignorant of aeronautical matters. My only reason for writing is that I feel that we should adopt a less critical attitude towards Imperial Airways than is the common case at present. I have never travelled by any shipping or railway line which paid such remarkably efficient consideration to the comfort of passengers as Imperial Airways'

MODELS OF *IMPERIAL AIRWAYS* AIRCRAFT

Excellent models of Imperial Airways' aircraft are now being made by Meccano, Ltd., in the *Dinky Toys* series. Considering their size and the price at which these models are sold, they are very faithful replicas of the aircraft themselves. Undoubtedly the most interesting and most ambitious is the model of the *Mayo Composite* with detachable components. The prices of the models are: *Frobisher* 10d., *Ensign* 1s., *Imperial* flying-boat 1s., *Mayo Composite* 2s.

FROBISHER CLASS

Imperial Airways has placed with the De Havilland Aircraft Company an order for two more of the *Frobisher* class of 4-engined air liners. These two air liners, to be named *Fingal* and *Fiona*, are to be put into service very shortly on the European routes. They are to be identical in every way with the three air liners of the class already in operation and which have already won for themselves several records for speed, as mentioned in the last issue of the *Gazette*

'IRON LUNG' BY AIR

Kampala in East Africa is grappling with an outbreak of infantile paralysis and recently an urgent request was received in London for one of the 'iron lung' equipments which Lord Nuffield is presenting to all the hospitals of the Empire

With this disease, speed is of prime importance, and even

24 hours may mean the difference between life and death. Professor R. R. Mackintosh, of the Oxford University Department of Anæsthetics, who is responsible to the Colonial Office for the provision of these iron lungs, immediately got in touch with Imperial Airways, and it was arranged that an iron lung should be sent out directly by flying-boat. Three days after the delivery of the 600-pound lung to Southampton, it was delivered to the health authorities at Kampala

A MILLION MONTH

We reprint, with acknowledgments, the following interesting note which appeared in *The Aeroplane* of 8 February 1939

' One result of the Christmas mail rush was that Imperial Airways flew more than a million miles in December. The actual total, by Imperial and Qantas Empire Airways craft, was 1,158,000 miles

' Included in that total is 282,000 miles flown on special mail trips in addition to scheduled services. Another 181,000 were flown by outside help, 29,000 by the Royal Air Force, and 152,000 by special charters of Olley Air Service, Wrightways, Swissair and others

' The part played by the R.A.F. has not previously been revealed. One cargo was taken from Plymouth to Penang by a Sunderland flying-boat on a delivery flight to No. 230 Sqdn., Singapore. Vickers Valentias of No. 70 Sqdn., Habbaniyah, made seven return trips to Alexandria, and similar machines of No. 216 Sqdn., Heliopolis, made two trips to Kisumu from Alexandria.—Unlike the U.S. Army Air Corps when commandeered as mail-carriers, the R.A.F. suffered no ill effects '

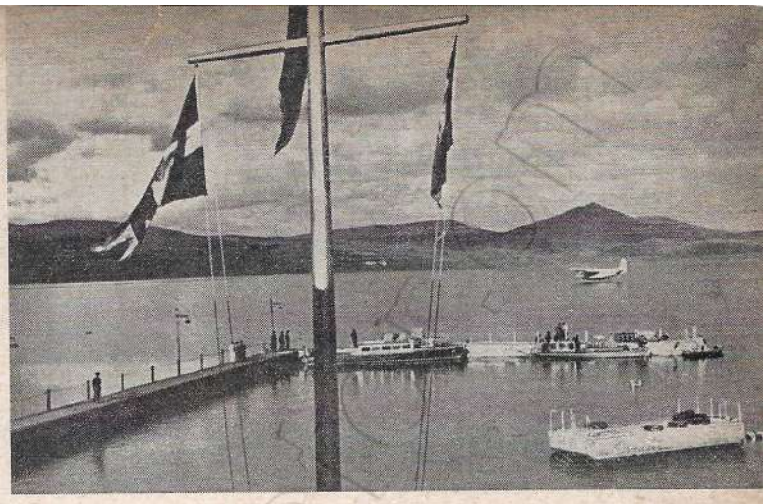
PREPARATION FOR ATLANTIC SERVICES

This summer air mail services between Europe and Canada and the United States of America are to begin, and it is not only the mechanical perfection of the aircraft and the skill of their crews which will be necessary for the successful operation of this venture. Both of these will be of no value without efficient wireless communication and accurate meteorological information

While the preparation of aircraft and the training of crews has been carried on, research and experiment has also been in progress so that frequent and accurate weather reports may be transmitted by wireless to commanders of aircraft as they cross the 2,000 miles of sea

At Foynes in Eire and at Botwood (Newfoundland) special long-range wireless stations have been built for use in connection with this North Atlantic service. Further, for some time these stations have been making frequent and regular tests with their apparatus in anticipation of a start this summer of scheduled air services between the Old and the New Worlds. In one respect the station at Foynes has been more fortunate than Botwood, for the Irish station has been able to carry out tests with the *Imperial* flying-boats on the Empire routes leaving and approaching Southampton

The meteorological knowledge which is to be used in connection with these services is the result of very many months of experiment and research and will, of course,



One of the Imperial flying-boats landing at Bracciano, the airport of Rome

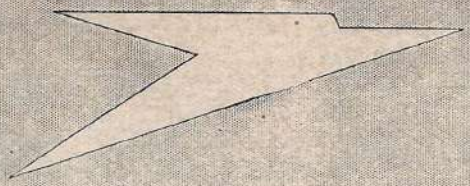
benefit from the actual experience gained during the series of experimental flights carried out by Imperial Airways and Pan American Airways in 1937, and by the upper component of the *Mayo Composite Marine Aircraft* during last summer

An immense amount of data on North Atlantic weather conditions has been obtained from wireless reports received not only from various shore stations but also from ships, both merchantmen and liners, using the North Atlantic. Further, meteorological observers have themselves travelled many times on ships making observations which are of paramount importance in the forecasting of Atlantic weather. For example, by means of special instruments the movements of small pilotless balloons released from the ships have been observed. This has given information on air currents at heights at which aircraft are likely to operate

These observations and the mass of accumulated data mean that the meteorologists are now able to forecast accurately the weather conditions at any point on the 2,000-mile crossing and, what is more, can differentiate between the conditions at sea level and at varying heights. In other words, it will be possible to give the Commander of one of the Atlantic aircraft such accurate information that he will be able to plan his course, decide at what heights he must fly, and make an accurate estimate of the length of time it will take him to make the crossing. This in itself is a remarkable achievement, but in addition the aircraft will be constantly in touch with shore stations which, in turn, will be in touch with ships. Any unexpected change in weather conditions can therefore be transmitted immediately to the Commander of the aircraft so that, if need be, he can change his course to avoid unfavourable conditions

For some time past ocean weather charts have been prepared which have enabled the personnel who are being trained for the North Atlantic air service to do valuable preparatory work. On these charts they have been able to plot almost mile by mile the course which they would be steering if they were actually flying over the Atlantic

Regular air services are often long delayed after the first venturous solo flights, even after the commercial survey flights. But in the carriage of passengers and mail nothing can be left to chance



AEROSHELL

LUBRICATING OIL

is used by Imperial Airways

on all their regular air

services throughout the world

Printed in England by Gee & Co. (Publishers) Ltd., 6 Kirby Street, London, and published by Imperial Airways Limited, Airway Terminus, London.