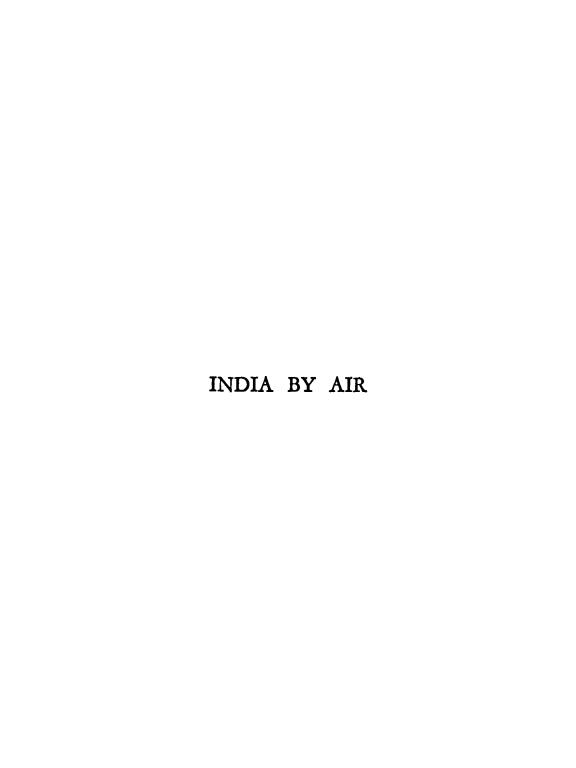
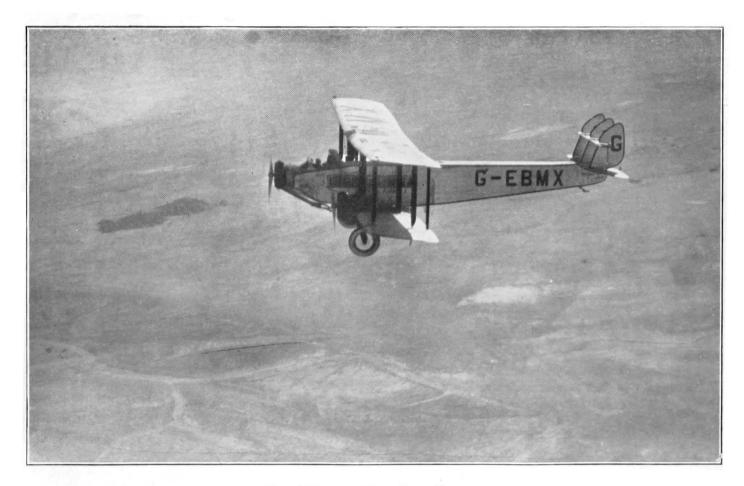


MAP OF THE ROUTE





THE "CITY OF DELHI" IN FLIGHT

THE RIGHT HON.

SIR SAMUEL HOARE, Bt.
G.B.E., C.M.G.

WITH AN INTRODUCTION BY
LADY MAUD HOARE, D.B.E.

WITH 35 ILLUSTRATIONS AND MAP OF THE ROUTE

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DEDICATION

TO MY MOTHER WHO AT THE AGE OF EIGHTY WAS WITH DIFFICULTY DISSUADED FROM MAKING A FLIGHT WITH ME IN A SOUTHAMPTON FLYING BOAT AND WHO CLOSELY AND SYMPATHETICALLY FOLLOWED EVERY INCIDENT OF THE JOURNEY DESCRIBED IN THIS LITTLE BOOK.

S. H.

Sidestrand August, 1927.

AUTHOR'S PREFACE

I AM greatly indebted to many friends for their help in the preparation of this book, particularly to Mr. Geoffrey Lloyd for his patient kindness in reading the proofs, and to Mr. C. Ll. Bullock and the Royal Air Force for most of the photographs.

I should add that for such of these photographs as are derived from official sources the copyright is reserved by the Crown.

S. H.

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By LADY MAUD HOARE, D.B.E.

JUDGING by the number of questions asked, the point of most interest about the flight was whether we were frightened during its course. And we have answered invariably, and I hope truthfully, 'No.' I remember wondering rather sadly on our bumpy journey to Dijon, the first morning, if it was going to be as rough the whole way and whether I should get used to it, as I was not, and am not, a perfect air sailor. And in murky and stormy weather the next afternoon along the Italian coast it ceased to be of great interest whether we arrived in Naples or not. But when we were in the air during the dust storm in the Persian Gulf, which probably was a period of some danger, we were too much interested to be frightened. The increasing gloom, the descent to within 20 feet of the sea, the sudden appearance of land on the opposite side of the machine to where it was last seen, the stampeding of some camels as we passed

just over their heads, made up a chain of incidents, puzzling perhaps, but far too interesting to be alarming at the time. And afterwards, admiration for the technical skill of pilot and navigator, and pride in the mechanical perfection of the engines left no room for any other feeling.

There was clearly some risk in crossing the Mediterranean in the winter in a land machine. But we had equipped ourselves with the latest pattern of life-saving waistcoats, made of hydrogenated rubber. And having arranged our affairs so that our little all was not devoured by legal arguments trying to prove who had died first in a crash, it was a risk we were prepared to run.

But in the weeks before departure, fear of illness or of fog at Croydon to delay our start was a worry. After all, 7.30 A.M. on Boxing Day was a severe test of friendship on the part of those seeing us off and a postponement might have meant an overstrain. Whilst a sprained ankle would have made an inaccessible peak of the three-foot-high step into the machine, and an outbreak of mumps would have been tragic. One of the objects of the flight was propaganda, and my conviction that any ordinary woman could easily do a long-distance flight needed proof. So delay at the start, from whatever cause, would have been disastrous.

Another point of interest, apparently, was how we passed our time in the machine. And the

answer that, besides looking out of the windows, reading, and repairing our short nights, a considerable amount of time was spent in writing, has astonished many people. Travellers by road and rail particularly do not seem to realise the delightful absence of vibration which to my mind is one of the greatest advantages of air travel. This book is entirely based on the notes written in the machine whilst flying. Another favourite occupation was map-snatching. The admirable map of the route thoughtfully provided by Imperial Airways was in such constant use that repair was needed before the return flight began.

Naturally enough, weight was of critical importance, and from the beginning of the preparations for the journey the luggage bluff was superb. To begin with, we wanted to know how much luggage we could take, and Imperial Airways wanted to know how little we could do with. Then prestige came in, and it became a question of who was entitled to most, the Great Man, the Only Lady, the A.O.C. India, or the Organiser? (The Organiser, I may say, was Mr. C. Ll. Bullock from the Air Ministry, the impresario of many flying tours.) On this three things should be recorded. The A.O.C.'s allowance was cut to the bone because he was not flying home with us, though, as we had all sent 'luggage in advance,' the logic of the arrangement was not very apparent

to him. The only hat-box was a man's. And when an extra passenger joined us at Alexandria, my dressing-case fittings were not sacrificed. I can only hope that the complete figures of first and of final weights will never be published or our reputation for truth will have a crash, probably a fatal one.

Equipment for the woman was a problem on which no one could throw much light. Clothes for the visit to India were easily sent in advance. But during the flight provision had to be made for sun and rain, heat and cold, deserts and drawing-rooms, all within the limits of a suitcase and a dressing case. I blessed the inventors of aluminium and stockinette. To begin with, my ordinary dressing-case weighed 11 pounds empty, so one with unstiffened top and bottom was substituted, which, with its equipment of erinoid brushes and combs, weighed only 5½ pounds. Then, glass bottles and china pots being heavy as well as breakable, there began a great hunt for lighter fittings, and aluminium solved the difficulty. But when catering for air travel becomes a business proposition, I hope manufacturers will realise that an unfair handicap is placed on would-be purchasers, when requests for 'aluminium bottles' produce either an infant's feeding-bottle or a thermos flask — 'muff-warmers' being the right term. Also 'picnic butter tins' as receptacles for

face-powder and bath-salts do not suggest themselves save to a very persistent inquirer. The Christmas present of a practical friend, too, came into prominence when I handed my roll-up shoeshine round the cabin preparatory to our arrival at Karachi.

My actual wardrobe consisted of a stockinette coat and skirt, with crêpe-de-Chine jumper worn most days, and a woollen jumper and tweed skirt as a change. Then, in layers according to temperature, woollen cardigan, leather coat, and fur coat. The felt hat matched the coat and skirt, and gum boots were occasionally most useful on wet aerodromes. A black lace evening dress for formal dinner parties—one night we met the Emir Abdullah at Amman, and the next night King Feisul at Baghdad—and a demi-toilette completed the visible list; but my most cherished possession was a Shetland wool dressing-gown, light, warm, and uncrushable! This met all requirements of comfort, and, I hope, of suitability too. For on arrival at Delhi, when we went straight into luncheon at Viceregal Lodge without unpacking, an old friend greeted me with: 'But of course you have changed out of your travelling clothes.' He appeared amazed when I told him that, as he saw me, so had I left London.

To have been the first woman to fly to India and to fly so long a distance was a wonderful gift

of fortune, and one for which I shall always be grateful. Many had the wish and only one the opportunity. All my friends were envious; some, perhaps, more envious after the flight than before it, but with most the envy was genuine. And they were willing to come in any capacity. One serious offer came from a woman-pilot to maid me, pack for me and call me at any unearthly hour necessary, if only she might come. The offer also implied a willingness to fly the machine when required, but as unfortunately our numbers were limited, I had regretfully to say 'No.' That she would have been an agreeable addition I have no doubt; but even in her absence we were a very happy and harmonious party. And the Organiser allows me to say that I only lost three pocket handkerchiefs, and was never seriously late during the journey in spite of the absence of the flying maid.

Two outstanding impressions remain with me. First, there is the wonderful interest aroused by the flight, and aroused not only amongst our own people. For the whole way along, foreigners and native tribes, veiled women, priests, and officials all flocked to visit the machine and to talk to the travellers. The moment the machine landed, the barest desert was crowded, and I can remember no landing-ground without the click of many cameras.

To our own people the thrill undoubtedly was the hope of a closer connection with home, a quicker mail and a shorter journey. The other impression is of great kindness and most understanding tact from many and various hosts and hostesses of all nationalities. For instance, the Governor of Malta, the Italian Governor-General at Benghazi, the High Commissioner of Iraq, the British Resident in the Persian Gulf, the officials of the Indo-European Telegraph Co. at Jask, and the Maharajah of Jodhpur, to mention only a few. All these, and many others too, provided us with warm welcomes and delightful memories for which we cannot be sufficiently grateful. One and all, from London to Delhi, they gave a delightful background to all the many interests of a unique journey.

M. H.

August 1927.

THE START

In the spring of 1925 Colonel Amery, the Colonial Secretary, and I spent the Easter Parliamentary recess in making a flying tour of the Middle East.1 In the space of a few weeks we visited every corner of Iraq and Palestine; we studied on the spot many questions of Imperial interest, and we realised for ourselves the great uses of the aeroplane in countries of vast spaces and few roads and railways. Day by day we covered in hours and minutes distances that would formerly have taken weeks to traverse; stage by stage we arrived at our destination without delay or mechanical breakdown. Such an experience, the first of its kind in ministerial annals, was bound to leave a permanent impression upon the minds of both of us. For the Colonial Secretary it created a picture of an Empire physically united by the instruments of flight, to the Air Secretary it confirmed the hope that the aeroplane would not be always a weapon used almost exclusively for destruction. When, therefore, we

¹ A Flying Visit, Cambridge University Press, 1925.

returned to London with these impressions fresh in our minds, I at once turned my attention with redoubled interest to the question of Imperial air routes, and to the possibilities of using the aeroplane and the airship for eliminating the time and distance that are now the most formidable obstacles in the way of Imperial unity.

I had always been convinced that the aeroplane could be made an asset and not a liability to the Empire, and I was anxious to bring my conviction to the test.

For various reasons the route to India and the East seemed to offer the line of least resistance. From Cairo to Basra a service of military aeroplanes had regularly carried the mails since 1922, and the desert was already equipped with fuelling stations, landing-grounds, and even a furrow, ploughed by Fordson tractors, that for 400 miles marked the line for the machines to follow. Here, then, as it seemed to me, both the air and the ground were ready for a civil line, here was the point for forging the first link in a chain that would eventually connect London and Calcutta.

For once at least the course of politics helped me with my project. Iraq, once a by-word for the turbulence of its population, had since 1922, when the Air Force took over the responsibilities for its order and protection, become year by year more peaceful and contented. It was, therefore,

THE START

possible to reduce the British garrison, and to substitute for the Air Force squadrons that had been carrying the mails a civil line that would be available for ordinary passengers and freight. As the subsidy for the civil line was more than set off by the savings in Air Force expenditure, my proposal meant an economy to the tax-payer; as the departure of squadrons from Iraq freed them for service at home, it also meant an eventual strengthening in the air defence of the British Isles. An agreement was accordingly signed between the Government and the Imperial Airways Company for a regular service between Cairo and Karachi, with the section Cairo to Basra the first to be operated.

Five new de Havilland aeroplanes, each equipped with three 450 horse-power Bristol Jupiter engines, were designed and ordered for the line, and the opening journeys were fixed for the beginning of 1927.

As soon as this project took shape I determined to make the first journey over a route that will one day become a great Imperial highway, and as the enterprise was civil and not military, and a woman was, therefore, not contraband, my wife was equally determined to go. Lady Maud had already flown more than a thousand miles with me. Together we had crossed Europe from London to Gothenburg, together also we had faced a very bumpy flight between Jerusalem and Cairo.

But the first flight to India, a flight that with the return to Egypt was to cover 10,000 miles, and had never been made by anyone, man or woman, in a civil machine, was in a very different class from these previous experiences. Lady Maud had no intention of letting the opportunity slip. When, then, our friends said to me, 'Surely you won't take your wife with you,' my answer was, 'You don't know my wife. If the flight succeeds, she is determined to be in it, and if there is an accident, she has made up her mind that we had better both be in it rather than one of us.'

There were others who expressed their doubts upon a different line of approach. 'Is it wise,' they asked, 'for a Cabinet Minister to embark upon such an adventure?' Cabinet Ministers should wear frock coats, and sit at home signing minutes in Whitehall. I was told more than once that the only other Minister who had taken part in opening a new line of transport had been Huskisson, the President of the Board of Trade, and that less than a hundred years ago he had been killed in the first journey of the Liverpool and Manchester Railway. 'Remember Huskisson,' they said to me, 'and do not expose the Government and Chelsea to the risk of a vacancy in the Cabinet, and an inconvenient by-election.'

If we listened deferentially to these warnings, we had not the least intention of allowing them to

THE START

change our plans. Undeterred, we proceeded to fix our date and to arrange the details of the flight.

As to the date, I was not my own master. In the first place the service was timed to start at the beginning of the year, and secondly it was a choice for me between going in the Parliamentary recess and not going at all. It was on this account that we had to select the end of December—that is to say, the worst possible time from the point of view of flying weather. If we had been free agents, we should have chosen the spring or the early autumn when the days are long and the weather agreeable. As it was, we had to fix upon Boxing Day, almost the shortest day, and a season of the year when, if there are no gales, there are usually fogs.

When I asked the Meteorological Office about weather prospects, I received little comfort. The Director gave me depressing diagrams and statistics showing that at the end of December we might expect a very high percentage of wind and fog and a very low percentage of fine weather.

There were three routes open to us across Europe. Firstly, we could go by Warsaw, Bucharest, and Constantinople; secondly, we could take a central route through Germany and the Balkans; thirdly, there was the line of France and Italy, with the alternative of crossing the Mediterranean either by Sicily, Malta, and Tripoli, or by Athens, Crete, and Alexandria. When I

saw the weather reports of Eastern Europe, I decided to run no risk of being held up by fog or snow in Warsaw or the Balkans, and I selected the western route, by France, Italy, and the Mediterranean. From the point of view of the weather the choice seemed a wise one, but the weather was not the sole factor in the problem. Our aeroplane was a land machine with a land under-carriage and no floats for landing on the sea. The Mediterranean route meant a flight of more than 600 miles across the open sea. Was it safe to make the flight in a land machine that had never been tried on a journey of this kind before? When I told our nervous friends that we would go equipped with Major Evans's patent rubber boots and waistcoats, they only said that, though we might escape death by drowning, we should certainly not escape it by freezing. When the First Lord of the Admiralty kindly offered to arrange for a chain of Destroyers to look out for us between Malta and the coasts of Europe and Africa, we were told that the chances of being picked up in 650 miles of sea by even a dozen alert Destroyers of the Royal Navy were very remote. None the less I was more afraid of the fog than of the sea, and having great confidence in British machines and engines, I stuck to the Mediterranean route, and the Mediterranean route by Sicily and Malta rather than by Athens and Crete.

THE START

But would the aeroplane be ready in time? The coal strike had delayed the builders, and a week before our start there was still a doubt as to whether the machine and engines would be tested in time. We were to leave on the Monday after Christmas. On the Saturday, and even on the Sunday, the tests were still going on, and there was no chance of giving the machine a long-distance journey as a trial. All this, while it did not make Lady Maud or myself nervous, was none the less a little unsettling on the eve of an altogether unprecedented journey. Two fears, and two fears only, obsessed us: the first, the fear of some silly illness, a cold or a chill, that would prevent our start; the second, the fear of a fog that would keep us kicking our feet upon the aerodrome at Croydon. Would it not have been intolerable if, after all our preparations, a sudden attack of 'flu' or even an unromantic cold in the head had stopped our starting? I could not help remembering that illnesses, quite insignificant in themselves, had often marred enterprises of much greater moment than ours. Was there not a moment when the sight of President Diaz on the balcony would have stopped the Mexican revolution, and the great Dictator was writhing with a tooth-ache that lost him a chance that never recurred? A series of such incidents occurred to my mind, of colds in the head that had sent great events awry, of little complaints that had frustrated

big adventures. After all our preparations a bad cold might stop us starting; it might ruin the punctual completion of our programme. I tried not to be morbid on the subject, and, as the best antidote, started in my friend Sir Philip Sassoon's court at Trent upon a training of intensive tennis as soon as the autumn session came to an end.

Then there was the fog. I could picture to myself the comic-opera scene of a moving farewell from all our friends at Croydon and our disconsolate return home in a London fog that had prevented us ever leaving the ground. An abortive start is always tiresome, but when it is at the beginning of a much advertised journey, and in the sight of an assembly of friends and reporters, it is intolerable. I cannot, therefore, say that we were not both a little anxious upon the eve of our departure. All the more gratefully, therefore, did we appreciate the telephone message that late in the evening came through to us from Sandringham:

'The Queen and I wish you and Lady Maud bon voyage, a successful visit, and a safe return home.—GEORGE, R.I.'

All the more joyfully, therefore, did I see when I looked out of my bedroom window at 5 o'clock on the morning of Boxing Day that the stars were shining brightly and that the morning was cold and clear.

THE START

We were to leave the aerodrome at 7.30 A.M., and to be in good time we left our house soon after 6. There was no traffic in the streets and in little more than 20 minutes we found ourselves at Crovdon, where the main room of the aerodrome hotel was already filling with the many friends who had come to see us off. All of them were kind enough to be greatly interested in our journey, some of them, however, were still obviously unconvinced as to its wisdom and safety. When they escorted us across the pitch-dark aerodrome to the machine. there was something about it that resembled an early morning procession to the place of execution. When the photographer fired his flash-light the illusion was heightened. In the white glare even the robust and rubicund face of Sir Eric Geddes wore an ashen pallor.

For the first time we entered the machine which was to be our home for 10,000 miles. Although I knew the details of its design I had not seen the type before, but even in the dim light it struck me as a very serviceable-looking aeroplane, with its three great engines already purring like kittens, its clean stream-line, and its comfortable cabin divided by a partition between the crew and ourselves.¹

Another wave from our friends, and we were off the ground and for better or worse launched upon

¹ Vide page 124 for a description of the machine.

our journey. As it grew light I was able to take stock of our surroundings. Our party was a party of four—with me were Lady Maud Hoare, Air Vice-Marshal Sir Geoffrey Salmond, who had 'emplaned' (to use the phrase that he himself coined) for the purpose of taking over the command of the Air Force in India, and Mr. C. Ll. Bullock, my principal private secretary at the Air Ministry. In front was the pilot, Captain Barnard, and at his side the navigator, Captain Johnston, and behind them Mr. Hatchett, the wireless expert, Mr. Mayer, an engineer from the Bristol Jupiter Company, and Mr. Emmott, the photographer.

From the first minute it was clear to me that a definite advance had been made in reducing the noise of the engines and the propeller, and that the cabin, with the easily opening windows and the control of hot or cold air, had been made as comfortable as it could be.

We were definitely off—that was a matter for sincere congratulation, and we were off in the company of as pleasant a party as ever travelled together, and in a machine that was already showing its paces to excellent effect.

When the news of our departure was announced to the Prime Minister, he is reported to have said:

¹ Expert and gallant pilot, cheery companion, loyal friend, tragically killed, whilst testing a new machine, at Bristol on July 28.

THE START

'What with F. E. winning diving competitions in Madeira, and Leo Amery ski-ing in the most mountainous regions up the Alps, and Sam Hoare flying to India, I feel like a circus manager whose performing fleas have escaped.'

THE FLIGHT TO AFRICA

At this point it may be convenient to give the programme of our flight to India. I give it in the form of one of the tables that were prepared for me.

LONDON TO DELHI.1

			Miles per Stage	Miles pe Day
Croydon	_	Dijon	373)	
Dijon		Marseilles	268	641
Márseilles		Pisa	295)	
Pisa		Naples	279	574
Naples		MaÎta	410	410
MaÎta		Khoms	230)	-
Khoms		Benghazi	350	580
Benghazi		Sollum	350)	
Sollum		Aboukir	300	650
Aboukir-	Gaza-	–Ziza	360 [°]	360
Ziza		Rutbah	289)	-
Rutbah		Baghdad	254)	543
Baghdad		Basra	285)	
Basra		Bushire	235	520
Bushire		Lingeh	316)	(
Lingeh	—	Jask	240	556
Jask		Pasni	355)	(
Pasni		Karachi	245	600
Karachi		Jodhpur	390	390
Jodhpur		Delhi	300	300
•			-	6124

¹ This table is based on calculations made in preparation for the flight. Owing to minor deviations in the route in the course of actual flying, the distances in this table do not correspond completely with the distances actually flown, a summary of which is contained in the log on page 139.

THE FLIGHT TO AFRICA

It will be seen that it is arranged in stages averaging about 300 miles, with two stages to be covered each day. The range of the machine being 400 to 500 miles and its air speed about 100 miles an hour, it was necessary to adapt the journey to the necessities of refuelling. By a happy coincidence we and the machine needed luncheon and rest at the same time. We were proceeding eastward and consequently, as a result of the distances that we were covering, we were often losing as much as an hour of daylight in the day. We had, therefore, to start as soon as it was light, and to base our plans upon the completion of our first stage by luncheon-time and our second stage by sunset. These arrangements, and they are the ordinary arrangements of long-distance flying by aeroplane, make air travel differ from journeying by sea, or railway, or car. The air traveller eats and sleeps on the ground and, when he arrives at his destination, usually lands at an aerodrome that is at some distance from the centre of population that gives it its name. He arrives late and leaves early, and it may well be that all that he sees of the city in which he sleeps are the street lamps in the evening and early morning. Our first day's journey vividly illustrated these characteristics of air travel. We were to lunch at Dijon and to sleep at Marseilles and to cover during the day a distance of about 650 miles. To us Dijon meant, not the capital

of Burgundy with its cathedral and its restaurants, but a huge military aerodrome with scores of Breguet machines drawn up in rows for the benefit of the British Air Minister, who was visiting one of the chief centres of French aviation. So also was it at Marseilles. The aerodrome of Marignane is 20 kilometres from the city, and it was as dark when we arrived at our hotel as when we left it.

Dijon was our first halt and, hungry and somewhat exhausted, we reached it by midday. We could not have had worse weather for the first day of our journey. A north-easterly gale was raging, sleet storms constantly shut out the view, and the Hercules, steady machine as she was, behaved like an express lift constantly descending from the top of the Woolworth Building to the ground floor. Even the most hardened pilots of the party were under the weather, even the two of us who survived experienced the chilly and unrestful sleepiness that forebodes the worst in a cross-Channel passage. Very cold and rather muzzy we emerged from the aeroplane to find the Prefect, the General of Division, and all the Dijon notables waiting upon the aerodrome to receive us. As best we could we pulled ourselves together, Lady Maud staggering under roses and chocolates that the kind ladies of Dijon had sent her, I struggling no less with a series of suitable speeches in the salle-

THE FLIGHT TO AFRICA

d'honneur of the barracks of the 132nd Régiment d'Aviation.

Admirable, however, are the tact and consideration of our French friends. They knew that it was the first day of our journey; they knew also that we had had a very bumpy passage. Indeed, in the driving clouds and sleet showers the machines that they had sent to escort us had failed to find us. Whilst, therefore, the authorities, military and civil, were anxious to give us an official welcome, they none the less realised that we needed food and quiet rather than functions and ceremonies. As soon, then, as the welcome was over, they showed us a quiet room where an excellent luncheon was ready and where they left us to ourselves.

Greatly refreshed by this kind hospitality we were off again by 1 o'clock. Though the sun had come out the weather was still very rough. To a good pilot, however, the wind may often be a help and not a hindrance, and Captain Barnard, riding the machine as Donoghue would ride a Derby winner, made full use of it to increase our speed. At times he took a cross-country route to keep it the better behind us; at times, when he needed shelter, he descended between the steep banks of the Rhône and skimmed over its waters. Our course was east of Lyons, Valence, and Avignon, at first along the line of the Rhône and then over the plains and lagoons that encircle Marseilles.

The lagoons I regarded with special interest, for I well remembered the description in Gould's 'British Birds' of the huge flocks of scoter duck that visit them. Sure enough, the waters below me were covered with black specks that I soon made out to be ducks and coots.

The wind was now falling and a golden sunset winning its way against the black clouds that had held possession of the day. Marignane, the Marseilles aerodrome, was soon in sight, and five minutes before our scheduled time we were once again upon the ground. A long drive to the city, taking as long as the aeroplane would need for 100 miles, and an interview with the representatives of the *Petit Marseillais* ended the first and, as it proved, one of the most tiring of the days of our journey.

Already the news of our passage was being broadcast about the world, and I noticed with interest upon the French tape a description of the 'avion ministériel' that had passed over Paris at 9.30 and had landed at Dijon two hours later.

The first day of the flight, though it had plunged us into the worst possible weather, had ended safely and punctually at the destination that we had planned.

By 7 the next morning we were motoring out to the aerodrome. As we left the outskirts of the

THE FLIGHT TO AFRICA

city we found the valleys enshrouded in a thick white fog. Having avoided fog in London it seemed hard to find it upon the Riviera. At Marignane the fog still persisted, and though we had satisfactory weather reports from Antibes and Ajaccio, we were compelled to delay our start until in half an hour it began to clear. As we rose into the air, wisps of white mist were drifting like cotton-wool around us, whilst an orange sun smiling upon the snow-capped Alps on our left and the dark green pines of the Montagnes des Maures gave the effect of a Japanese landscape to the country over which we were passing. In a little while we struck the line of the railway and I could see the Rapide jolting its way towards St. Raphael. Was it the 'Train Bleu' with its greatly advertised and showy discomfort? Were its occupants looking idly from overheated compartments at the silver machine that was overtaking them in the air? I do not think that there was one of us who did not prefer the occasional bounces of the Hercules to the continuous rattling and jolting of the Riviera train.

A few minutes more and we were over my brother-in-law's villa at Cannes, where, as we afterwards heard, the family came out to wave their good wishes with their handkerchiefs.

After Cannes we followed the line of the coast, flying a few hundred feet over the sea and casting

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the shadow of the machine upon the hills behind the Riviera towns. As we passed Nice, Monte Carlo, and San Remo, I could not help thinking that ours was the aspect from which these places should be approached. Beneath us, the bluest of blue seas and, a few hundred yards on our left, the white and yellow villas and casinos, idealised by the morning light, and a background behind of mountains and valleys that from our vantage-point we could see stretching for miles into the interior of the country. More than once we flew below the level of the Corniche road and its endless string of motors passing almost parallel with the machine. Lazily we identified many houses and places that we knew so well from the ground. It seemed that the air made them look their best. Even the Casino at Monte Carlo, to me one of the most repulsive examples of nineteenth-century bad taste, and the rows of barrack-like hotels were transmuted into fairy palaces.

Passing from the French to the Italian Riviera we continued our peaceful course to Genoa, where the mountains with their line of Vauban forts made a background, worthy of Joseph Vernet, for the shipping in the harbour. Towards Spezzia the weather began to change, and, as we neared the pine woods of Viareggio and the shore where the body of the poet Shelley had been found and burnt, there were signs of heavy rain. By the time that we sighted

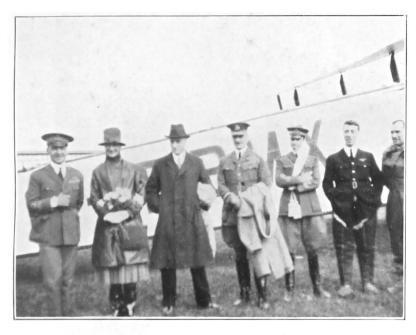
THE FLIGHT TO AFRICA

the Pisa aerodrome, we could see big puddles of stagnant water bearing witness to the storm that had passed over the country. We landed in a series of big splashes, and taxied across the sodden landingground to the hangar of an Air Force Squadron whose officers were awaiting us. Our Italian friends had come to the conclusion that the ground was unfit for landing. But as we had not received the message that they had sent to warn us, we did not realise the risk of having the machine stuck in the mud and water that covered most of the aerodrome. The Squadron had prepared a delightful reception for us, and the only difficulty was to bring the hospitality to an end in time for our departure. The refuelling, moreover, had taken longer than we expected, and we were doubtful when we left the aerodrome whether we should have enough daylight to reach Naples.

For the whole of the afternoon the weather was consistently bad, with scuds of rain and mist blowing from the Apennines and almost completely blotting out the panorama of the historic country over which we were flying. Now and then we had a glimpse of some town like Corneto with its towers looming mysteriously out of the mist as in a Joseph Vernet picture. Now and then we were able to make out an aqueduct or some famous ruin. Of Rome we could see nothing, although we passed within a few miles of it.

The Tiber, browner than ever, was a muddy streak below us.

As the afternoon wore on the weather cleared slightly, and we could observe with interest the curious contrasts of the Campagna and the Terra di Lavoro where the herdsmen with their white oxen and sheep seemed to alternate with the chain of new hangars and aerodromes that now marks the interest of Signor Mussolini and the Italian people in aviation. At Terracina, having skirted the Gibraltar-like massif of Capo Circeo, we took to the sea, and in rough and fitful weather followed the coast past the fortress of Gaeta, where the last Queen of Naples had made her final stand, until we could see in the mist before us the island of Ischia and the lights of the Castle of San Elmo. It was already growing dark, and as we knew that the aerodrome at Naples was very small and enclosed by houses, we began to regret our delayed start from Pisa. But there was no cause for anxiety. After a circle or two we were safely down and receiving a friendly welcome from the notabilities of Naples. The first functionary to greet us was the secretary of the Neapolitan Fascists with a bouquet for Lady Maud and congratulations from his Committee. The first question that the crowd of reporters addressed to me, as I stepped from the machine was, not as I had expected, 'How has your flight progressed?' but 'What do you think



GROUP INCLUDING THE SECRETARY OF STATE, LADY MAUD HOARE, SIR GEOFFREY SALMOND, THE PILOT AND ITALIAN OFFICERS



VESUVIUS FROM THE AIR

THE FLIGHT TO AFRICA

of Mussolini?' I could not help thinking that the form of our welcome was symptomatic of the tendencies of modern Italy.

When we reached the hotel, I was asked to sign a special visitors' book, and I noticed with interest that the two names above my own were those of Mr. Lloyd George and ex-King Ferdinand of Bulgaria. My signature looked insignificant in the presence of two such autographs.

All the evening the rain descended in torrents, but the next morning was worthy of Naples at its best—a brilliant sun, a mild and soft wind, and the waters of the bay lapping gently against the Castello del'Uovo. At the aerodrome we found our friends of the previous evening and an array of photographers, whose efforts had been previously foiled by the bad weather. The machine rose without trouble, and surmounted the houses that cluster round the aerodrome as an old horse takes the first fence in a steeplechase. What wind there was, was against us, and we, therefore, decided to land at Catania in Sicily for refuelling before we attempted the passage of the Mediterranean to Malta.

Having time to spare and being untiring sightseers, we determined to linger for a while over Vesuvius and Pompeii. Vesuvius could not have behaved better; the volcano, whilst active enough to show us its energy, was not sufficiently disturbed

to prevent our circling over the crater and almost penetrating the chocolate clouds of smoke that were emerging from it. As for Pompeii, it looked as beautiful as ever, but with the added effect of a city that, though its inhabitants had left it, was still intact and habitable. Then followed that wonderful series of bays, their names as beautiful as they are themselves—the Gulfs of Salerno, Policastro, Santa Eufemia, and the rest—with a black island on our right that proved to be Stromboli.

That day we had intended to visit the trio of the great volcanoes, and having started with Vesuvius to complete the tour with Stromboli and Etna. But by now there was too much mist on the mountain-tops to make a flight possible over Stromboli and Etna, and we were forced, therefore, to keep to the coast and the Straits of Messina. Scarcely had we reached the narrow neck of water than we realised that we were in the kingdom of Scylla and Charybdis. Indeed these two mythological powers seemed to be playing a single of tennis in which the machine was the ball and the Straits the net across the court. Backwards and forwards we flew, struck first by the cannon-ball service of a Tilden, then smashed back by the dashing return of a Borotra. Fortunately for us the game did not last long, and we emerged over the open sea, somewhat shattered from our experience that, whilst it had done us no

THE FLIGHT TO AFRICA

harm, had in a previous flight knocked Sir Sefton Brancker's head against the ceiling of the machine. As it was, we were glad to have a couple of hours' rest at Catania, where the British Vice-Consul and a large company of agreeable Sicilians came to inspect the machine and its ministerial party.

From Catania to Malta the distance is short, a mere 150 miles, but as the clouds were gathering and the afternoon looked uncertain, we started away directly after luncheon. It was then that we had our first experience of really bad weather at sea. Masses of thick cloud were driving across the sky, and a gale of wind and rain was raging as soon as we left Cape Peloro on the Sicilian coast. Our pilot, realising the thickness of the clouds, decided to fly below them, and for the whole distance from Sicily to Malta never rose above 500 feet. Could there have been a better testimony to the reliability of our three engines than Captain Barnard's confidence in keeping the machine close down over a really rough sea? My only feeling of doubt was whether in the bad visibility we should succeed in hitting off Malta. Malta is a very small island to reach from the air in a December storm. If we had missed it, it would have been, to say the least, tiresome to choose between returning to Sicily or wandering about the Mediterranean until our fuel was exhausted. As it was, our excellent navigator,

Captain Johnston, hit it off as Vardon at his best would have holed out a long putt. As straight as a die we came over the island and saw below us a small circle cut up like a chessboard by the stone walls of the small fields and the domes of many churches looking like the chessmen. The rain was coming down in a deluge as we landed at Halfa, and greeted a number of Air Force officers, who, like me, had been doubting whether or not we should find the Island in the storm.

Within a few minutes I was started upon a programme that kept me busy during the few hours of our stay—the inspection of the Air Force units, a long talk with the Prime Minister, and a dinner with the Governor, Sir Walter Congreve, a very gallant gentleman whose recent death is deplored by a host of friends and brother officers.

I had never visited Malta before, and I greatly wished that I had time and daylight to see more of what is well described as 'a city built by gentlemen for gentlemen.' A night at the Palace with its splendid marble staircase, its fine suite of reception rooms, and some really remarkable Gobelin tapestry gave me an idea of the riches of the Order that had so long governed the Island. When I saw the silver plate that the Knights used in their Hospital, I felt that the post of Grand Master must at one time have been amongst the most dignified in Europe, and I envied the Lavalettes,

THE FLIGHT TO AFRICA

the Rohans and the Pintos, whose pictures and coats of black and red I saw on the walls of the Museum and the Palace. I should not be surprised if the Palace was not a difficult house to manage in accordance with present-day requirements. I was certainly struck by the fact that the Governor's bedroom opened into the Council Chamber, where the Assembly of the Island holds its meetings. In the Palace of Westminster the Speaker runs no such risk of his midnight slumbers being disturbed by an all-night sitting.

As our next day's journey was a long one, we had an early start in the morning and again found to our disappointment a gale of wind and a downpour of rain. However, unlike the previous day, the weather improved as we proceeded on our course, and a wind veering to the north helped rather than hindered us. It cannot, however, be said that the Mediterranean looked prepossessing, or that we envied the Destroyers that from time to time we saw below us. As we passed over them we exchanged messages of greeting, and I thanked them, and through them Sir Roger Keyes, for the care with which they were looking after us. One of them replied, 'You may think it bumpy up there, but it is nothing to what it is down here,' and as I saw the Destroyer jumping about like a pea on a drum, I fully agreed with the Captain's observation.

ONCE again we flew very low the whole way, and when we reached the sandy shore of Tripoli we could claim to have flown the whole way across the Mediterranean at a height of only a few hundred feet. Once again, also, our navigator hit off with unerring instinct the point at which we were aiming. To my inexperienced eyes there was little to distinguish the settlement of Khoms from the desert coast that stretches for hundreds of miles along the shores of North Africa. But Captain Johnston brought us to it without a deviation, and Captain Barnard landed us within a few hundred yards of the ruins of the city of Leptis Magna. Before us on the desert was a hangar, gaily decorated with Italian and British flags, and equipped with the preparations of a banquet in our honour. The Governor-General of Tripoli, General de Bono, and the British Consul-General, Colonel Dodds, were there to greet us with a number of Italian officers and civil officials. With an unerring instinct for our tastes the Governor at once invited us to visit the ruins of the buried city beside us. Originally a colony of the Sidonians, Leptis

Magna became under the Carthaginians and afterwards under the Romans the chief entrepôt of North African trade. After playing a part on Pompey's side in the war against Cæsar, and progressing as a colony under Trajan, it reached its zenith in the fourth century during the reign of its greatest citizen, the Emperor Septimius Severus. The harbour then seems to have silted up, and the water supply to have failed. It only needed the nomad tribes to give the death blow to the city's life, and for 1500 years a pall of white sand has covered its remains. It has been left to him whom many consider to be the founder of the new Rome to rediscover its ancient glories and to restore to honour the birthplace of a great Emperor. When Signor Mussolini visited last year the scene of the excavations, he must have felt satisfied with the plan that he had originated and the work of his lieutenant, Count Volpi, the first Governor-General, who put it into execution. Even in the short hour we spent among the ruins we could see gates and walls regaining their shapes and recovering their places. The blocks of marble, with their edges as fine as on the day that they were cut, lay ready to the hands of the native prisoners who were working under the direction of an Italian archæologist, and all that was needed was to piece them together as though it were a children's game of bricks. A row of recently excavated statues

was before us, some of them no doubt destined to go to Rome and to take their place with their neighbour from North Africa, the wonderful Venus, in the Museo delle Therme.

Reluctantly we tore ourselves away from this entrancing site and went off to the hangar for luncheon. Our host, General de Bono, I had met upon the Italian front. After the war he had become a prominent Fascist, and with two others as prominent as himself in Cyrenaica and Eritrea, now takes his part in the Fascist administration of the three Italian colonies.

As we still had a distance of 350 miles to cover before sunset, and our flight was to be across the open sea, I looked anxiously at my watch and hurried on, so far as I was able, the time for our departure. I need not have been anxious. The wind had changed again, and when we found ourselves in the air, we saw on the face of the speedometer that our ground speed was 130 miles an hour. Our course lay across the Gulf of Sidra, the Syrtis Major of the ancients, and for more than 300 miles we had no sight of land. Our destination was Benghazi, the capital of the Italian colony of Cyrenaica. Thanks to the following wind, we arrived there half an hour before our time. The ceremony that had been intended to greet us had not yet been staged, the Governor had not arrived, and the native troops were not yet on

parade. In course of time, however, a blare of bugles announced the arrival of Their Excellencies, and there appeared on the aerodrome a limousine that would have done credit to the Champs Élysées. Out of it stepped Signor Teruzzi, one of the younger hopes of Fascism, resplendent in a black silk shirt and a tunic covered with ribbons. and his newly arrived wife looking as if she had come straight from a drive on the Pincio. After the usual greetings we went in procession for some miles to the Governor's Palace, passing through the beginnings of a town that already boasts an imposing railway station and a church. On both sides of our path was a native guard, and before and behind us an escort of colonial Cavalry. Not without difficulty did we harmonise the desire of the limousine to show its paces with the jog-trot of the native horsemen. As we proceeded slowly and joltingly over the newly made road, the inhabitants, evidently well drilled, gave us the Fascist salute. In the evening a pleasant dinner, a wonderful menu and many friendly speeches made us wonder how our charming hostess, Signora Teruzzi, had been able in this remote spot to give us so splendid a reception. Early the next morning the procession again formed, and we returned to the aerodrome through a storm of driving rain.

As the weather cleared, the red soil that had been soaked by exceptional storms looked redder

than ever. Except for the military blockhouses and a few Bedouin camps, the country seemed uninhabited. Below us, hour after hour, stretched the desert that had almost completely obliterated the signs of former prosperity.

We were now, in fact, embarked on the first stage in our journey across many deserts. Indeed, I suppose that between Benghazi and Delhi, desert would account for more than 4000 miles of the total distance. It might be thought that a flight of this kind would be monotonous in the extreme. Those who have never journeyed across a desert will think of it as a completely flat waste of monotonous sand. Having surveyed a greater expanse of desert than most travellers, I can say that this impression is totally incorrect. Deserts vary greatly one from another, and even in the same desert there is often a surprising diversity of feature.

The Libyan Desert, the first that we were to traverse, is between Benghazi and Sollum neither desolate nor arid. The soil is red, and the vegetation shows there is a considerable rainfall in the course of the year. I should say that much of the country near the coast was once a forest. Scrub oak, juniper, and arbutus still give it the appearance of a wood that, having lost its timber, has become a heath.

Very different is the Sinai Desert with its billowy sandhills and its effect of an endless bunker

on a golf course. There, no trees are to be seen, few stony river beds and even fewer oases. From the Suez Canal to the mountains of the Dead Sea the effect is mainly one of dry sand above a high tide.

Then come the deserts of Mesopotamia, different in colour, different in substance. Dried mud takes the place of sand; brown, varied with black in the basalt country, is the predominant colour. Farther afield are the deserts of Southern Persia, neither brown, nor black, nor yellow, but often white, and made either of a fine sand or of a curious sticky clay. Lastly, there is the desert of Sind, to me the least attractive of any of them—a desert of blowing grey dust and stunted scrub, evidently as hot in summer as it appeared to be cheerless in winter. Over all these deserts, red and yellow, black and brown, white and grey, the sky and the sun were constantly painting impressionist effects. At times it was the mirage of a fairy lake, at times a tide of black waves that the clouds were dashing across the scene, at times the opal light of a dawn, or the orange of a sunset, more vivid than any painted by Claude, that turned the almost limitless steppes into a magic country. Throughout these desert journeys our view seemed almost unrestricted. On the left of our course to Baghdad we could, for instance, easily see the Mountains of Lebanon, whilst in the clear air of the Persian Gulf

peaks more than a hundred miles distant remained in our view for many hours. As we proceeded over desert after desert, the effects below us were constantly changing. There was almost always some feature of beauty or interest to survey, and, surprisingly often, many signs of human life. Now it was a herd of gazelles drinking at a pool, now a flock of sand grouse rising from the ground, more often still a Bedouin encampment with its black tents, out of which rushed hordes of women and children to gaze at our machine. The camels would not generally take the trouble to give us a glance, but the mules, goats, and dogs would show every symptom of extreme excitement.

To the European the number of people that he meets is one of the wonders of the desert. Wherever an aeroplane lands, Bedouins will suddenly appear from every direction. In what seems to be the most deserted spot in the world, the silhouettes of men, horses, and camels are as if by magic cut out of the horizon, and in a few minutes there is a crowd of Arabs squatting on the ground around the travellers. It mattered not where we landed, our experience was always the same, and bore out the statement, made to me by a British official in Egypt, that many more people live in the desert than strangers imagine.

There was another feature of our desert flights that greatly impressed me. Remembering the



BEDOUIN AND BINT

vivid description of the Syrian Desert in that greatest of travel books, Kinglake's 'Eothen,' I contrasted with the terrible hardships of the author's journey our own experiences of desert travelling. From Gaza to Cairo it took Kinglake ten days, during which he and his caravan battled with heat and thirst and hunger. Travel-stained and exhausted they eventually struggled into Cairo. Here we were flying in two hours a distance that had taken him more than a week to accomplish, and arriving at our destination without a speck of dust, and dressed in much the same clothes that Lady Maud or I would have worn in London. Could there be a more striking instance of the change that flying is making in the East than this contrast between our desert experience and his?

I fear, however, that my interest in deserts has caused me to digress from Benghazi and our arrival in Egypt. I will, therefore, return to December 31, the fifth day of our journey.

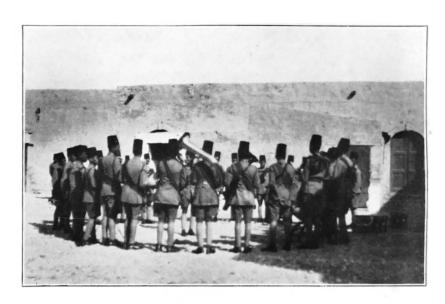
Between Benghazi and Sollum, the frontier post of Egypt, there lie the unexcavated ruins of the great Greek colony of Cyrene. True to our love of sightseeing, Lady Maud and I were determined to visit this famous, though little known, spot. The flight to Cyrene meant a detour from the coast at Derna into the interior of the country, and we had been warned that the inhabitants were still picking up the pieces of the last pilot who, straying

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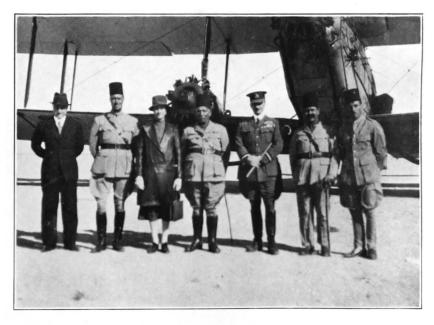
from the coast, had suffered a forced landing and a most unenviable reception from the local tribes. So far, however, as we were concerned, we had no anxiety. Since our engines had enabled us to skim safely over the Mediterranean and the Gulf of Sidra, we had no fear of a forced landing in the deserted interior of Cyrenaica. In any case we had equipped ourselves with letters from the London School of Oriental Languages, written in the languages of the tribes over which we were to pass, to explain that we were a party of travellers and politicians who deserved their friendship rather than their hostility. A translation of these diverting documents, perhaps amongst the most curious that have ever issued from Whitehall, duly signed and sealed by the Secretary of the Air Ministry, I have set out at length in an appendix.1

Thus equipped we ignored all warnings and flew to Cyrene. Circling round and round we could easily distinguish the lines of its white marble streets and baths and basilicas. In strange contrast to these relics of an advanced civilisation was the country around. Close by was an Arab village and a wood of Mediterranean pine, and in the distance we could see the white cantonments of the Italian Fort of Got Geta. It seemed to us in the aeroplane that little or no excavation had been begun at Cyrene. How rich a field must

¹ Vide page 125.



EGYPTIAN BAND AT SOLLUM



GROUP AT SOLLUM INCLUDING EGYPTIAN OFFICERS

be there for the spade of the archæologist! It is almost inconceivable in its present aspect that the deserted country upon which we were looking could have supported a city of a hundred thousand inhabitants, whose schools were famous for medicine and philosophy and from whose gates travelled colonists such as Simon to the cities of Europe and Asia. A few circles in the air exhausted the time that we could give to 'the grave, the city and the wilderness' of Greek civilisation, and we passed on our way, regretful that we had no opportunity to land.

Our midday halt was Sollum. Sollum is the frontier post between Egypt and Cyrenaica, and from afar we could see the fort, and signs of military activity. Beneath us were the silver forms of four Air Force machines resting on the ground like great dragon-flies with wings outstretched. They had flown down not only to meet us, but also to bring with them the material for our luncheon and even the stove with which to cook it. When we landed we found a group of Air Force officers, and a company of the Egyptian Army with its band. We were now within the sphere of British influence, and our way was henceforth to be made smooth by Air Force help and regular weather reports. Moreover, we had reached a highway of the air that had for long been a thoroughfare for Air Force machines and official mails. The

knowledge of these things made us enjoy the more the luncheon that had been prepared for us, and even the curious modes and harmonies of the Egyptian band.

When we left at 1.30, we had with us an escort of Bristol Fighters. It was our first experience of an organised air escort. Of all escorts an escort of aeroplanes seems to me to be the most exciting. Even more royal than a Sovereign's Escort of Household Cavalry, even more impressive than a convoy of Cruisers and Destroyers, are aeroplanes that, keeping their exact distance, rise and fall, sway and quiver, turn on outside and inside edge, upon each side of the escorted machine. A prince with an escort such as this is in every sense the monarch of all that he surveys. It was thus that we approached Alexandria, passing first over a brown desert speckled with the darker patches upon which the Moslem tribes by a generous application of religious impartiality grow rain-fed barley for British brewers, and then proceeding steadily to the great city of Alexandria that lies in a double crescent between the sea and a chain of lakes. Our future journey was to a great extent to follow the line of Alexander's marches, and it was fitting that we should begin our course across the Middle East at the city that he founded and within sight of the tomb where he is reputed to lie buried. In three days' time we were again to

strike his tracks in the Desert of Mekran, through which by incredible exertions he struggled back from the Indus to Southern Persia. A few miles farther and we were over Aboukir Bay, and the shadow of Napoleon seemed to merge itself into the shadow of his great prototype. From the air Alexandria is certainly a royal city, and worthy to be associated with these captains and kings of history.

The aerodrome at Aboukir looked like Epsom Downs on Derby Day. There were rows of motors, crowds of spectators, amongst them my sister and nephew, and a general aspect of excitement and curiosity. Once again we realised that in a flying tour it is not the aeroplane and the flying that tire the passenger so much as the functions and crowds and ceremonies that await him on the ground. Hundreds of handshakes, scores of officials, the ubiquitous company of reporters, healths and speeches, presentations and compliments—all these excitements, delightful and flattering as they are, make a flight such as ours a feat of some physical endurance. The kinder the welcome the heavier is the effort of making a worthy response to it. When at place after place we received the overwhelming hospitality of our hosts, we could only regret that the limitations of the human frame were not always equal to the generous kindness that was showered upon us.

At Alexandria, at any rate, we had a little breathing space, for our next stage was the shortest of the journey, being a mere 350 miles to Amman in Transjordania. For once at least we had no early start to make, and it was possible to delay our departure until midday.

Before our departure we gave a farewell luncheon to our excellent pilot, Captain Barnard. It had been arranged by Imperial Airways that he should bring us to Egypt and that Captain Woolley Dod should take us thence to India. The success with which he had accomplished the first stage of our journey was a pleasant augury for the second. When at the end of the round I was asked which of these two excellent pilots had been best, I could honestly say that they were all square in the record score that they had made.

THE DESERT ROUTE

When we reached the aerodrome for our start we found again a considerable company, and amongst them a young French airman who had stopped in Egypt on a return flight from Madagascar to France. The day's journey that we were now to make is cut into two distinct parts by the Suez Canal. For the first part we were flying over the dark chocolate Delta of the Nile. Below us there seemed to be more water than land, though the little brown towns and blue canals bore witness to the fertility of the country. But as soon as we crossed the canal at Kantara the scene completely changed. A sandy desert took the place of the Nile marshes, and the only distinctive marks to be seen on the ground were the thin line of the desert railway and the trenches of El Arish, that still looked as intact as they did on the day when Sir Archibald Murray took them from the Turks.

Hav ng flown for a couple of hours we landed at Gaza for oil. Although our stop had not been announced in the official programme, the inhabitants soon gathered around us to inspect our party and the machine. One of them, a Roman Catholic

priest, informed me that at a recent election he had voted for me in Chelsea. I answered that I hoped that he would be back in time to vote for me again. I do not imagine that a Member has often met one of his constituents in more unexpected circumstances. We had just enough time to have tea and to send a New Year's greeting to Lord Plumer at Jerusalem before we started across the mountains of Moab to Ziza, the landing-ground in the neighbourhood of Amman.

Rising to 5000 feet, we kept the Dead Sea on our right, and did not cross it until we reached its northern limit. As we passed over its aquamarine waters, two yellow towns flashed into our view; with their walls and towers they seemed to be cities from the Alps or Apennines. The first, the smaller, a graceful campanile surmounting it, was Bethlehem; the second, evidently a city 'built as a city that is at unity in itself,' was Jerusalem. Above was an opal sky, and on each side of the lake dove-coloured mountains that, as the evening drew on, became dark mauve and gradually assumed strange cubist shapes.

It was 4.30 when we reached the Plain of Ziza. We had now a drive of some 15 miles to Amman, where we were spending the night. The Plain of Ziza is a high and spreading plateau that has on many occasions been a field of battle. Although there has been fighting on it even in recent times,

THE DESERT ROUTE

a period of peace has already stimulated its fertility. As we drove along, we noticed as the emblems of tranquillity the motor-ploughs, fifteen of which are already being operated by the native cultivators. Along each side of our road were the remnants of the Roman dominion. Here a great cistern, there a Roman milestone or a section of Roman pavement, there a tomb that recalled the Appian Way and the grave of Cecilia Metella. At Amman, one of the two Philadelphias of ancient history, there is an amphitheatre and a splendid colonnade to bear further witness to the influence of Rome, and to the magnitude of its frontier posts. These ruins I had already seen in my journey of two years ago. But as it was dark when we reached Amman, and no less dark when we left the next morning at 6 o'clock, Lady Maud had little chance of sharing my good fortune.

Our way from Amman to Baghdad lay principally along the famous furrow to which I have already alluded. As the furrow marks the King's Highway of the desert, and is the most prominent feature to meet the traveller's eye, it is worth turning aside to say something of its history and of the idea that inspired its making.

It was in March 1921, at the Cairo Conference, that it was decided that the Air Force should be responsible for the garrison of Iraq, and that for the purposes of Imperial communication an air

route should be opened across the desert from Egypt to Iraq. From ancient days there had existed a caravan route between Damascus and Baghdad, and the simplest course would have been for the aeroplanes to follow the track that for centuries had been trodden flat by the feet of camels. For the purposes of the Cairo Conference, however, such a route was ruled out by the fact that a part of it lay outside the sphere of British influence. It was therefore necessary to make a new airway farther south. Over wide tracts of desert, where there was no water of any kind, something more than a compass was needed for safety. Engine trouble might bring a machine down in country where a pilot might either die of thirst or only be rescued after a protracted search. It was, therefore, decided to make a track, and to divide it into sections, equipped with landing-grounds and refuelling points. By means of such a track the pilot would easily keep his course, by means of it also would he be easily rescued in the event of a forced landing.

It was in these circumstances that two car convoys set out, the one from the East and the other from the West, to mark the unknown desert between Ziza and the Euphrates with a furrow of nearly 500 miles in length. Whilst experience showed that the best track was made by the wheels of the cars themselves, over certain portions of the route

THE DESERT ROUTE

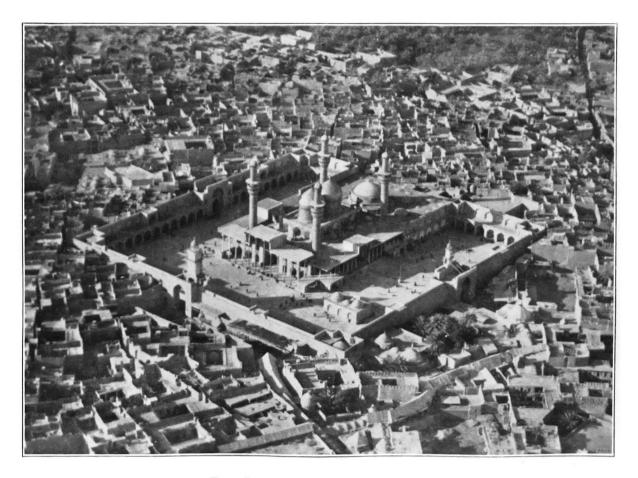
a Fordson tractor with a plough attached to it was used to make a plough track in addition. Every twenty miles, a circle ploughed on level ground and marked with a letter or a number provides an emergency landing-ground, and at definite intervals there are tanks let into the ground for refuelling. Dr. Ball, the scientist who helped the Air Force in the survey of the route, fixed his position by the stars, and in order to check his delicate chronometer set up a small wireless station from which he listened every evening for the Eiffel Tower time signal. Could there be a more vivid picture of the power of science, than that of the French operator working his sending key, and enabling a British scientist 2000 miles away to locate his position in a trackless desert?

For five years in succession Air Force machines have flown safely over this route, carrying mails and official passengers with an almost unbroken regularity, and maintaining a quick and constant communication between Iraq and the West. A desert that was once one of the world's greatest barriers is now crossed with ease and comfort in the space of a few hours, and Arab sheikhs, who have never lived in a house, or seen a railway, accept the passing of aeroplanes as one of the ordinary features of their daily life. Henceforth the machines that will chiefly use it will be civil and not military. Henceforth the military air route

will become a thoroughfare for civil passengers and freight. At the moment when this transformation is taking place let us remember the enterprise and perseverance of the pioneers who marked it out, and of the Air Force pilots who, week after week and year after year, flew it with such courage and precision.

It might be thought that the winds and shifting sands of the desert would soon obliterate the thin line of the track. This is not the case. The scars and furrows of the desert, even the ghostly signs of ancient civilisations, seem to last for ever. The line of the track was as easy for us to distinguish as the layout of the submerged cities over which we were to pass the following day.

The desert between Ziza and Baghdad supports my contention that the aspect of deserts is diverse and not monotonous. In the space of a few hours we passed over country of conspicuous contrasts. At the start we looked out for the line of ruined Roman forts. Soon after, a flash of blue water showed that we were over the oasis of El Azrak, once the most famous duck shoot in the Middle East, and now the encampment of many refugee Druses, whose arrival has not only created a political problem, but has also destroyed a paradise of wildfowl. More than once we could trace the dark lines of anc. Int strongholds, the 'works of the old men,' as the Bedouins now call those



THE GOLDEN MOSQUE OF KAZIMAIN

THE DESERT ROUTE

remnants of primitive civilisation. Farther afield, the black circles were the humps of basalt that upon all sides burst up from the desert.

As we neared the country of the great rivers the desert became a steppe, with camels and sheep grazing upon it in great numbers. At length there was Lake Habbaniya, looking more like a mirage than a real sheet of water, and the Euphrates curling in circles like a cat trying to eat its tail.

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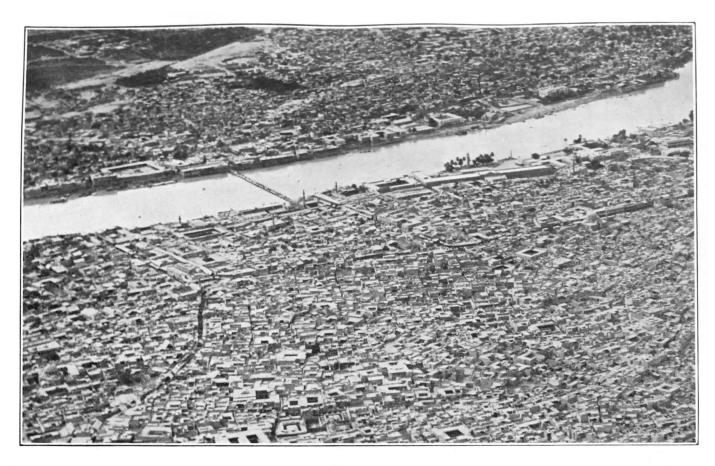
To reach an ancient and historic city after a long desert journey is an impressive incident. When that city is Baghdad, and the mode of approach is the flying carpet of Solomon, it is an event that is not easily forgotten. It was about half-past three when we first saw a great brown city built on each side of a wide river, and dotted about with the dark green patches of palm groves. We were before our time, and knowing that the ceremonial reception had been prepared for us, we made several circles about the surrounding country. In one of these turns we passed over the golden mosque of Kazimain, the place of pilgrimage that with Kerbela and Nejef makes up the trio of sacred Shiah cities in Iraq. The pigeons fluttered about its blue tiles, and the people hurried into the streets to see what the noise of our engines betokened.

Looking again at our watches, we continued this little tour until the moment fixed for our descent

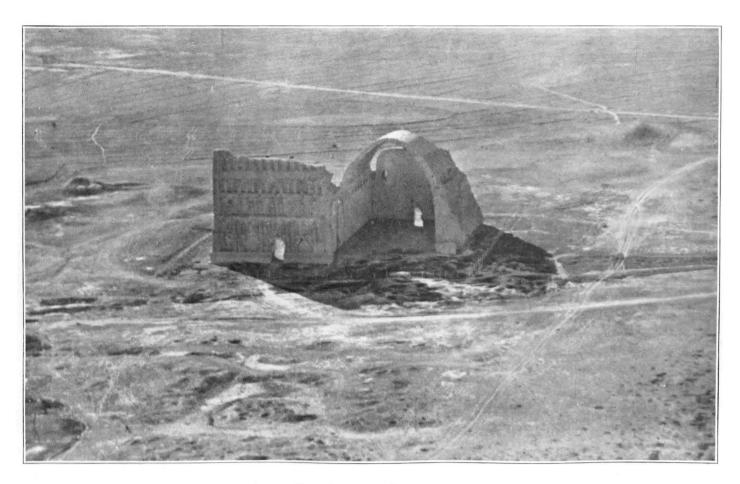
arrived, and the machine glided gently down upon the military aerodrome of Hinaidi.

I will not here describe the events of our short stay in Baghdad. I have already written of a former flying visit to this interesting city. I will only say that, unlike many travellers, I always find Baghdad an attractive and enthralling capital. The river is finer than the Neva at Petrograd, and the diversity of the inhabitants is greater than the variety that was to be found in Constantinople in the days of the Sultans. Moreover, I have many friends among the Iraqis and the British, many of whom we found waiting for us upon the aerodrome. To the Iraqis the aeroplane is both the instrument of order and the medium of communication with Western civilisation. Naturally, therefore, King Feisul and his Government showed a peculiar interest in our journey, and in the results that may follow from it. As there was little time to discuss with them the many questions that so greatly interested us, I promised to spend an extra day with them on my return to complete the discussions that we had barely commenced. In the evening Sir Henry Dobbs gave a small dinner attended by King Feisul, and not too early the next morning we started upon our journey to Southern Persia.

The flight from Baghdad to Basra I had already made, but I was glad to point out to Lady Maud



BAGHDAD



THE ARCH OF CTESIPHON

THE DESERT ROUTE

the sites that had vividly impressed themselves upon my memory. First, there was the great arch of Ctesiphon, once an imposing feature in a royal palace, now a gaunt landmark on the plain, its site and structure vividly reminding me of Shelley's tomb of Ozymandias:

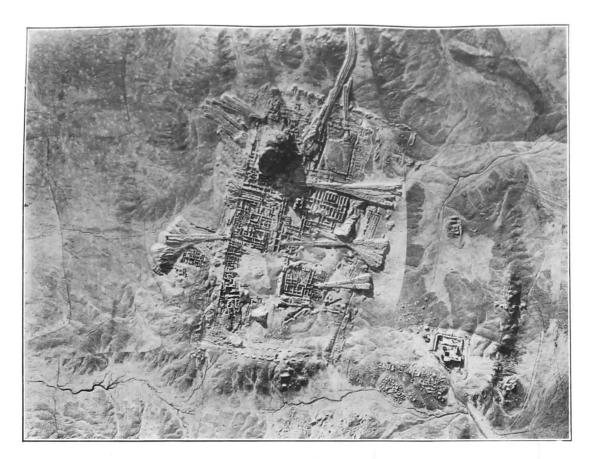
'Round the decay Of that colossal wreck, boundless and bare, The lone and level sands stretch far away.'

A few minutes afterwards, there were beneath us the mounds and hillocks that are all that remain of Babylon. Very different is Ur of the Chaldees, with its mountain-like pyramid, and its well-preserved streets and palaces opening out on all sides. Over Ur we descended so low as to make the scores of Professor Woolley's excavators think that the end of the world had come. Round and round we glided, skirting the Ziggurat and looking down upon the home of Abraham, and the wonderfully complete remains of a city that was ancient even in Abraham's days. Having visited Ur two years ago from the ground, I could mark from the air the satisfactory progress that Professor Woolley has made with his work. Day by day new streets are being unearthed, the details of daily life are being discovered—the ovens, for instance, of the days of Abraham are emerging almost intact and ready for use; jewels and ornaments, as fine in material and as distinguished in design as any in

Cartier's window, are being collected in such quantity as to make difficult the task of cataloguing. So rich and varied is the evidence of luxury and culture that, were I a cynic, I should be tempted to point to the civilisation below me as conclusive proof against any theory of human progress.

Nearer Basra we traversed the country of the Marsh Arabs, the scene of the murder of Elliott, Cobham's mechanic. Perhaps I should call it an endless expanse of reeds and lagoons rather than a country. Even the villages appeared to be built upon piles, and the only means of communication between them, long boats and reed-bound dykes. We were now approaching the final stages of the great rivers. When a great river nears the end of its journey to the sea it always impresses some mark of its power upon the landscape. The spreading of the marshes below us bore witness to the last efforts of the Tigris and the Euphrates that, having struggled in contortions over endless deserts, join together in an alliance to break through to the sea. Basra stands at the point where, within a few miles of the frontier between Iraq and Iran, they become the Shat el Arab.

It was not in the city that we landed. Our destination was Shaibah, the cantonments of the Air Force Squadron. There the officers, commissioned and non-commissioned, and the men of the Squadron overwhelmed us with their kindly



UR OF THE CHALDEES

THE DESERT ROUTE

welcome, and marked it by a presentation to Lady Maud of a beautiful Amara tea service. I sat at luncheon next the Civil Administrator, a man who had seen much service in the Arab campaigns. asked him of the heroes of the Middle East, of Lawrence of course, but also of those lesser-known leaders of men, of Leachman, whose influence over the Arabs was almost mythical until the day of his murder at Khan Nuktar, and Soane, that strange man who lived amongst the Kurds at Sulimanieh and ruled them with the hand of a medieval despot. The civil official had served with them in the war and the rebellion. It was good to hear the history of these soldiers of fortune, whose names, though they be unknown in England, still ring at the outposts of Empire. Will not some master of the English language, following in the steps of Lawrence, write the lives of these heroes of exile?

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THE MOUNTAINS OF THE MOON

When we left Shaibah, we parted from the desert track and the excellent Air Force organisation, and started upon a part of our journey where aeroplanes are seldom seen and travellers rarely penetrate. As if to throw into greater relief the predominant desolation of the country that we were soon to traverse, the first point of interest that attracted our attention was the port of Abadan, the centre of the Anglo-Persian Oil Company's activities. Abadan has risen from the desert in the space of a few years. Where before the war there was nothing but sand, over a hundred great oil tanks now rise gasometer-like from the plain, and a wellequipped harbour provides accommodation for a continuous service of tankers. Although we were 2000 feet above this hive of modern industry, the smell of oil, almost intolerable as I know from my own experience on the ground, penetrated pervadingly into our cabin.

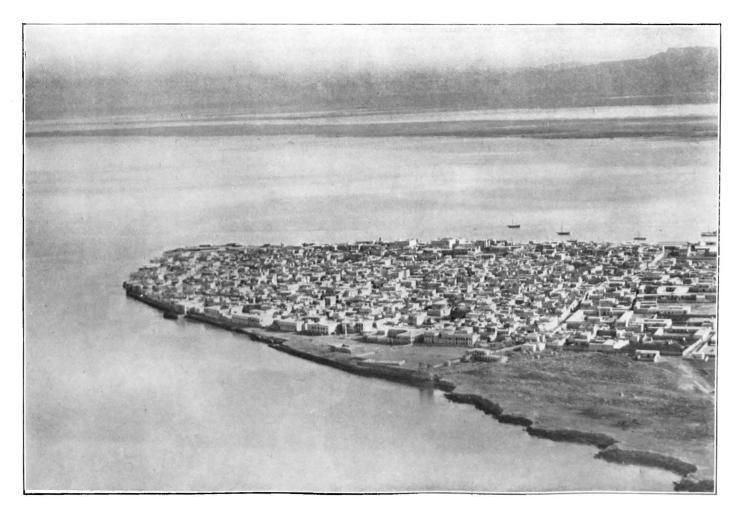
There are few territories more deserted than that which lies between the head of the Persian Gulf and the North-West Frontier of India. For many miles between Basra and Bushire endless expanses



SHAIBAH AERODROME



Works of the Anglo-Persian Oil Co. at Abadan



Bushire

THE MOUNTAINS OF THE MOON

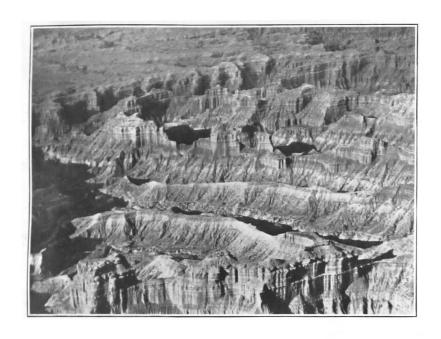
of marsh and sand mark the dying efforts of the two rivers to free themselves from the desert. Not a sign of human life in all this deserted country, not a spot where we should feel happy with a forced landing. Only the pink flamingoes, the white pelicans, an occasional school of turtles or porpoises, and the splashes of the sharks. Gradually the estuary gives place to a dryer land that, though of very different features, is equally desolate. Greybrown mountains rise almost sheer from the sea. only to be broken by stretches of white desert that from time to time cut in and out of them. So savage and fantastic is the aspect of these crags that we likened them to the mountains of the moon; so arid is this country that for hour after hour we saw not a blade of grass.

Our first stopping-place was to be the principal oasis on the Gulf, the Persian town of Bushire. Bushire juts out into the sea, a solitary circle of green at this season in a landscape of grey and brown. It is the home of the chief British official in Southern Persia, whose duty it is to act as Consul-General towards the Persian Government and as Resident and British representative towards the sheikhs of the Arabian coast who recognise the influence of the British Government. The post of Resident in the Persian Gulf is rightly highly esteemed; it has naturally been held by men of distinction, and one of them, whose father before

him had also held it, had after many years of service only vacated the Residency on the morning of our arrival. Nothing daunted by the inconvenience of our arrival, the new Resident, Colonel Haworth, and his wife gave us a most hospitable welcome to a house that they had only entered a few hours before.

The plain, where we landed, bore a singular aspect. Upon it were already drawn up four British machines, two of them, big Vernon troopcarriers, come from Iraq to escort us to India, the others, two tiny Moths that those undefeated sportsmen, Messrs. Stack and Leete, were flying to India. I had already had news of the Moths from Iraq. I had been told how their pilots had crossed the desert with a single packet of biscuits as their sole emergency ration against a forced landing; I had heard of their cheery visits to Air Force messes. When I looked into the cockpits of the machines I asked Messrs. Stack and Leete how they managed with luggage in a space that did not seem bigger than the inside of a perambulator. They answered that they did very well. 'We take'-to quote their own words-'an attaché case each and a ukelele between us.' What more indeed could a modern pilot demand? Here was the latest instrument of speed. Here also was the most essential attribute of the Charleston.

Before we left the landing-ground we pushed





THE WILD MOUNTAINS OF THE PERSIAN GULF

THE MOUNTAINS OF THE MOON

the Moths under the wings of our machine and took a photograph of the aerial hen watching over her aerial chickens. A crowd of Persians intently regarded this curious spectacle. One of them told me that his brother, the well-known chief of a neighbouring tribe, had intended to come to meet me, but that unfortunately he had gone off the day before to fight a war. He himself apologised for having appeared in carpet slippers. Whilst on the previous day he had been cleaning his gun he had, apparently as a matter of everyday occurrence, discharged both barrels into one of his toes. I expressed my surprise that, after an experience that appeared to me to be both painful and unusual, he was able to put on even a pair of carpet slippers. The evening we spent pleasantly at the Residency, hearing the news of the Gulf, and discussing the strange events that took place in Southern Persia during the war.

Upon the following morning, as I was dressing, I heard the sound of aeroplane engines. I hurried out on to the flat roof, and I saw that the two Moths were already starting upon a further stage in their journey. Bad luck, however, was to bring them engine trouble within fifty miles of Bushire, and to prevent their arrival in India before us. As we followed after them, we exchanged wireless messages with the two sloops, the *Crocus* and the *Cyclamen*, that represent British naval power in the

Gulf. From time to time Sir Geoffrey Salmond would point out the emergency landing-grounds that he and Air Commodore Borton had marked out ten years ago for the first flight to India.

We were now passing over a country where there is no vegetation, and where man and beast live on fish. A long line of jagged mountains seemed to bar all approach to the interior of the country. Sometimes we rose to five or six thousand feet to surmount them, more often we flew along the blue waters of the Gulf. In a little more than two hours we caught the first sight of trees since we had left Bushire, and having passed on our left a great salt lake of many miles in length arrived at the oasis of Lingeh. From the air Lingeh has the appearance of an Italian town. On all sides there is an effect of small domed churches. When I asked the British Vice-Consul about these domes, he told me that they are built-in wells for the preservation of surface water. The whole town seemed to be designed for the keeping of any scanty drops of rain that reach it, and the rare draughts of air that are carried into open-work towers, there to be treasured like old wine in a cellar.

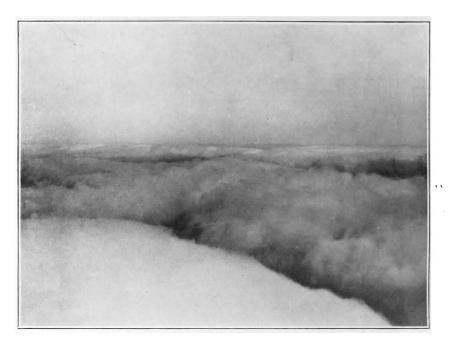
In these little places on the Persian Gulf, though the fisheries are close at hand, it is water and air that count even more than pearls. But Lingeh, according to the Vice-Consul, is well favoured in the matter of rain; it has two inches

THE MOUNTAINS OF THE MOON

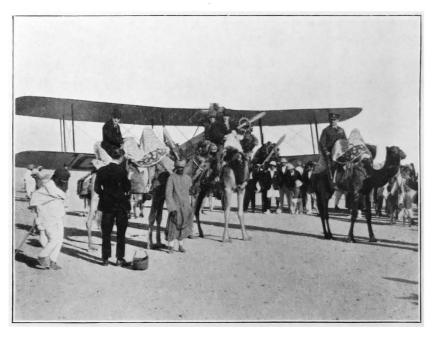
in the year. Very different is the case of Jask, where we were to spend the night. At Jask three-quarters of an inch is the full measure for twelve months, and the cows, when they cannot get fish, live on the waste tape of the Indo-European Telegraph Office. For all their water difficulties, these places had a cheerful aspect upon the day of our arrival. As at Bushire, so at Jask, the inhabitants had come in from all directions to inspect us. There were the representatives of the Persian Government in tight-fitting black frock coats and high black fezes. There was the agent of the Sultan of Muscat, there was a host of the local women with their faces covered with black, skulllike masks. Perhaps most curious of all, there was a gentleman who, in spite of his Oriental appearance, addressed me in perfect English, and informed me that, being a member of the Manchester Light Aeroplane Club, he was there to see his fellow members, Stack and Leete, fly past on their way to India. True to the tradition that pushes British merchants into every part of the world, he was engaged in selling Manchester piece goods down the Gulf. One by one I took this varied company of our hosts into the cabin of the machine, whilst outside a black-coated Persian installed a wooden table on the desert, and proceeded with the hand of a trained caligraphist to make curious signs, as if of the zodiac, upon our passports.

As our afternoon stage was a short one, we determined to vary our course and to see something of the Pirate Coast on the Arabian side of the Straits of Hormuz. Moreover, we had been told at luncheon that the Indo-European Telegraph employees on the desolate island of Hanjam had been most helpful with telegrams and weather reports. Could we not, asked our host, give this little company of isolated officials a sight of the machine whose journey they had followed so closely on the cable? Such a request we could not refuse. Leaving Lingeh, therefore, we set out across the sea, and circling round Hanjam waved our greetings to the station on the shore. Little did we think that within a few weeks the customhouse and post office, that we saw below us, were to be raided by the sheikh of the island, who, although an old man of ninety, planned a murderous and unpremeditated attack on the men who had asked us to visit the island, and who came out to give us a friendly cheer.

We had thought that the coast that we were leaving was the most desolate in the world. We had not seen its Arabian vis-à-vis. If the mountains were high and jagged on the Persian side, they were as nothing compared with the points and edges of the Arabian coast. I see in our logbook that we flew over 8000 feet. Even so, we had little to spare over the mountains below us.



FLYING OVER CLOUDS IN THE PERSIAN GULF



FROM AEROPLANE TO CAMELS AT JASK

THE MOUNTAINS OF THE MOON

White clouds were hanging around them, through which from time to time there came the view of a purple inlet cut into them like a Norwegian fjord. As we turned our backs upon this curious land, and set our course towards the Arabian Sea to Jask, we wondered whether there could be any tract in the world as desolate as that which we had just surveyed.

We reached Jask in the middle of the afternoon. For some inscrutable reason the point at which aeroplanes land upon the desert is several miles from the Telegraph Station, where their occupants find rest and shelter. Jask is a corner of the world to which not even a Ford car has yet found access, and the only means of transport are the camels that proved as useful to us as they had been to Alexander the Great. Excellent, however, as they were as beasts of burden, they were not used to riders, and we were not used to camels. The three miles, therefore, to the Telegraph Station was a severe testing time for our backs and legs. A crowd of Persians and Baluchis did their best to keep the beasts to a pace that was tolerable to the human frame and in a direction that was likely to lead us to our destination. As I jogged uneasily along, Mr. Janes, the representative of the Telegraph Company, recounted to me the local gossip; how they had already had more than their average of rain for the whole year, and could therefore expect

no more. How the flies died of heat in summer, and how it was a matter of sober fact, not a subject for idle laughter, that the cows ate the paper tape from the office. The talk is never dull in these remote places of the earth, and we spent an evening with our hospitable host and hostess hearing of the strange conditions of life in the Gulf, and the many curious happenings there in recent years. At length we went to bed, greatly excited by the fact that we were now only a day's journey from India and that upon the morrow we hoped to arrive at Karachi.

THE SAND STORM

When we left the house at about 6 o'clock and started upon the camel ride back to the machine it was evident that the weather had taken a change for the worse. The evening before, the Hercules, lying like a great dragon upon the desert, had been visible for many miles. To-day the atmosphere was so thick that we were almost upon it with the camels and caravan of luggage before we could see it. The sun was indeed visible, but it was a sun that looked like a white lawn tennis ball upon a very grey court. We had been receiving weather reports by cable and wireless, but by ill luck the morning messages had been delayed. We were consequently in some doubt as to what to do. Should we start without the reports and gamble on the mists clearing off, or should we wait and run the risk of not having time to cover the 600 miles in the day? Stack and Leete, whose Moths had joined us from Bushire, declared that, so far as they were concerned, they would not risk the start. It seemed, however, safe for us to rely upon the far greater range of the Hercules, and to keep to our programme.

Accordingly, soon after 7 we left the ground, and rose to a height of about 2000 feet. As we proceeded the atmosphere became thicker and thicker. The mist soon turned into a violent dust storm, and it was clear that every mile that we advanced we were penetrating into worse conditions. In a few minutes the sand blotted out from our view the land below us and scorched the faces of the pilot and the navigator. By sudden jumps the altimeter began to fall from the 2000-feet mark to the 200 mark, and from the 200 to the 20. We could now see the sea, that at one time was not more than 12 feet below us—a nasty grey sea with ugly white horses. On each side of us was an impenetrable wall of fog. A sudden swerve, and we had reversed our course as if to return to the point from which we had started. As I could see that the pilot and navigator had their hands more than full, I did not trouble them with any inquiry as to what had happened. I could only surmise that they had turned round, and were trying to make again the landing-ground at Jask. For a few minutes more we skimmed over the sea, and then suddenly reached the low sandy coast. We could not have been more than a few feet from the ground, as at the point at which we struck the coast we almost decapitated a party of Persians who, mounted on camels, were trekking along the shore.

THE SAND STORM

Having regained the coast it now remained for us to find the landing-ground. Fortunately the pilot and navigator had noticed a heap of stones near the point from which we had started. Without some such landmark there would have been nothing to distinguish this part of the desert from any other, and we might well have gone wandering on in the storm. As it was, they saw the heap of stones, and in spite of the fact that a gale of wind was blowing behind us landed the machine safely and smoothly, and within a few yards of our starting-point.

The desert had now changed from the blazing Sahara of the previous day to Siberia at its worst. A gale of wind was raging, and, although the sand still scorched our skins, the cold was intense, and the visibility about the same as a November fog in London. Even if there had been more light, the penetrating dust would have made it impossible to see more than a few yards.

As we got out of the machine, our host, Mr. Janes, appeared with a delayed telegram informing us that at Pasni, the place planned for our midday halt, the visibility was less than 50 yards, and that an unprecedented sand storm was spreading over the whole coast of the Persian Gulf. The message fully confirmed the wisdom of Captain Woolley Dod and Captain Johnston in returning to Jask. They might well have thought

that the machine with a 450-mile range could push through any storm, however extensive, and that it was safe to fly above the sand and to rely upon Pasni and Karachi being clear. Happily for us, they had both had previous experience of sand storms and desert flying. Fearing the extent of the storm that had burst upon us, they took instantly two decisions of the utmost importance to our safety. Within a few minutes of our departure they decided that the cycle of the storm was far too great to penetrate, and that the only wise course was to return to Jask. Secondly, they at once left the jagged mountains of the coast and flew out to sea, where it would be more possible to turn the machine. Having descended almost upon the water they successfully made their turn, and by a remarkable piece of air navigation brought it back to our starting-place. If we had flown on through the storm we should have had little chance of ever finding a landing-ground. Our petrol would in course of time have become exhausted, and we should have been compelled to descend through the dense sand upon any point of the desolate coast or equally desolate sea that happened to be below us. I need not say that we hastened to overwhelm with our thanks and congratulations the aviators who had brought us safely through a very unpleasant hour. The whole incident is thus described in the log-book of the machine:

THE SAND STORM

'Journey abandoned owing to dust storm which, whilst increasing in intensity, increased in area until finally its front extended from Hanjam, where gale force was reported, to eastwards of Karachi. The disturbance was caused by a deep depression centred over the Punjab and a welldefined cold front across the Makran coast which coming in contact with the superheated air was the cause of the condition. The wind at times reaching gale force and visibility nil. In exposed places the wind was biting cold, but in shelter the atmosphere was sultry and oppressive. The air was filled with minute particles which deposited a light fawn film on everything and caused considerable irritation to cuts and sores. Occasionally its visibility improved to about five hundred yards, to be again blotted out by repeated squalls. Native craft were forced to heave-to in the lee of the land. Towards night the wind moderated and eventually in the early hours of the morning the zenith became clear and visibility improved. At daylight, whilst the wind was still fresh, visibility had improved to about three miles. Indications of the upper wind backing. Subsequent observations showed that the wind backed, visibility improved.'

I can add further details to this concise statement. Whilst the storm raged as far as Karachi on the eastern side of the Gulf, it extended much farther on the Arabian coast. Altogether its front covered 2000 miles, with limits as far apart as Basra and Aden. The whole of the Gulf was for

more than a day locked in its embrace. A troop-ship and a British-India passenger-boat were delayed for 48 hours and smaller craft were actually lost in the neighbourhood of Karachi. These facts, that we learnt in subsequent stages of our journey, reconciled us to some extent to our enforced delay. If the aeroplane had been driven back by the storm, so also had ships of large tonnage. If Jask had been blotted out by sand, so also had places many hundreds of miles distant.

Glad that we had so successfully weathered the crisis of the morning, but sad that we had lost a day, we remounted the camels and again imposed ourselves upon the kind and generous hospitality of the Janeses. It was not yet midday, and for many more hours we had to endure the monotony of the storm, not knowing whether we should be held up for hours, days, or weeks.

To wile away the time we began a rubber of bridge. It was a game under formidable difficulties. There was so great a plague of flies that one of us failed to declare 'No trumps,' as the black insects had turned two of his aces into threes. A counter-offensive of 'Flit' only made the pack so sticky that it was impossible to have another deal. The rubber was consequently left unfinished.

Towards evening the storm abated sufficiently for some of us to stretch our legs upon the shore. There we noticed several interesting waders—

THE SAND STORM

spoonbills, turnstones, and one or two species of skua gull. The shore, however, is not made more cheerful by the proximity of a cemetery where are buried the score or so of British subjects who at one time or another have died upon this desolate spot.

Our one subject of conversation was the weather. Time after time we visited the Telegraph Station to look at the telegrams that were constantly arriving. Was the wind changing? Would it be clear enough to start the next day? Should we be able to keep our time-table for arriving at Delhi? I am afraid that with our minds concentrated upon these questions we must have been tiresome guests for our excellent hosts. If it was so, they did not show their feelings, though they could give no answer to our repeated questions. During the years that they had lived upon the Gulf they had never known a storm of this ferocity. As there were no precedents for it, they could make no prophecy as to its duration. The weather reports were equally uncertain. Reluctantly, therefore, we had to resign ourselves to complete uncertainty, and to hope restlessly, though not very confidently, for a sudden change.

When, however, towards bedtime we looked out of the bungalow, we found the sky clearer and the wind changing. By sunrise the change had become more definitely marked, and although it was

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still far from clear, we set out again on our camels for another attempt at a start. The weather reports were distinctly better, and although the messages from Pasni still spoke of only 50 yards visibility, it seemed probable that the storm was clearing off.

To our great relief Captain Woolley Dod decided to start. Having said our second good-byes to our kind hosts, we entered the machine and rose swiftly to a height of 9000 feet for the purpose of keeping above the sand. The day before we had been ten feet over the sea, we were now ten thousand feet over the land, flying through clear blue sky, with a great bank of solid yellow cloud blotting out everything below from our view. Provided that our destination was clear, we could safely fly for hours over the storm, and we felt confident, as the day progressed, that the landingground at Pasni would be clearing. For most of the morning we coasted along the Gulf, picking up at 11.15 a pleasant message of greeting from the captain of H.M.S. Lupin. By 11.30 we were nearing the frontier of Baluchistan, and just before 12 we had a wireless from H.M.S. Cyclamen sending us good wishes and congratulations upon entering Indian territory. Before, however, we reached Pasni, we again struck a very thick patch of fog. The pilot had at this period left the coast, and in order to save time was making a

cross-country flight. So thick was it, and so flat the desert, that it was difficult to say whether we were flying over the sea or the land. From time to time we could make out rocks or islands that seemed to rise black and clear out of the grey surface below us. As we proceeded the desert became whiter, giving the impression that it was covered with a thin coat of snow. We were now reaching the white plain of Pasni, the flattest and whitest plain, I should think, in the world. Through the mist we could see it gleaming, and through the mist also we could make out upon it the three silver forms of the Bristol Fighters that had come to meet us from Quetta.

By the time that we landed the sun had beaten the sand storm, and we emerged in a blazing glare on a perfectly level plain of baked white clay that looked as if it was admirably suited for an endless row of hard tennis courts. Before us stood Colonel Keyes, the British Resident in Baluchistan, a Baluchi Guard, and the Air Force officers from one of the Quetta squadrons. In the distance was a tent containing a luncheon brought expressly there by Colonel Keyes and worthy of the Marlborough Club on Cup Day at Ascot. We jumped into a motor lorry, and in a few minutes reached the well-appointed tent. Before luncheon I received two interesting presentations. The first was an Afshar carpet, made by the nomad tribes

in the Kerman Province, and sent by the Khan of Kalat, the ruling Prince of Baluchistan. With it, enclosed in a bag of gold brocade, was a letter that Colonel Keyes handed to me with an English translation. The letter ran as follows:

'It gives me great pleasure to welcome you on alighting in my State on this historic occasion. I regret that I am not able to greet you in person, but I have asked my Political Agent to greet you on my behalf and entertain you and the Lady Sahiba and to offer you from me a carpet as a symbol of your conquest of the air—a conquest such as King Solomon made when he flew over these regions on his magic carpet. May you as the representative of His Gracious Majesty King George V, whom God preserve, be indued with the wisdom of King Solomon in bringing unto me the wonders of science.'

The second gift, offered to me by the Sardar Bahadur Mir Bahi Khan, the Gichki Sardar of Kech Makran, was a magnificent sword with a Shiraz blade and a scabbard of blue and white Kalat enamel. Has any traveller to India ever enjoyed so pleasant and picturesque a welcome as I received that morning on the plain of Pasni?

Regretfully we tore ourselves away from Colonel Keyes' luncheon, for we were timed to arrive at Karachi at 5.25. Having missed a day at Jask, it was more than ever important to arrive upon the

tick of time. So, taking Colonel Keyes with us, we proceeded on our way.

The flight, though the wind was somewhat against us, was easy and uneventful. Almost the whole way we flew down the coast at a height of about 7000 feet and at a distance of about a mile from land. I do not deny that as we neared Karachi I was feeling not a little excited. Lady Maud and I had reached India, and with the exception of the sand storm at Jask and a fair share of bad weather, we had reached it easily and comfortably. A woman had for the first time made the journey, a Minister of the Crown had for the first time flown to a distant part of the Empire, and an Air-Marshal had for the first time taken over his command from an aeroplane. These seemed to me to be events not only of great personal interest to ourselves, but of some significance also in the history of Imperial communications. Perhaps these thoughts were shared by the citizens of Karachi. Certainly they came in their hundreds to welcome us. As we passed down the long lines of British and Indians who had come to meet us, and listened to the greetings and congratulations that were showered upon us, it was obvious that India in general, and Karachi in particular, looked upon the flight with more than ordinary interest. Amongst the letters, for instance, that were awaiting us, I found one addressed

to me as Sir Samuel Hoare, 'Aeronaut of Renown.' My Indian correspondent had written to congratulate me as one flying pioneer to another, for, as he informed me, he was the first collector of air stamps in India.

An evening of cheerful ceremony followed our arrival, and the impression left upon my mind is one of great crowds of friends, of military bands and of gun salutes that always make me jump, and wonder whether the allotted number of rounds is already fired.

Amongst the many congratulations we had received on the aerodrome were a telegram and a letter from the Viceroy, in which he suggested that we should arrive at Delhi at 12.30 on the morning of January 8. We had always intended to arrive on January 8, and our delay at Jask had merely used up a day that we had intentionally kept in hand. As it was important to time our arrival for the exact moment that the Viceroy had arranged, we decided to accept the kind invitation of the Maharaja and to spend the next night at Jodhpur. One of the advantages of this arrangement was that our next stage was a short one, and that I had time in the early morning to get rid of the effects of the journey by playing a vigorous single with Mrs. Shepherd Barron, a former partner with whom I had enjoyed many good games of tennis in England.

The distance between Karachi and Jodhpur is

about 400 miles, and we did not start until after an early luncheon at Government House. The flight across the Sind Desert is dull and monotonous, with a glimpse of the Indus as the only incident worthy of remark. But it is well worth making the journey if only for the purpose of seeing from the air the wonderful city of Jodhpur. When I first saw the pink fortress rising upon its rocky base from the plain I thought of Edinburgh Castle, I thought of Bouillon, and many a castello in the Apennines, but I came to the conclusion that I had never seen a more picturesque block, or a stronghold that in the days before heavy artillery could better have withstood an assault. Having made our bow to the Castle we landed upon the aerodrome that the young and progressive Maharaja had recently prepared for visiting machines. His Highness was awaiting us, and the British Commissioner and a many coloured crowd from the State of Jodhpur. At the rear of the aerodrome was drawn up a row of curtained carts through which the purdah ladies peeped curiously at the new visitors.

As I descended from the machine, I was handed a telegram that ran as follows:

'My hearty congratulations on your safe arrival in India after your most successful and enterprising flight. I hope that you and Lady Maud enjoyed your journey.—George, R.I.'



Jodhpur

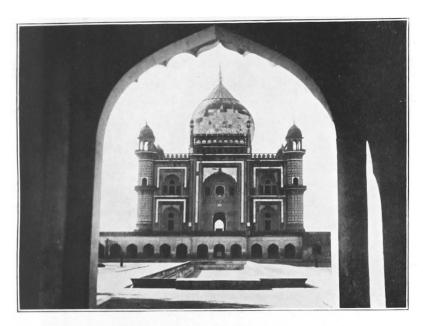
His Majesty, having given us such kindly encouragement on the eve of our journey, was gracious enough to send us the first wire of congratulations that we received from England upon our safe arrival in India.

I am not writing a guide-book of India, and I will not stop to describe the interesting evening that we spent with the Maharaja, and our visit to the Fort, where are stored jewels and arms of incalculable interest and value, or our drive through the game preserves, where the Rolls could scarcely avoid running over the great numbers of chikara and pig, or our banquet in the evening when the Maharaja offered us a ceremonial welcome. Though I do not give in this book the details of these pleasant episodes, I shall none the less retain them as a very delightful memory.

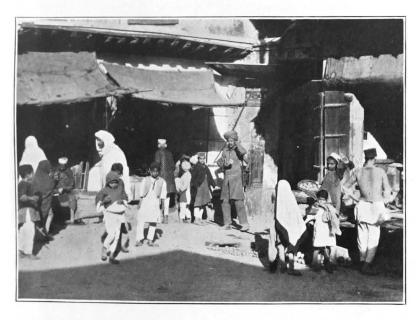
In the morning our track crossed the path of another ministerial traveller. For as we were starting, there arrived Lord and Lady Winterton, who had also come on a visit to Jodhpur. We had just time to show them the cabin of the machine before leaving in plenty of time to reach Delhi by 12.30.

We were now started upon the last lap of our outward flight. We had only 300 miles to go, and the wind and weather were favourable. This was plain and easy flying; our only difficulty was to avoid arriving too soon. In these circumstances

Captain Woolley Dod could afford to unbend, and to show us at his leisure the various tricks and paces of the machine. Sometimes, therefore, we flew upon three engines, sometimes upon two, sometimes even upon one. As we neared Delhi we had still time to spare, and several detours to make before we could fill it up. At length, as our watches pointed to 12.15, we directed our course upon the shining white island in the distance, called by its critics 'the White City,' known to the official world as the new Capital of India. As we looked down upon the aerodrome, we gasped in surprise at the crowd that was looking up at us. A public holiday had been declared in our honour and the inhabitants of Delhi, official and unofficial, had journeyed out to the aerodrome to see the strange sight of a ministerial arrival by air. Some never believed that we should arrive at all, and many were so confident that we should be late that we saw them in motors and carts hurrying to the landing-ground after we ourselves had arrived. The Viceroy's representative and the Commander-in-Chief, Sir William Birdwood, were the first to welcome us. There then broke upon the machine and its occupants wave after wave of sightseers, Indian as well as British, women and children as many as men. It was with difficulty and after some delay that we made our way to the Viceregal cars, and motored off to the Royal



SAFDARG JANG TOMB AT DELHI



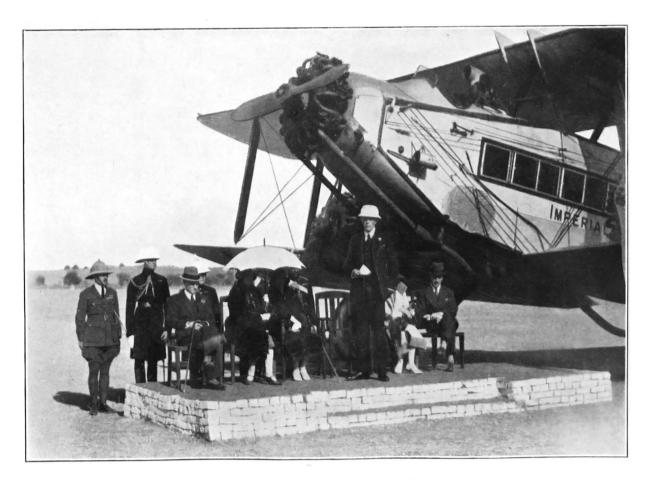
BAZAAR AT DELHI

Pavilion that was to be our comfortable home during our stay in Delhi.

We had now accomplished the spectacular part of our flight. We had flown 6000 miles over every kind of country and more than 1000 miles of sea, we had encountered very bad weather and yet we had averaged nearly a hundred miles an hour the whole way. We had carried out our programme in every detail with the single exception of the delay at Jask. It was never my intention to attempt a record flight from the point of view of speed. If I had wished to fly to India in the shortest possible number of days, I should have chosen a season of the year when the days are long and when I could easily have telescoped the 63 hours into a week. As it was, we had started on December 27 and arrived in Delhi on January 8, proceeding by easy stages and spending much time on the way in discussions with officials and inspections of Air Force units. The importance of our journey was its regularity rather than its speed. An ordinary commercial machine with a full load of passengers and luggage had, day after day, carried out its time-table with the precision of a pre-war express train. It was this aspect of our journey more than any other that impressed itself upon the imagination of India. Would it not be possible, asked the scores of British and Indians who came to meet us, for India to make use of so

reliable a means of communication for surmounting the great distances that are one of its chief problems? This was the question that I was constantly discussing with officials and business men during my few short days in Delhi. There was already a keen interest in flying questions. On the one hand, the efficiency of the Air Force squadrons had already established the importance of air power upon the North-West Frontier; on the other hand, the Indian Air Board, an official body representing various departments of the Government of India, had recently issued a Report in which emphasis had been laid upon the suitability of the conditions for the development of civil aviation, and the significant fact that hitherto India, almost alone of the great countries of the world, was without a civil aviation programme.

From January 8th to the 17th I was constantly exchanging views upon the flying problems with Sir Bhupendranath Mitra, the member of the Viceroy's Council under whose supervision civil aviation comes, and with representative members of the Assembly and business men. It was not for me to dictate or even to suggest a policy to the Government of India. I was there rather to place before Indian public men the results of our own experience, and to point out to them the great advantages that would accrue to



The "Hercules" named "City of Delhi" by the Viceroy

India and to the Empire if British and Indian aviation could develop upon co-operative lines. Ever since I became connected with the Air Ministry in 1923 I had been convinced that the future of British civil aviation lay in long-distance Empire routes, and not in the short joy-rides between the capitals of Europe. Equally clear had it been to me that if these lines are to be organised between London and the farthest capitals of the Empire, the British taxpayer cannot shoulder the whole burden of the subsidies, but must be given a helping hand by his fellow taxpayers in the Dominions and Dependencies through which the air lines pass. Upon this basis a service to the Far East could be. operated upon a relay system, a British line flying to India, an Indian line continuing the service, and an Australian line forming a junction at Singapore. It was with the Indian section that I was naturally interested at Delhi. It was satisfactory that before my departure for the frontier we were able to direct our discussions into what appeared to be a promising field.

On the second afternoon after our arrival the Viceroy and Lady Irwin performed the naming ceremony of the Hercules. It will be remembered that the name 'Hercules' distinguishes not the individual machine, but only the type that is being employed upon the Eastern service. It had been decided that each machine should be named after

the capital of one of the countries through which they were to fly. The first to be named was ours, and it was henceforth to be known as 'The City of Delhi.' A second has subsequently been named 'The City of Cairo' by King Fuad, a third 'The City of Baghdad' by King Feisul, and a fourth 'The City of Jerusalem' by Lord Plumer, the High Commissioner of Palestine.

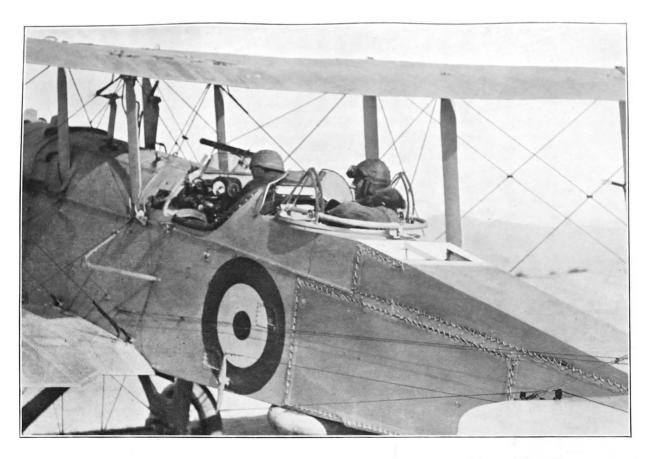
Before the naming ceremony at Delhi there had been much discussion as to who should or should not be taken for flights in the machine. Some were nervous of air-sickness, some of the children were thought too young, others believed themselves too old to begin. When the aerodrome was reached, the doubters were convinced, and the only difficulty was to pack the volunteers into the machine upon its successive flights. There was, however, one very young member of the party who was judged to be not old enough by his domestic authorities. He and I therefore had to go upon a deputation to the Viceroy to obtain a revocation of the interdict against his flight. The Viceroy relented, and I was soon helping the small boy into the machine. As he was climbing in, he turned round and with an irresistible appeal said to me, 'Cannot Nannie come too?' Having satisfied his wish to fly, I could not refuse a request for his companion, and Nannie and he accordingly made together their first ascent into the air. Neither

ARRIVAL IN INDIA

was air-sick, and the Viceregal nursery has since become a valuable centre of flying propaganda.

Another flight was reserved for the members of the Viceroy's Council. Almost every member of the Council wished to fly. When we had installed them all in the cabin and the machine was on the point of leaving the ground, an official, who shall be nameless, but who evidently, to judge from his question, must have been twelfth man for the first eleven, said to me, 'Couldn't you arrange for the machine to be crashed? Think of the promotion that it would mean in the higher ranks of the I.C.S.' There are some things that not even an Air Minister dares to do, and I fear that the flight meant no acceleration of promotion for my friend and his deserving subordinates. I could not in any case break our record for reliability.

IMMEDIATELY after the naming ceremony the 'City of Delhi' was sent to the Air Force depot at Ambala for overhauling. We had expected that she would need extensive repairs and readjustments after a maiden flight of more than six thousand miles. When, however, she reached Ambala, it was found that just as she had needed no spare parts or repairs during the journey, so she required no more than a little tidying up at the end of it. If I had known that this would have been the case. I might well have used her for my tour of the North-West Frontier. As it was, I had made arrangements to leave Delhi and to make my northern inspection in an Air Force D.H. 9A. Whilst I was naturally glad to fly in a military aeroplane, I was somewhat nervous of the great cold that is encountered in an open machine flying at many thousands of feet. Our start from Delhi gave me the first taste of the cold that we should be facing. Englishmen are apt to think that hot places are always hot, and that cold places are always cold. Having travelled a good deal about the world, I can say that I have never been hotter



SIR SAMUEL HOARE IN A MILITARY MACHINE FOR HIS FLIGHT TO THE NORTH-WEST FRONTIER

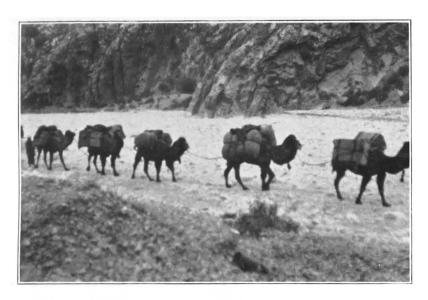
than I have been in Russia, and that I have never been colder than I have been in the tropics. There certainly is no fear of being too hot in Delhi in the month of January. On the morning of January 17 there was a white frost and a biting wind when we reached the aerodrome. Our party was changed, for whilst Lady Maud was remaining in Delhi-a woman being contraband in a military machine-Lord Winterton and Sir Victor Warrender were joining me as far as Rawal Pindi. Our wives had come to see us off, and I have an interesting photograph in which we are shown in costumes varying from the blue and gold of Lord Molyneux, the Viceroy's A.D.C., and Lady Warrender's hunting confection to a Sidcot suit that covered little more of Lord Winterton's manly frame than a modern skirt covers an athletic young lady.

Our first halt was Ambala, where we landed for luncheon in a strong wind and clouds of dust. Then over a monotonous country we proceeded to Lahore, where we were to spend the night with Sir Malcolm Hailey, the Governor of the Punjab. On the way we passed by Amritsar, with its golden dome and its troubled memories of eight years ago. Towards teatime we reached Lahore, and found Sir Malcolm Hailey awaiting us with Sir Hari Singh, the Maharaja of Kashmir. Together we drove through the pleasant avenues of the city

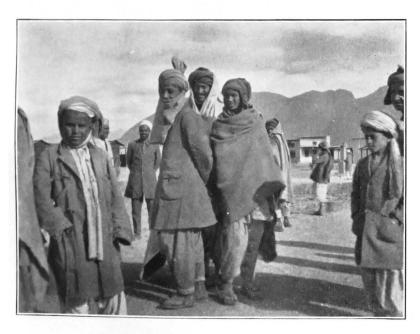
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to a Government House that was once a tomb and still in certain respects recalls its origin. The keenness and vivacity of Sir Malcolm and Lady Hailey should be, however, more than proof against the depressing atmosphere of any building. Even a short stay of a few hours was sufficient to impress us with the personal energy of the Governor, and the magnitude of the economic progress that has been achieved in the Punjab by wise and generous schemes of irrigation. Towards evening I went for a walk with His Excellency into the city, where at every step I felt that I was looking at some thrilling page of Indian history and romance. We passed Sir Henry Lawrence's office with its memories of the Mutiny, we stopped before the great gun, Zam-zammah, the fire-breathing dragon 'whose possession holds the Punjab,' and I thought of the meeting of Kim with the Lama from Tibet. I would gladly have had further time at my disposal for visiting a city that has taken so prominent a part in the making of the Indian Empire. But the details of my programme showed me relentlessly the hour of my departure, and I was forced to content myself with a stay of a few hours.

The following morning was occupied in inspecting the Air Force Park, where I found the officers greatly excited by the arrival of the first Fairey III DH to be seen in India. I then left for Peshawar,



A CAMEL CARAVAN IN THE KHYBER PASS



TRIBESMEN OF THE FRONTIER

passing over Pindi, where I parted company with Lord Winterton and Sir Victor Warrender. wards the end of the flight the pilot passed me back a slip of paper telling me that the carefully dug out rectangle below us was the ancient city of Taxilla, a centre of successive civilisations from the time of Alexander to the fall of the Buddhist kings. was from Taxilla that Alexander had taken an Indian ascetic as the companion of his march. For many days the fakir had followed with the army until for some undisclosed reason he determined to end his own life upon a funeral pyre on the desolate shore of Mekran. Associated with this and many other strange incidents was the country below us. Its central and predominating feature, the Indus, had now become the companion of our voyage.

By the time we reached Peshawar it was bitterly cold, and it was with difficulty that I could make a suitable reply to the kind welcome that came from Sir Norman Bolton, the Commissioner of the North-West Province and the General of Division. The warmth and comfort of Government House, however, soon restored my circulation. I had not arrived many minutes before I had brought home to me the utility and ubiquity of aeroplanes in these distant parts of the Empire. The roar of an aero engine interrupted our tea, and within a few minutes a servant appeared carrying an official

letter that had been dropped from the air in the adjoining garden. I was myself to undergo in the next few days many more experiences of the change that the aeroplane has imposed upon the habits and conditions of the frontier.

I was to spend in all five nights upon the frontier and to see as much of it as I could in the time. Including the journey to and from Delhi my flights were to cover about 2050 miles. When it is remembered that I had inspections to make at every landing-point, it will be seen that the day's work was to be varied and exacting.

Thanks to the great kindness of Lady Bolton and the not too early starts, I was able also to see something of the city of Peshawar, and the life of the cantonments outside it. Peshawar seemed to me to be one of the most interesting cities that I had ever visited. It is still much as it has always been. Only a handful of Europeans live within it, and the visitor who desires to enter its gates is expected to take with him an escort of police. Lying on the high road between Central Asia and India, it is the resting-place of the great caravans of Bactrian camels, and a rich entrepôt of Chinese, Persian and Indian trade. It is therefore the gathering-place of traders and travellers of almost every Asiatic type, and of traders and travellers who are carrying on their daily business without the presence of European globe-trotters in the



A GRAIN DEALER OF THE BAZAAR

bazaar. It was fortunate for me, though not for my banking account, that during my stay the weekly caravan arrived with its load of furs and silks and carpets. The caravan I had first struck in the Khyber Pass, where for several miles our car was held up by an interminable string of huge Bactrian camels with their shaggy legs and heads. I next saw it unloading in a vast and dusty khan, and I finally surveyed the results of its many days' journey in the Chinese silks and Persian lamb-skins in the bazaar.

As is the case in every Eastern town, it is the bazaar that counts in the daily life of the inhabitants. And it is the people, and not the buildings, that make the real interest in it. In the city of Peshawar there are few buildings to be noted. Frequent fires have destroyed almost all those that were of any account there, whilst an Afghan Governor had all the minarets pulled down, because, as he said, the curious could gaze at his wives from their summits. The Fort is, however, a monument of some interest, whilst from its roof it is possible to obtain a delightful view of the whole city. More than once I stood there, looking over the brown houses to the great mountains in the distance, and watching the flocks of pigeons fluttering round the roofs and the crowded houses. But, as I have said, it is the bazaar that is the centre of the city's interest. And it is a bazaar to keep one

happy for many days. I could only regret that I was on the frontier on a flying and not a buying expedition.

My first flight was to Kohat in the Kurram valley, an Army and Air Force station, situated on the farther side of a range of steep hills. A road and railway go there, but a journey by either takes many tedious hours. For me it was nothing more than an approach shot from the Peshawar tee on to a near, though blind green. By rail or road it would have been an interminable dog-legged hole. As it was, a quick thirty-five miles over brown and purple mountains, and then a drop into a small secluded plain.

Kohat is a hill station which still has a bad name for malaria in the summer, but in the cold weather is highly esteemed by officers and men. Life has settled down there since the robberies and murders of a few years ago, when Miss Ellis was abducted by a gang of marauders, whose ringleader has only recently been captured and hung. A good landing-ground, new buildings, and a pleasant layout make it a popular station with the Air Force Squadron that is quartered there. Moreover, it is the only place that I have ever visited where the main road is lined on each side with beds of violets.

Upon the luncheon-table at the mess there was a fine display of silver cups. When I asked their

history, the Commanding Officer told me that they were souvenirs of what he described as 'all the funny flights that had been made by officers of the squadron.' By this bright description he meant such flights as from time to time take place between the North and South of India. I told him that, with his permission, I would add another to the number as a reminder of the even funnier flight that a British Minister had made from Croydon to Kohat.

From Kohat we flew to another mountain landing-ground, Arawali. Arawali is an advance station of the Air Force, and is close up to the Afghan Frontier. Situated in the midst of very wild country, its buildings, only now being completed, give the appearance of a great oval fort. As we landed, several eagles and big falcons soared around us, looking suspiciously upon the new and strange bird that was poaching upon their hunting-ground. Below were groups of Afghan workmen engaged upon the building, a British Major with his guard of local Scouts, and the Political Officer from Parachinar.

Of the Political Officer I had already heard many stories. Whilst serving in Southern Persia towards the end of the war he had been captured by Kuchik Khan, a notorious brigand chief, and chained to a Kurdish prisoner for almost a year. Having survived this terrible ordeal, he is now intent upon

turning Parachinar into a hive of industry, and a centre for Alpine sports. Without a moment's delay he made me the following requests. Could one of the first machines upon the service that was to be started from Cairo to Karachi bring him a consignment of rainbow trout, bees, and pheasants' eggs? Rainbow trout, bees, and pheasants' eggs have this in common, that they can none of them stand the length of a three weeks' journey by train and ship. The only way, therefore, to stock the streams and coverts of Parachinar, and to start a bee industry in the country where the native bees have been destroyed by disease, is to obtain supplies by some means of communication that would not take more than a fortnight between England and Waziristan. I have not forgotten his request, and I hope that some time when the line is running we shall be able to fulfil it. In the meanwhile this enterprising administrator has started a rink and a ski run in the neighbouring hills, and has equipped Parachinar with electric power. It is men such as he who leave their mark not only on the countries that they administer, but also in the pages that tell of British achievements in the remote corners of the world.

With the wind behind us and a gorgeous sunset painting the mountains and valleys with purple and gold, we returned to Peshawar. There, in the evening there was a dinner at the Air Force mess,

and the inevitable speech that was always demanded from me at every point where I landed during the tour. But much more interesting than the speech was the talk of the officers around me. These Air Force squadrons on the frontier are making history. A few years ago, and no one would have believed that air power could be used in conditions so difficult. Mountains rising to many thousands of feet, valleys sometimes little broader than a riverbed, tribes whose men and boys are the finest guerrilla fighters in the world, weather of fierce and sudden contrasts—these are conditions in which it might well have been thought that flying of any kind was impossible, and, most of all, military operations in the air. Year after year, however, the squadrons have by their daring and efficiency proved the practicability and the value of air control upon the frontier. The tribal areas are quieter to-day than they have ever been in the history of India. Is this result in no way due to the mobility and ubiquity of air power? An aeroplane or a flight or a squadron can reach almost any point upon the frontier in a few hours. It is this swiftness of pressure that has been the secret of Air Force success in Iraq; it is this swiftness of pressure, also, that in the very different conditions of the Indian Frontier has exercised a steadying influence upon the tribes in recent years.

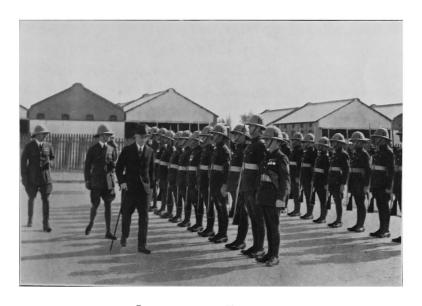
A year ago the Air Force was for the first time

given the honourable responsibility of carrying out under the orders of its own officers a military operation against rebellious tribes. In a week or two everything was finished; the cost was insignificant, the casualties almost nil on both sides, and yet the enemy surrendered at discretion. Indeed the victory was so quick and complete that the Whitehall conservatives objected to the issue of medals, on the ground that the campaign was so short and the casualties so few that the affair could not be called a war. The conservatives were overruled, and I am glad to think that there is a growing body of opinion, military and non-military, that judges a military operation not by the number of troops that fight and die, but by the success that is achieved, and the speed with which the achievement is attained.

The officers around me at dinner had many of them taken their part in the making of this history. Like all British officers they regarded their successes in that humorous self-depreciatory manner that M. Maurois, alone of foreign authors, seems to understand. When I asked one of them how it was that the campaign of last year was finished in a fortnight, his answer was simple and direct: 'We bombed the tribes and drove them into their caves. The fleas drove them out and made them surrender.' The flight of the aeroplane, the jump of the flea, the alliance of the mechanical instru-



A FRONTIER SQUADRON



INSPECTION AT RISALPUR

ment and the primeval insect—who could resist *such a combination?

Upon the following day my programme was Risalpur for luncheon, and a flight up the Malakand Pass in the afternoon. Soon after leaving Risalpur the site of a fortified monastery in ruins stimulated in me a new interest in the Buddhist period of frontier rule. Having seen from the air its turrets and courtyards, I wrote in my notebook that I must visit the Museum of Buddhist Antiquities before I left Peshawar.

As to Malakand, my memory is of a sunny valley intersected by a canalised river and a frame of steep hills along the edge of which fluttered the white ribbon of the Chitral road. Beyond the hills there was a line of snow-capped mountains, one of them standing out at an immense height above its fellows. The road upon which I was looking had felt the constant tread of troops; it had even seen the military form of a young officer of the Fourth Hussars, now my friend and colleague, the Chancellor of the Exchequer. Along it had passed more than one military expedition, along it had journeyed every two years the Chitral Relief Column to the farthest point of British influence. I suppose that I could easily have flown to and from Chitral between luncheon and tea. The Relief takes two months for its single trek from Risalpur to its destination.

So quickly indeed does an aeroplane traverse the frontier that it is well for the traveller, if he desires a true impression of the difficulties of the country, to accomplish certain of his visits by road. It was on this account that I determined to see the Khyber not from an aeroplane that would cover the Pass in a few minutes, but from the road that had for centuries been the chief highway in and out of India, for trade, travel, and war.

Sir Norman Bolton was kind enough to accompany me, and to describe the peoples and points of interest that we were constantly passing. At fixed intervals along the miles of road stood Kasadar sentinels, each of them showing by his presence that he and his rifle were there to answer to their names. From time to time we passed abandoned cantonments, ruined forts, and Buddhist shrines. The cemeteries of holy men I noted in particular, surmounted by the crazy poles and pennons of the pilgrims that have visited them. Perhaps, however, the most striking buildings in the Pass are the fortified houses of the Afridis themselves, each with its high wall and tower and its ladder as the only means of entrance. Here, indeed, is every man's house his castle; here, indeed, does the strong man armed keep his goods against his enemy.

At length we reached Landi Kotal, where the Colonel Commandant of the district joined us and



SIR SAMUEL HOARE AND AN AFRIDI CHIEFTAIN AT THE FRONTIER



SENTRIES AT THE AFGHAN FRONTIER

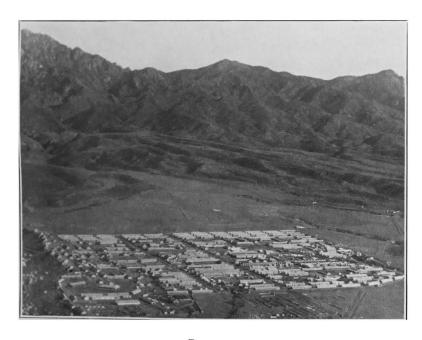
took us on to the frontier point of Landi Khana. There, indeed, we were at the final point of British dominion. A pole across the road, a notice against crossing it that might have come out of an English railway station, an Indian sentry on one side, and a very down-at-heels Afghan on the other, were the landmarks of a geographical point that has excited generations of European statesmen. A pleasant party of Gurkhas, each of them covered with the medals of bravery and the broadest of grins, gathered around us for a photograph, the centre of which was to be my humble self arm-inarm with the senior Chief of the Afridis, an old man of patriarchal appearance and of probably unsurpassed knowledge of frontier fighting. The Chief's benignant smile may have expressed the present friendliness of his people—I say the present friendliness of his people, for no one would be so bold as to guarantee the permanence of Afridi affections. It is, at any rate, cause for satisfaction that for some years past peace has predominated in this country of fights and feuds. The tribesmen have been making good money out of the construction of the road and the railway; they have been freed from the threatening spur of famine; they have acquired new tastes from a period of prosperity. There has ensued a period of unusual calm over the Afridi country. Only the future will prove whether, with the road

and the railway finished and the stream of wages dried up, the present peace and quiet will continue. The Afridi Chief beamed upon us and we beamed upon him. The only regret that he expressed was that we had not arrived in the machine that had brought us from England.

I had still another frontier expedition to make—a flight to Miramshah, and thence, if the weather permitted, to Quetta. The distance from Peshawar to Quetta is 400 miles, and the journey must be made over mountains and passes that force the machine to heights of more than 10,000 feet. It is only, therefore, in the best of weather that the flight can be accomplished in a single day. When we left Peshawar the sky looked very threatening; indeed we had all been awakened by an earthquake shock that morning, and the general impression was that we could not possibly get through to Quetta before the evening. Our 135-mile flight to Miramshah, as cold an experience as I have ever endured, confirmed us in this view. A bitter head wind was blowing the whole time against us, and the higher peaks were covered with snow and mist. So frozen were we when we reached the fortified camp of Miramshah that I think that we were all greatly relieved when the telegrams from Quetta informed us that there also the weather was equally bad. In these circumstances we decided to lunch at Miramshah, and before returning to Peshawar



THE FRONTIER POST OF MIRAMSHAH



RAZMAK

in the evening to make a tour of Razmak, Bannu, and the neighbouring country.

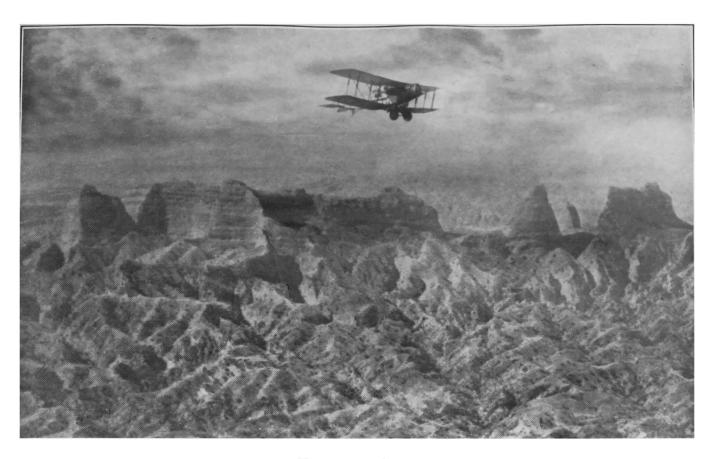
Adjoining the Air Force quarters at Miramshah are the barracks of a company of Tochi Scouts. How delightful it was to visit the British officer commanding them, and to hear him after twenty years' service describing them in terms that would have been flattering to a battalion of British Guards! Outside his mess was a sheltered garden about which strutted his constant companion, a very distinguished-looking crane.

Refreshed by the hospitality of the Air Force and the Tochi Scouts, we embarked upon the second stage of our very cold flight. In spite of a fur coat, a Sidcot suit, and a pair of rubber boots, I could scarcely see for the cold the white streak of the Razmak road, and the circle of buildings at Bannu. I squinted at them past the wind-screen, and then put my head down to get any shelter that there was from the wind. As it was too cold to look out of the machine for long at a time, I occupied myself with thinking of the influence that both the places that I had just seen had exercised upon Indian history. There, beneath me, was Bannu, the starting point of John Nicholson's romantic career. For if it is upon the ridge of Delhi and at the Kashmir Gate that British people chiefly remember him, it was from Bannu and the surrounding country that he emerged as a great captain and

leader of men. Of Razmak there was a different history to recall—the story of a finely engineered military road that has brought security to the British garrison and prosperity to turbulent and starving tribes. I was told in Peshawar that there are already fifteen Ford cars owned by Waziris, and that the Political Officer this year received Christmas-cards from several of the nelghbouring chiefs. It is hunger that chiefly drives the frontier tribes to battle and murder. With the making of the road and the wages for its building and upkeep, the incentive to crime and rebellion becomes less insistent. Will the Razmak road do for Waziristan what Macadam and Wade did for Scotland in the eighteenth century?

Upon our return to Peshawar we found our kind hosts, who had imagined that we should fly to Quetta for the night, ready once again to receive us. As for myself, I am not sure that I ever more fully enjoyed the delights of a fire than at the end of the very cold flight that we had just finished.

I was glad of a quiet Sunday and a chance of visiting the Buddhist Museum. How nearly Greek and classical are these Buddhist statues! With more edge and harder lines many of them would not have looked out of place in the ruins of Cyrene. Interesting as are these many examples of Greco-Bactrian art, the treasure of the Museum is the reliquary of Buddha. Although its most



FLYING OVER BANNU

venerated contents have been given by the British Government to a temple in Mandalay, the casket remains, a monument of the high level of art that was reached in Central Asia at a time when Europe was groping through the Dark Ages. In complete contrast to the Buddhist reliquary there hangs close by on the wall a lithograph of a general in whiskers and coatee who looks as if he came straight out of the 'Rose and the Ring.' This is General Avitabile, the famous Commander-in-Chief of the Sikh conqueror, Ranjit Singh. The story is still told how he sat in a red and gold uniform in the fort of Peshawar dispensing justice with a drawn sword across his knees. If ever I write a book about European adventurers in the East, I shall keep a whole chapter for this whiskered condottiere, who in the early part of the nineteenth century made his name feared and famous in the Punjab.

I was now to make the final stage of my military flight, the return to Delhi via Multan and Bikaner. At Bikaner I was to join the Viceroy on the State visit that he was paying to the Maharaja. As my journey covered a distance of 600 miles, and much of it across unsurveyed desert, it was thought best to make a halt at Multan for the night. Following, therefore, the course of the Indus I arrived about midday at the city that is famous in history for its heat, its dust, and its beggars. In my short visit I experienced none of these evils. Instead of

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them, I found cold weather, kind friends, and several sets of excellent tennis.

When I left Multan, a city in the plain but still a part of the Frontier Command, I took leave of frontier conditions, and returned once again to the desert. I had spent a week on the frontier, a short time indeed but long enough to excite me by its singular atmosphere and its dramatic history; certainly long enough to impress me with the feeling that it is a worthy boundary of a great Empire. You can judge a country by its frontiers. A great country should no more have its neighbours pushing into it than should a great house have other houses looking into its front windows. The mountains of the north-west are as splendid a frontier for India as the sea is for the British Islands. There is much that is imposing, magnificent, and even threatening about both these frontiers. For each, however, once almost inaccessible in its isolation, there is now a disquieting speck in the clouds above. Was it not significant of the change that a new invention had brought with it, that our machine had jumped the Channel in ten minutes and had surmounted the Frontier peaks as a Rolls would take the Newmarket road? Herein is created a new aspect of Imperial defence, herein is forced upon our attention a totally new problem of security. The men who are guarding the Empire in India and Great Britain should constantly ponder these things.

A STATE VISIT BY AIR

Ar this point there follows a short intermezzo in the flying opera! On January 25 the Viceroy had planned to make a State visit to the Maharaja of Bikaner, and both host and guest had invited me to join them. Having heard the fame of His Highness's hospitality and knowing also the interest of several of the ruling princes in aviation, I determined to turn aside from the direct route to Delhi and to accept so attractive and interesting an invitation.

A Viceregal visit resembles an army on the move. When its objective is a State like Bikaner, it is scarcely possible to count the multitude of the guests and the camp-followers who take part in it. In this case the Maharaja's staff, with the precision of an efficient G.H.Q., printed and distributed a list of the party, the number amounting to the respectable total of 155, without servants. Not, however, content with the lavish hospitality of Bikaner, His Highness transported the whole of this army upon the second day to Gujner, his hunting palace, at a distance of 20 miles, where after two days' stay everyone returned again to the capital. Within these broad strategic

movements there were constantly changing tactical dispositions, for State ceremonies, tennis, and sandgrouse shooting. Hour by hour army orders appeared upon the notice board, politely and conveniently directing each guest to his partner for dinner, or the motor that was to transport him, or the butt that was to shelter him for a duck or grouse shoot. Never have I dreamed of an entertainment carried out upon so spacious a scale. The Maharaja with his long record of wise administration and his equally long row of service medals has so many claims upon the admiration of Englishmen that he needs no further testimonial from a stray visitor like myself. I will only therefore say that when I looked around at my 150 fellow-guests, and the swift and smooth arrangements that were made for their comfort, I felt that I was in the house of a Napoleon of hospitality.

It was the first occasion upon which one of the Maharaja's guests had arrived by air. To mark this new precedent I was asked to reach Bikaner the day before the Viceroy, so that our arrivals should not clash. The simultaneous appearance of my aeroplane and of the ceremonial elephant would obviously have been somewhat incongruous. Moreover the Maharaja and the several ruling princes who were staying with him were anxious to make the landing of the aeroplane something of a special affair.

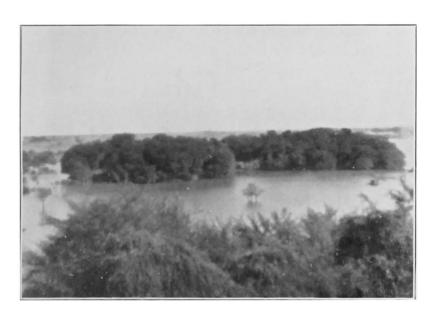
A STATE VISIT BY AIR

As I approached Bikaner the contrast between the modern sandstone palace and barracks and the arid desert on all sides became conspicuous. After the brown and grey of the morning's flight the blaze of native colour was the more striking on the aerodrome. With His Highness were several other Maharajas, amongst them the talented and agreeable prince styled the Jam of Nawanagar, but whom the British public will always remember as 'Ranji.' A gay crowd encircled the machine, in the midst of which was an old man of a hundred and thirteen who had come to look at the new migrant to Bikaner. I am told that Eastern crowds do not usually demonstrate their feelings. It was all the more pleasant that at Bikaner, as at Jodhpur, the spectators did not refrain from an almost Western cheer.

For the next three days our time was occupied up to the last second with a round of pleasure and ceremony. Of the Viceregal procession, of the illuminated entertainment at the Fort, of the State banquet, and of the review of the Camel Corps, I will say nothing, but I cannot refrain from making mention of the sport for which Bikaner is specially famous.

The Imperial Sand Grouse, the exclusive and distinguished relations of the commoner Pallas's Sand Grouse, at certain times of the year collect in vast numbers in the neighbouring desert. As

the country is waterless, the birds must from time to time come to drink at the Gujner Lake. It is along the shore of the lake and in lines radiating across the desert that the rows of butts are placed. On the first morning I was close to the lake and in the next butt to the Viceroy's. I had brought neither guns nor cartridges with me, and had to borrow as best I could, and to depend upon my Air Force corporal for a loader. I had been warned that of all birds the Imperial Sand Grouse is the most difficult to shoot, and of all stands two hours at Gujner with 500 shots crowded into them is the most exhausting of shooting experiences. Indeed, those who have shot at Gujner before practise many useful devices against fatigue. Some of them, I noticed, were wearing rubber soles to their shoes, others used white silk gloves, whilst several had their special dopes against gun headache. When the birds began to come I soon realised the truth of these warnings. It was evident that they were determined to prove to the Air Minister that although the Air Force Display provides flying of great speed and variety, the original owners still hold the dominion of the air. In every kind of formation and at every height they descended upon me, zooming, banking, looping the loop, now swooping into my butt like torpedo-carrying bombers, now almost out of shot like singleseater fighters. After firing an incredible number



THE GUINER LAKE



BIKANER SHEPHERDS

A STATE VISIT BY AIR

of cartridges without once having a really easy shot I was not surprised to hear that a former Viceroy in the next butt to mine once had over 600 shots and claimed six birds at the end of the stand.

On the following morning I was some way from the lake, and posted on the hill. There the grouse were even more difficult than they had been near the water. It was, therefore, a relief to me to find that even Ranji and the Maharaja of Dholpur, two of the best shots in India, found the shooting far from easy, and that when the total of 3500 was added up for the two mornings, I had come out third in the list of 41 guns.

When I returned to Delhi I sent the Maharaja a telegram of thanks, and observed to His Highness that whilst my aeroplane had flown me swiftly to and from his capital, its speed was as nothing compared with the flight of his Imperial Sand Grouse.

If, however, the Sand Grouse were swifter than my D.H. 9A, the D.H. 9A was certainly swifter than the Viceregal train. Whilst Lady Maud's train journey took 18 hours between Bikaner and Delhi, I accomplished the distance in just one-sixth of the time.

THE RETURN FLIGHT

THERE now remained only two days before my departure from India, and a long series of interviews and discussions that could with difficulty be fitted into them. Upon the Sunday I had the pleasure of lunching with Sir Bhupendranath Mitra, and of meeting prominent representatives of all the parties of the Assembly. In the discussion that I initiated, I attempted once again to emphasise the value of air lines to India, and to illustrate it by the time that I had saved in my 2000-mile tour of the frontier, and my journeys to and from Bikaner.

As the day for our departure approached the weather took a change for the worse, and upon our last evening a cold mist and rain set in. So certain, however, are flying conditions in India at this season of the year, that it never occurred to us that our start might be delayed on the Tuesday morning. Yet when we reached the aerodrome at about 8 o'clock we found it enshrouded in so thick a fog that we could not see 50 yards around the machine. Having avoided fog on Boxing Day in London, it was evil fortune to find it on February 1

THE RETURN FLIGHT

in Delhi, and, as subsequent events proved, it was to be even worse luck to strike it again at Paris in a few days' time.

Our many friends had come to see us off, and, as they had not breakfasted, were probably anxious to say their good-byes without undue delay, or at least to know for certain when we were likely to start. The telephone buzzed with our inquiries for weather reports, and telegrams passed to and from the adjacent points upon our route. Not always, perhaps I might even say not often, did we receive very helpful answers to our inquiries. From a station along the line came the Delphic response: 'All clear. Everything up to time, the express has just passed through two hours late.'

It was finally without the oracle that we had to make our decision. If we delayed much longer, we could not hope to cover the 700 miles and to make Karachi that evening. Our programme would be dislocated, a banquet at the Sind Club would have to be cancelled, and I should have no chance of inspecting the great airship shed that is now nearing completion at Karachi. As soon, therefore, as there was a little break in the clouds, we started with a prayer on our lips that the fog would, unlike the Jask sand storm, prove local in its incidence. This time, at any rate, the weather was to prove as kind as it had been unkind three weeks before. We had not gone many minutes

before we saw the thick wads of cotton wool unravelling into wisps of smoke, and in half an hour's time we were out of the fog into a bright and bumpy blue sky. The wind was behind us, and the speedometer showed that we were doing well over 100 miles an hour. This sudden change for the better gave us a chance of retrieving the three hours' delay at the start, and of reaching Karachi on the same evening. When we reached Jodhpur for luncheon, the betting that we should reach Karachi the same evening was about even. When we left it at 4 and after a long delay with refuelling, the odds had lengthened against us. Once again, however, the wind was to help us through, for, though it made the flight anything but pleasant, it added a steady 10 miles an hour to our ground speed. Even so, it was obvious that we could not reach Karachi in daylight. Should we then land at some half-way stage, or should we push on through the darkness? Hitherto we had attempted no night flying, and our stages had been carefully adapted to the hours of daylight. But by this time the pilot and the navigator had come to know so well the machine and the engines, and we had equally come to know so well the pilot and the navigator, that we felt no anxiety when we decided to go for the long putt.

It was a dark and cloudy evening, and by 6.30 it was difficult to make out the Indus. By 7 it was

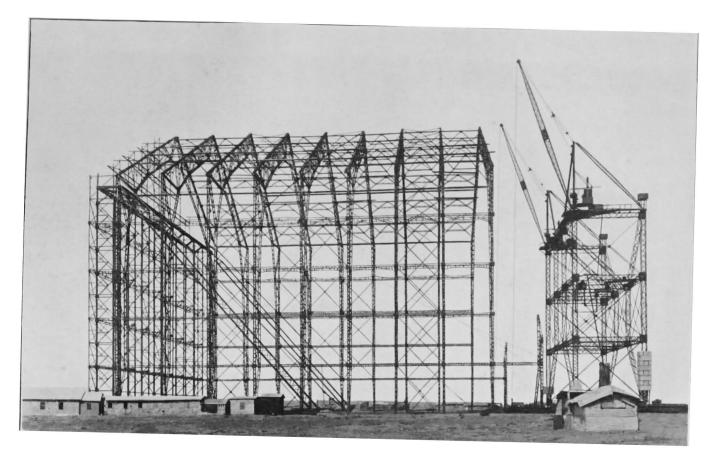
pitch dark, and I could only see the clock that records the revolutions of the engines when the pilot from time to time turned on the light. As we dashed through the dark, I had for the first time a sensation, that was subsequently confirmed by our second night flight between Palestine and Egypt, that an aeroplane flying by night closely resembles a carriage on the Metropolitan or District Railway. Darkness outside, the character of the light within, and particularly the noise, reminded me of many a journey between Westminster and Sloane Square.

We were on to the flares of the aerodrome before I realised that we had reached Karachi, and in another minute we had made as easy and quiet a landing as any that is ever made at Croydon in broad daylight. Our friends gathered round us in the dark, delighted that we had safely arrived, delighted also that I was able to fulfil my engagement to dine at the Sind Club in an hour's time.

Thus ended a long and tiring day. A ceremonial farewell is in itself a wearisome affair, and when the good-byes are extended, as they had been that morning, to two hours and a half, it will be understood that we were already tired before we started upon our 700-mile flight. There had been the rush against time, the bumpy wind and the arrival in darkness. Upon the top of these experiences followed a crowded and enthusiastic

banquet given me by the British community, and the speech that, try as I would, I was unable to avoid in any of our halts. It is a testimony to the cheery friendliness of the members of the Sind Club, and to the excellence of their champagne, that I was not a corpse at the end of this very exciting day's work.

When I had previously passed through Karachi, I had seen through the mist the great building of the new airship shed, and I had marked it down for inspection on my return journey. It will be remembered that, according to the programme of airship development upon which we are engaged, we are intending to fly one or both of the two new airships to India and to other parts of the Empire during the next two years. The airship shed at Karachi is an essential part of this programme, for without it experimental flights at so great a distance from the British base would involve unjustifiable risk. Although the shed is not more than half completed, its gigantic form already dominates the view. As we neared it it looked like some highshouldered Gothic cathedral that had not yet been completed. Just as its twin shed at Cardington is, I believe, the biggest building in England, so the shed at Karachi will be the biggest building in India. With the background of the Sind desert and the clouds of blowing sand, its form loomed up mysterious, and even frightening, by its size



THE AIRSHIP SHED IN COURSE OF CONSTRUCTION AT KARACHI

and shape. When we entered it the cranes were working, and huge girders were being swung into their places, whilst workmen from Lancashire and the Clyde were supervising the operations. Would the pioneer work that I was watching mark a new stage in Imperial communications? Would the airships that this shed is to house bring Karachi as near to London as Edinburgh was to London a century ago? Whilst only the future can answer these questions, the present can at least justify the wisdom of an attempt, the success of which may confer so great a benefit upon the whole Empire.

A wind, more exhausting than the mistral and the sirocco, blew the whole day, and towards evening the weather reports that began to dribble in gave an unpleasant forecast of the next 24 hours. A day of unprecedented rain had turned the white clay of the Pasni Aerodrome into a gigantic lake. The half-way house, therefore, in our day's journey was out of action. Was it safe to push on to Chahbar, the next landing-ground, and to risk a flight of 425 miles along the Persian Gulf when the range of the machine was not more than 450? I feel sure that we should not have made the attempt in the first few days of our outward flight, but just as we had confidently faced the night arrival at Karachi, so now after more than 6000 miles in the 'City of Delhi' we settled to go for Chahbar.

The Manora Fort was firing a salute as we left the ground. The noise of the engines drowned the succession of reports, but puff after puff of white smoke showed to those who were interested in ceremonial detail the number of guns to which a British Secretary of State is entitled by the Protocol during a visit to India.

We now held a course that, unlike that of our outward flight, was mainly over the land. Below us lay the brown sands and rocks over which Alexander, making a precedent for the Retreat from Moscow, made his retreat from Mekran. Our morning's journey of three or four hours was to cover almost exactly the distance that took him over 80 days of terrible hardship to traverse. At first over the Gibraltar-like rock of Ormara; then over what had been the Pasni landing-ground and was now a great lagoon, out of which fluttered disconsolately a tent that had been meant for our luncheon, and upon which floated a score of petrol tins; then along the coast, where two D.H. 9A's that had been intended to meet us had been compelled to land upon the shore; next, past Guadar, a little fort that though it is in Baluchistan is still held by the Sultan of Muscat. Lastly, at the very point where we crossed the Indian frontier we found H.M.S. Cyclamen lying below us with her crew waving and wirelessing their greeting to us.

Our speed was so satisfactory that we had little

fear of a premature landing before Chahbar, and in point of fact we arrived there a good hour before we were expected. As the news of our arrival spread, the inhabitants, as usual, gathered around us from all sides. In the centre of the crowd were two local chieftains, the one a man of middle age and the other a boy of ten or twelve, who had come ostensibly to see our machine, but in reality to show off their horsemanship to the assembled multitude. During most of our stay this curious pair galloped in and out of the throng, displaying the paces of their horses and their own skill in trick-riding. Whilst the crowd lingered on the landing-ground watching alternatively their movements and our machine, we restfully lunched with our kind hosts of the Indo-European telegraph station.

Our afternoon's flight to Jask was a mere bagatelle, and we were now, in contrast with our outward journey, gaining and not losing an hour of daylight during it. Sleepily and peacefully, therefore, we proceeded on our way with little to look at save the blue sky and the flocks of flamingoes splashing it with pink.

As Lady Maud has a rooted objection to returning from any expedition, whether by foot, motor, or aeroplane, by the same route upon which she has started, we determined to vary as much as we could our return flight up the Persian Gulf. After

a night, therefore, at Jask we kept to the Persian coast, and did not for a second time visit the inhospitable mountains of the Arabian peninsula. Our way lay over a curious range of slab-like mountains, apparently flat on the top although sheer upon all sides. The day being clear, we could easily see the Arabian coast on our left, and from time to time an island of wine-coloured rocks in the blue straits between Arabia and Persia. Upon one of these little islands there had recently been enacted a grim tragedy. A fishing party that landed upon it had lost the boat that had brought them, and when, some days afterwards, their plight was discovered, all had died of thirst save a single survivor who had been driven raving mad.

In the far distance on our right was a long range of snow-capped mountains. As we neared Bandar Abbas, the country opened out, and we looked down on a broad plage of red-coloured sand. Next we passed over a great mangrove swamp, cut into a veritable archipelago by many channels, and looking a paradise for ducks. Towards midday there was a halt at Lingeh for luncheon. Once again, the Vice-Consul and Mrs. Woodsall talked pleasantly of local conditions, particularly of the pearl fishers who put pieces of bone in their noses, and do not eat anything until the end of their day's diving, and of the slaves who still from time to time enter the

precincts of the British Vice-Consulate for manumission. One such slave had lived in the compound until a few days before our arrival. Another similar case came to our notice, when a few days after our return to England we read with interest the report of a trial in the Karachi courts, in which several natives of Mekran were convicted of slave-trading in this part of the Gulf.

Our Persian friends were on the aerodrome to greet us, the officials in their frock-coats, the women in their skull-like masks, and the caligraphist with his wooden table for the passports. They had never believed that we should arrive safely the first time; they had certainly not believed that our return would be no less sure and punctual.

Of our further journey between Lingeh and Cairo I will not attempt to set out the details. Our way was the way that we had already traversed, and our experiences not dissimilar from those of our outward journey.

There is, however, one incident of it to which I must make some allusion. Lord Lloyd had many questions to discuss with me in Egypt, and I was anxious to hurry on to Cairo with as little delay as possible. I was also anxious for another reason to fly from Baghdad to Cairo in a single day, and in the space of a few hours to pass the

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four great rivers of the ancient world—the Tigris, the Euphrates, the Jordan, and the Nile. Three times I had taken two days for the flight, and, though the journey has on several occasions been accomplished in twelve hours, its completion in a single day is still regarded as something of an achievement. Keeping to our plan, we spent Sunday at the Residency at Baghdad, where we varied our occupation between official discussions, a voyage upon the Tigris in a motor-boat, and a protracted visit to the bazaar. The visit to the bazaar and certain preparations that I had made in connection with the purchase of furs brought me into touch with one of the Baghdad carpet dealers, who shortly after my return to London honoured me with a communication so vividly expressed as to deserve quotation:

'Honoured Sir,' so it ran,—'I have the honour most respectfully to submit the following Memorial in connection with my humble services devotedly rendered in obedience to the command of Their Excellencies Sir Samuel and The Lady Maud Hoare—Most Exalted—on the occasion of Their Excellencies august visit to Baghdad in January last when the signal honour was extended to me of being required to attend and wait upon Their Excellencies pleasure in Government House to give my professional and expert services in selecting, for, and in the presence of Their Excellencies,

the best stone marten skins from a wide range

received from various part of Iraq.

'Your Honour will readily realise I have not hesitated to sacrifice my ordinary business persuits willingly in implicit and immediate obedience to perform this exceptionally honoured duty, regarded by me as a command of Their Excellencies exalted pleasure. It was also my immeasurable good fortune on the same occasion that Their Excellencies were further graciously pleased to honour me with their patronage by a purchase of some Zaku rugs from my own stock in trade.

'I, Their Excellencies devoted Memorialist, esteeming in the highest degree this signal honour extended to my professional services, and not having since learnt of the condition in which the parcels and articles in question ultimately opened up to Their Excellencies in England, beg most respectfully to seek to allay through Your Honour, my anxiety and concern in protection of my reputation and business, and which I beg to plead is made all the more necessary by such exceptional patronage as that so graciously bestowed on me by Their Excellencies.

'The Excellencies humble memorialist, begs most humbly to put forward this my prayer that any appreciation of Their Excellencies communicated to me will, in addition to allaying my anxiety, go far to seal my existing business prospects and reputation and which I now beg to lay most humbly before Your Honour for such esteemed pleasure as Their Excellencies will be graciously

pleased to direct.

'Always Their Excellencies devoted and humble servant.

'I have the Honour to Be, 'Honoured Sir,

'Your most Obedient & Humble Servant,

'Memorialist.'

The letter—that I was prompt to acknowledge—reminded me of a pleasant and profitable hour spent in a bazaar that, although it has lost the mystery of Haroun-al-Raschid, still protects under its roof the rich and varied products of the Middle East.

On the eve of our departure King Feisul gave in our honour a State banquet at the Royal Palace. His two brothers, King Ali and the Emir Abdullah of Transjordania, attended it, in addition to the principal ministers and British officials. The few halting words that towards the end of the evening I uttered in reply to my health were transformed by the Arabic interpreter into what appeared to be a page out of the 'Arabian Nights.'

Our morning start was early, for, as I have said, we had decided to attempt the journey to Cairo in a single day. As the distance is more than 900 miles, the success of our attempt was to a great extent dependent upon the weather. When we left the ground the wind was behind us, and we began to congratulate ourselves upon a swift and steady

course. But our satisfaction was premature. There was soon a complete change in the wind's direction, and I saw the speedometer fall from 120 to 70 miles an hour. A 1000-mile journey at 70 miles an hour is very different from a 1000-mile journey at 120 miles an hour, and when there is added to the loss of time the thrusts and buffets of a gale of wind, a manageable journey develops into a tedious and exhausting feat of endurance. Towards 10 o'clock we reached Rutbah Wells, the halting-place for the Nairn Transport Company, where a strong police post and a potential Shepherd's Hotel of the Desert have risen from the sand in the space of a few months. There we stayed to breakfast and refuel before resuming our desert trek. The afternoon proved worse than the morning. Hour after hour we plunged and pitched over the desert, sometimes as high as 7000 feet to escape the worst of the wind, sometimes at less than 70 miles an hour. The points in the desert never seemed to get nearer, the black basalt hills appeared to be endless, the mountains of Lebanon were always in the same corner of the view. At last, shaken and torpid, we reached Ziza, where we emerged into a storm of icy wind and driving rain. It was 3 o'clock, with an hour and a half as a minimum for refuelling, and it was doubtful whether we could now make Cairo the same evening. We at once retired to the little

station on the Hedjaz railway for luncheon and a council of war. If I had put the question to the vote, I think that the motion in favour of stopping at Amman or Gaza would have been carried against me. But knowing something of the conduct of public meetings, I took no such risk, and when I heard Captain Woolley Dod speaking hopefully of the prospects of reaching Egypt that evening I hastily took him at his word, and settled to proceed.

When we actually started it was nearly 5 o'clock on a very wet and dark February afternoon. The mountains of Moab looked grey and not purple, the Dead Sea steely white instead of aquamarine.

The line that Captain Woolley Dod selected was the eastern route over Beersheba and some distance from the coast. As far as Beersheba it was still fairly light, but almost the whole way thence to Cairo it was pitch dark without the flicker of a star. For an hour and a half, therefore, we had our second experience of night flying, and an experience of it at the end of an even more tiring day than the day of our departure from Delhi. But once again Captain Woolley Dod and Captain Johnston never left the fairway. Flying entirely by compass they kept to the middle of the course over Ismailia, and, if I may continue the golfing metaphor, holed out at Cairo without a mistake. It was a thrilling moment when, after an hour of

complete darkness, we caught sight of the lights of Ismailia and a ship or two upon the Canal; it was even more thrilling when, after a circle or two over the glare of Cairo, we dropped surely and safely on to the aerodrome at Heliopolis. A double event had been arranged for us. We had dined the previous night with King Feisul at Baghdad; we were to dine that night with King Fuad in Cairo. But the head wind had been too strong for the second engagement, and as it was then too late for State ceremonies, we hurried off, very tired, though on the whole contented, to a quiet dinner and bed at the British Residency.

Thus ended the first flight of the 'City of Delhi,' and of the first woman to fly to India. So successful had been their journey that both would have been ready and willing to fly the whole way back to London. We should have saved much time, we should have completed the return flight, we should have arrived dramatically at the Croydon aerodrome before the fog that was soon to enshroud London and the Channel. On the other hand, the machine was needed to start the regular service between Cairo and Basra, and our journey was not meant to be a stunt, but the opening flight of a new service. If we had brought the 'City of Delhi' back to London we should have delayed the regular operations of the Cairo-Basra route, and we should have lost in practical utility what we

had gained in spectacular effect. It was on this account that with great regret we said farewell at Cairo to Captain Woolley Dod, Captain Johnston, Mr. Mayer and Mr. Hatchett, and to the gallant aeroplane that had carried us so surely. Our excellent photographer, Corporal Bain, to whose skill many of the photographs in this book are due, we had already left with his unit in Baghdad. Air Vice-Marshal Sir Geoffrey Salmond had been installed in his command in India, and Air Vice-Marshal Sir Sefton Brancker was staying in Egypt for the purpose of making a flight upon the experimental line between Khartoum and Kisumu. In a few days the machine soon started upon its regular journeys to and from Basra, and only Lady Maud, Mr. Bullock, Major Woods Humphery, the Manager of the Imperial Airways Company, and our excellent Air Force Corporal Hetherington were left of its first occupants to accompany me back to London.

It was now a descent not from the sublime to the ridiculous, but from the sublime to the conventional. As I tossed in my cabin across the Mediterranean, as I jolted in the wagon-lit from Brindisi to Paris, I thought longingly of the 'City of Delhi.' She had given us our fair share of bumps in the air, but she had throughout the whole journey averaged 100 miles an hour. The miserable 20 or 30 miles an hour on the sea, the scarcely

less miserable 30 or 40 miles an hour in the train, made me turn irritably from the choppy sea and the shaky railway track to the sky above me. A rough sea and a jolting train were very trying to all of us. Even more so was the fog that we struck in all its denseness at Paris, a fog that had hung for days over Southern England and Northern France, that had held up shipping and clogged the revolving wheels of ordinary life. We had arranged as a little savoury at the end of the menu a flight from Paris to London. Our friends had expressed a wish to meet us, and great preparations, as I afterwards learnt, had been made for our welcome at Croydon. Could there, therefore, have been anything more irritating than at the end of a journey of 11,000 miles, in which we had easily surmounted formidable obstacles, to be prevented from making a joy-ride between England and France that is usually made as comfortably as a railway journey between London and Brighton? For two whole days we waited in Paris for the fog to clear. At length, as the meteorological reports were still pessimistic, we surrendered to the railway and the Channel boat.

Taking this course I was at least doing something to fulfil the pious wish of a well-known foreign aviator whom I met in Paris. 'There is one thing and one thing only lacking,' he had said to one of our party, 'in an otherwise altogether successful

journey, the British Minister ought to be killed in a railway accident at the end of it. His sacrifice would for all time establish the safety and superiority of air travel.' For good or bad, however, this culminating incident was lacking, and we arrived in due course by the boat train at Victoria.

In spite of the postponement of our journey, a great crowd of our friends welcomed our safe return. His Majesty the King was gracious enough to send his representative, Lord Lucan, to congratulate us, and the Prime Minister wrote Lady Maud a letter saying that His Majesty had further shown his interest in the flight by appointing her a Dame of the Order of the British Empire.

So ended our journey. In the space of little more than the Christmas recess we had carried out our long programme of visits and inspections and ceremonies; we had flown 11,000 miles; we had crossed 1000 miles of sea in a land machine; we had passed over the great rivers of the Old World—the Tiber, the Nile, the Jordan, the Tigris, the Euphrates, the Indus; and we had never had a mechanical breakdown or needed a spare part for a repair. In the face, moreover, of exacting labours we had all kept well, and I think I may say also that, in spite or because of our close proximity, we had ended even better friends than we were on the day that we had started from London.

I am inclined to think that these successes absolved me from carrying out the one thing lacking in the foreign aviator's plan. I had not followed in the way of my predecessor Huskisson. The Chief Whip had no writ to move for a byelection in Chelsea; no vacancy in the Cabinet compelled the Prime Minister to find a new Secretary of State for Air. The sceptics and the pessimists had been routed, and an example broadcast to the world of a new and reliable means of transport, that in the years to come will be regarded as ordinary and unexciting as the railway, the ship, the bicycle, and the motor.

APPENDICES

THE 'CITY OF DELHI'

THE aeroplane 'City of Delhi' is one of five 'D.H. Type 66' designed and built by the De Havilland Aircraft Company and engined by the Bristol Aeroplane Company especially for the Cairo-Karachi service of Imperial Airways.

The D.H. 66 is a triple-engined biplane and measures 79 ft. 6 ins. from wing tip to wing tip, 55 ft. 6 ins. from nose to tail, is 19 ft. 3 ins. high, and weighs, when fully loaded, 15,100 lbs., or nearly 6\frac{3}{4} tons; the wing loading is 9.6 lbs. per square foot and the power loading 10.9 lbs. per horse-power—characteristics which should not only help to ensure a good performance, but also enables the aircraft to fly with one engine stopped without loss of height while carrying a full load. Its cruising speed is 100 miles per hour, and its maximum speed with all engines at full throttle is nearly 130 miles per hour. Petrol is carried in two tanks situated in the central section of the upper main plane; each engine nacelle carries an oil tank, and this supply of fuel and lubricant gives a range of some 500 miles at cruising speed under normal conditions.

The wing and tail units, the latter also of the biplane type with rudders and stabilising fins in triplicate, are of the usual wood and fabric constructions, carefully protected against heat, humidity, and strong sunlight of the zone in which the

machines are to operate.

The fuselage or hull has a framework of high-tensile steel tubes joined in duralumin and steel joints, so arranged that any tube can be easily replaced without disturbing the others, and special attention has been given to the attachment to this, the main unit of the aircraft, of the planes, tail, undercarriage and other units with the object of facilitating inspection and replacement of any unit—a point of no small importance where small staffs of Europeans must work under tropical conditions.

The wheels and tyres are the result of much research work

THE 'CITY OF DELHI'

by the Dunlop Company, and are amongst the largest yet used, the tyres being five feet in diameter with a cross-section of 12 ins.

The cabin of the 'City of Delhi' is equipped to accommodate nine people in two compartments—the forward one is reserved for the use of the engineer and his colleague the wireless operator, and also houses part of the apparatus used by the latter. The rearmost cabin is reserved for the passengers, and is most comfortably furnished and equipped for seven persons.

Aft of the cabin is a large baggage compartment having a capacity of some 160 cu. ft. and offering ample accommodation for the baggage of the full complement of passengers.

The engines are the well-known Bristol 'Jupiter Mark VI Commercial,' and are technically described as 'nine-cylindered air-cooled radials,' and each is capable of delivering considerably more than the 425 horse-power at which they are rated at their normal speed of 1700 revolutions per minute.

THE ENGLISH TRANSLATION OF THE LETTERS IN FIVE LANGUAGES CARRIED FOR USE IN EMERGENCY

THE bearer of this letter is Lieutenant-Colonel the Rt. Hon. Sir Samuel John Gurney Hoare, Baronet, Companion of the most distinguished Order of St. Michael and St. George, Member of Parliament, a Principal Secretary of State and one of the chief ministers of His Most Excellent Majesty George the Fifth, by the Grace of God King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India. He, with his wife, staff and servants, is proceeding by air on an urgent and important British mission. The safety of this exalted personage and his companions is a matter of closest concern to the King of England, who will amply reward persons who may give them any assistance they may need on their historic journey.

The Seal of the Air Council has been affixed in the presence of Sir Walter Frederic Nicholson, K.C.B., Secretary of the Air Council.

LONDON TO DELHI.1

			Miles per Stage	Miles per Day
Croydon		Dijon	373]	
Dijon		Marseilles	268	641
Marseilles	_	Pisa	295)	
Pisa	<u>·</u>	Naples	279	574
Naples		Malta	410	410
Malta		Khoms	230)	•
Khoms		Benghazi	350	580
Benghazi		Sollum	350)	,
Sollum		Aboukir	300	650
Aboukir-	-Gaza	Ziza	360	360
Ziza		Rutbah	2891	
Rutbah		Baghdad	254	543
Baghdad		Basra	285)	,
Basra		Bushire	235	520
Bushire		Lingeh	316)	
Lingeh	_	Jask	240	556
Jask		Pasni	355)	_
Pasni		Karachi	245	600
Karachi		Jodhpur	390	*00
Jodhpur	_	Delhi		390
Jourbar		Ъепи	300	300
				6124

¹ This table is based on calculations made in preparation for the flight. Owing to minor deviations in the route in the course of actual flying, the distances in this table do not correspond completely with the distances actually flown, a summary of which is contained in the log on page 139.

G.M.T.

26/12/26

1610. Croydon to French Coast forecast:

Wind N.E. to E. 10-15 m.p.h. Cloudy to fair.

5/10/10/10 1000 to 1500 ft. Vis. 2000-4000 yds.

French Coast-Dijon.

Wind N.E. to E. 10-15 m.p.h. 20/30 at 2000 ft. fine or fair, local mist at first. Vis. 1000-2000 becoming 2000-4000.

Dijon-Marseilles.

Wind E. 10-15 m.p.h. 30-35. 35/40 at 200 ft. towards Marseilles. Risk of snow showers locally.

8/10/10/10 at 500 ft. at times. Vis. Marseilles 2 to 4 miles.

Inference: Anti-cyclone over Ireland W. England moving southwards. A deep depression over West Mediterranean is strengthening the E'ly wind over S. France.

1800. A well-defined low West of Italy and a fairly strong S.E.'ly wind on Italian Coast. The depression is spreading N'ward over France giving increasing E'ly winds. On the first part of the route N.E'ly wind 30/35 at 2000 ft. towards Dijon and beyond Dijon there will be snow.

27/12/26

Croydon—Dijon—Marseilles

G.M.T.

0735 Left ground.

o743 Biggin Hill, set course 125. a/s 100 Wind N.E. 10 m.p.h. G.S. 100 m.p.h. Ht. 500 ft.

0751 Tonbridge.

0759 Cranbrook L.H. abeam to Starboard.

0815 Dungeness. Wind N.E. 30.

0837 Paris Plage a/c 160.

o841 Berck. Wind becoming more easterly and hard frost.

G.M.T. 0856 Abeville. Mist. 0908 Poix. 0923 Beauvais. Landed Dijon. 1135 Total Time. Distance. Average speed. Total time. distance. 4 h. 93·25 m.p.h. 4 h. 373 m. 373 m. 27/12/26 DIJON-MARSEILLES G.M.T. 1305 Left Dijon. Wind E. 20. Clear in Zenith Course 188 a/s 110. Wind S. G.S. 80. 1345 Bourg. G.S. 92. 1353 1409 Lyon. G.S. 100. Valence. Occasional snow and mist. 1445 Marseilles. 1545 Total Time. Distance. Average speed. Total time. 2 h. 40 m. 268 m. 97.5 m.p.h. 6 h. 40 m. distance. 6 h. 40 m. 641 m. 28/12/26 MARSEILLES—PISA—NAPLES G.M.T. 0730 Thick fog. Vis. 100 yds. 0735 Taxied out. 0740 Took off. Set course 90°. G.S. 104. Cannes. Fine and clear a/c 65 along coast. 0832 Bordighera. G.S. 108. 0852 Albenga. Strong N.E. wind becoming N.N.W. later 0714 across Gulf of Genoa. 0958 Genoa a/c 133. 1042 Pisa. 1045 Landed. Total Distance. Average speed. Time. Total time. distance. 3 h. 10 m. 295 m. 93 m.p.h. 9 h. 50 m. 936 m.

29/12/26

G.M.T.

PISA—NAPLES

1250 Took off. Set course 170°. a/s 105. G.S. 120.

1355 a/c 135. Wind N.E. 15 to 20. Ht. 2500. 10/10 clouded. At Lake Bolsena, rain squalls, low clouds and mist. Wind becoming S.E.

1420 Civitavecchia. Wind S.W. 30. a/c 135. a/s 105.

1440 Rome. Heavy rain, low clouds. Strong S.W. wind becoming S.E'ly south of Rome. Sky fracto-cu. and cu. nimbus and then hail storms with wind E.S.E.

1516 Terracina. Wind becoming west 25 m.p.h. G.S. 125.

1547 Naples. Wind S.E. heavy rain.

1548 Landed.

Time. Distance. Average speed. Total time. distance. 2 h. 58 m. 279 m. 93·3 m.p.h. 12 h. 48 m. 1215 m.

29/12/26

NAPLES-CATANIA-MALTA

M.E.T.

0845 Finished fuelling.

0905 Taxied out.

o907 Took off. Set course 137. Wind light and variable. Sky clear in zenith but hard clouds on horizon.

0914 Over Vesuvius. Wind E.N.E. 15/20.

0921 G.S. 75.

0939 Castellabara. G.S. 100. Wind N.W. 10 m.p.h.

1000 G.S. 100.

1013 Azeta. Low clouds, heavy rain.

1015 G.S. 92.

1100 Off C. Vaticano. Low clouds and heavy rain. Wind S.W. at surface.

1115 Off N. of Sicily. Heavy rain, squalls, low clouds.

1207 Catania.

1210 Landed.

Time. Distance. Average speed. Total time. distance. 3 h. 5 m. 246 m. 95.6 m.p.h. 15h. 53 m. 1461 m.

20/12/26

29/12/26
M.E.T. CATANIA—MALTA
1405 Finished fuelling.
1410 Took off.
1411 Set course to Pessaro.
1443 Pessaro. Wind 285 35 m.p.h. a/c 218. a/s 95.
Ht. 1000 ft. G.S. 75. Severe rain. Squalls.
1520 Sighted Malta.
1535 Crossed coast at Mersa Scala.
1540 Calafrana.
1541 Landed.
Total
Time. Distance. Average speed. Total time. distance.
1 h 30 m. 124 m. 75 m.p.h. 17 h. 23 m. 1585 m.
30/12/26
Malta—Khoms—Benghazi
G.M.T.
o650 Taxied out. Heavy rain. Squalls.
0655 Took off. Set course 210. a/s 95. G.S. 90 W/N.
35.
o735 Over first destroyer. G.S. 80. Ht. 200 ft.
0818 Over second destroyer. G.S. 88. Squalls.
0852 Passed third destroyer. Wind W.S.W.
0902 Sighted coast.
0920 Over coast at Khoms.
0927 Landed.
Total Time. Distance. Average speed. Total time. distance.
2 h. 32 m. 230 m. 87 m.p.h. 19 h. 55 m. 1815 m.
30/12/26
30/12/20

30/12/26

KHOMS—BENGHAZI G.M.T.

1137 Taxied out.

Took off. Set course 90. Wind W.N.W. 35 m.p.h. 1148 Passed first destroyer. Weather squally.

G.M.T.

- 1228 Passed second destroyer.
- 1240 Passed third destroyer.
- 1255 Passed fourth destroyer.
- Passed fifth destroyer.
 1335 Passed sixth destroyer.
- 1410 Sighted land. 1425 Benghazi.
- 1430 Landed.

Total Time. Distance. Average speed. Total time. distance. 22 h. 48 m. 2 h. 53 m. 344 m. 118 m.p.h. 2159 m.

31/12/26

Benghazi-Sollum-Aboukir

M.E.T.

- 0823 Took off. Set course 48. a/s 90. Wind S. 5/10. m.p.h.
- 0845 Tankra. Heavy rain squalls. Wind indefinite.
- 0902 Tolmetta. G.S. 100.
- 0909 Ras Tolmetta.
- 0938 Appolonia.
- 0945 Ras Hellah a/c 114.
- 1001 Derna.
- 1013 a/c 150. Wind S.W. 25/30.
- 1145 Sollum.
- 1147 Landed.

Total Time. Distance. Average speed. Total time. distance. 102 m.p.h. 3 h. 24 m. 350 m. 26 h. 12 m. 2509 m.

SOLLUM—ABOUKIR

M.E.T.

- 1328 Took off. Set course 95°. a/s 100. Wind S. 15 m.p.h.
- 1354 Sadi Barani. G.S. at 1500 ft. 92 at 500 ft. 103.
- 1440 Mersa Matruh.
- 1527 El Daba. a/c 108°.

M.E.T.

1553 El Mayid. a/c 58°. 1621 Alexandria.

1630 Aboukir, landed.

Time.	Distance.	Average speed.	Total time.	Total distance.
3 h. 2 m.		102 m.p.h.		2809 m.

SUMMARY

27/12/26	Croydon-Dijon Dijon-Marseilles	373 } 268 }	641	{4 h. o m. 2 h. 40 m.
28/12/26	Márseilles–Pisa Pisa–Naples	295 } 279 }	574	{3 h. 10 m. 2 h. 58 m.
29/12/26	Naples–Catania Catania–Malta	246) 124	370	{3 h. 05 m. 1 h. 30 m.
30/12/26	Malta-Khoms Khoms-Benghazi	230) 344)	574	{2 h. 32 m. 2 h. 53 m.
31/12/26	Benghazi–Sollum Sollum–Aboukir	350) 300}	650	{3 h. 24 m. 3 h. 02 m.
		2809		29 h. 14 m.

1/1/27

ABOUKIR—GAZA—ZIZA

L.T.

Taxied out. Petrol 300 galls. at 75 galls. per hour. 1200 Fine and clear.

Took off. Wind light and indefinite. Set course 1203 92°.

Edfu a/c 100° Ht. 2000 ft. a/s 98. 1215

1241 Murab G.S. 92. a/s 90. Wind N.N.W. 15.

1257 Mansura. G.S. 91. 1340 Picked up escort 4 m. N. of Kantara. G.S. 84. 2/c 80.

1352 Romani. a/c 85.

1408 Mosefig. G.S. 106.

1431 El Arish a/c 75. Wind 170. 20.

L.T:

1447 El Rafa.

1457 Gaza. G.S. 92.

1500 Landed.

Total
Time. Distance. Average speed. Total time. distance.
3 h. o m. 275 m. 92 m.p.h. 32 h. 14 m. 3084 m.

1/1/27 Gaza—Ziza

L.T.

1521 Taxied out, fine and clear.

Took off. Wind N.E. 15/20. Course 90. Wind becoming S. 20.

1537 Crossed railway.

1546 Jerusalem abeam to port. 10 miles.

1600 Crossed West shore of Dead Sea.

1605 Crossed East shore of Dead Sea.

1620 Ziza.

1623 Landed.

Time. Distance. Average speed. Total time. distance. 1 h. 0 m. 91 m. 91 m.p.h. 33 h. 14 m. 3175 m.

2/1/27

ZIZA-RUTBAH-BAGHDAD

L.T.

0728 Took off. Fine clear weather.

0730 Set course 85°. Wind West indefinite.

0732 Crossed track.

o745 Khasa Khasrah. G.S. 113. Wind N.W. 17 m.p.h. at 4000 ft. a/c 70.

0810 Over L.G.D.

0828 Over L.G.H. a/c 47. G.S. 120.

0846 a/c to come back to track.

0855 Over L.G.S. 113.

0903 Over M.

0911 Over N.

	INDIA BY AIR				
0958	Over O. Rutbah. Landed.				
Tin 2 h, 3	me. Distance. Average speed. Total time. 2 m. 278 m. 110 m.p.h. 35 h. 46 m.	Total distance. 3453 m.			
	2/1/27				
	Rutbah—Baghdad				
1237 1238 1255 1312 1337 1358 1450	Taxied out. Fine and clear. Took off. Wind S.W. 30. Set course 92°. Ht. 5000 a/c 80. Wind West 30. L.G.V. G.S. 120. 7000 ft. G.S. 108. Wind S.S.W. 38. Bitumen Lakes to Port G.S. 120. Baghdad. Hinaidi. Landed.	Total			
Tin 2 h. 1.	ne. Distance. Average speed. Total time. 4 m. 242 m. 110 m.p.h. 38 h. 0 m.	Total distance 3695 m.			
	3/1/27				
	Baghdad—Basra—Bushire				
L.T.					
0810	Taxied out. Fine and clear.				
	Took off.				
	Set course 135.				
	823 Ctesiphon. a/c 230. Wind N.W. 15/20. 830 Babylon.				
	Set course 135 for Ur. G.S. 120.				
0918					
1011	Ur. Wind N.N.W. 30.				

L.T.

1018 Set course 98. G.S. 120.

1115 Shaiba.

1117 Landed.

Time. Distance. Average speed. Total time. distance. 3 h. 7 m. 285 m. 95 m.p.h. 37 h. 53 m. 3738 m.

3/1/27

BASRA-BUSHIRE

L.T.

- 1251 Took off. Set course 85. a/c 95. G.S. 113. Fine and clear.
- 1255 Zibair.
- 1315 Abadan.
- 1317 Ht. 2500. G.S. 98.
- 1336 G.S. 102.
- 1349 G.S. 120. Wind N.W. 30.
- 1421 Bandar Dilam. a/c 156. G.S. 120. Wind 330 40 m.p.h.
- 1505 Bushire.
- 1515 Landed.

Time. Distance. Average speed. Total time. distance. 2 h. 24 m. 238 m. 108 m.p.h. 40 h. 17 m. 3976 m.

4/1/27

BUSHIRE-LINGEH-JASK

L.T.

0739 Taxied off.

0740 Took off.

- 0742 Set course 156 a/s 95. G.S. 106. Wind West 25 at 2500.
- 0815 G.S. 128. Wind to N.W. 40 at 4500 a/c 100 to Diyir.

0838 Diyir. a/c 128.

0935 Bandar Muguan. G.S. 113.

0942 a/c for Lingeh 110°. a/s 95.

		•			
1028	Chia Ling Lan	g eh			T-1-1
	me. 3 m.	Distance. 316 m.	Average speed. 113 m.p.h.	Total time. 43 h. 10 m.	Total distance 4292 m.
			4/1/27		
			Lingeh—Jas	K	
1400 1425 1502 1520	Too Set o Han N. o G	jan. a/c : of Omam. .S. 120. i Mubouk.	G.S. 90. Fir 158. G.S. 90. Clouds 7000 f	7000 ft.	
Tim 2 h. 3		Distance. 200 m.	Average speed. 100 m.p.h.		Total distance. 4492 m.
			5/1/27		
		JAS	к—Римі—Каг	ACHI	
0908	At 7 in a/c Over Jask Lance	k off. Wind of the Set	ind N.N.E. 2 course 82°. a/s Dense dust store ind considerabl afterwards to 3 miles E. of Jash	y Vis. under 1 100 m.p.h. m. Considera y increased, can	ble temp.

Journey abandoned owing to dust storm which, whilst increasing in intensity, increased in area until finally its front extended from Hanjam, where gale force was reported, to eastwards of Karachi. The disturbance was caused by a deep depression centred over the Punjab and a well-defined cold front across the Makran coast which coming in contact with the superheated air was the cause of the condition. The wind at times reaching gale force and visibility nil. In exposed places the wind was biting cold, but in shelter the atmosphere was sultry and oppressive. The air was filled with minute particles which deposited a light fawn film on everything and caused considerable irritation to cuts and sores. Occasionally its visibility improved to about 500 yds. to be again blotted out by repeated squalls. Native craft were forced to heave-to in the lee of the land. Towards night the wind moderated and eventually in the early hours of the morning the zenith became clear and visibility improved. At daylight, whilst the wind was still fresh, visibility had improved to about 3 miles. Indications of the upper wind backing. Subsequent observations showed that the wind backed, visibility improved.

6/1/27

JASK-PASNI-KARACHI

L.T.

og19 Took off. Wind N.N.E. 10 m.p.h. Vis. moderate,
atmosphere still full of dust.

0920 Set course 90°. G.S. 93. a/s 100. Ht. 2000 ft.

0940 G.S. 113. a/c 83. Dust haze. Wind 330. 24 m.p.h. 5000 ft.

1000 G.S. 100 m.p.h.

1020 8000 ft. Wind N.N.E. 32 G.S. 94.

1040 15 m. N. of Ras Tank. Thick dust haze.

1050 Ht. 9500. G.S. 100. Wind N. 24.

1110 15 m. N. of Chahbar. G.S. 106.

1133 Crossed Silup River. G.S. 100. Wind N.N.W. 24.

1150 Crossed Dasht River. G.S. 110.

			IDIII DI	21110	
L.T.					
1210	15 m. N	of Gv	vador. Dust	storm. a/c 7	0.
1230	Wind N	.N.E. 3	8. Dust sto	rm. G.S. 77.	
1258	Pasni.	Landed	i.	• •	
£111			A T	Maral et	Total
Tim	ne. Disi	ance.	Average speed.	Total time. 48 h. 52 m.	distance.
2 11. 2	9 m. 5)) III.	98 m.p.m.	40 m.)2 m.	404/ш.
			6/1/27		
•		T	Pasni—Kara		
I.S.T.		•	ZISINI - IKAKA	CIII	
-	Took o	off. Se	t course 84	a/s 95. Vis.	boor on
-7//		nt of d		40 9,0 120	Poor on
1505			ft. wind N.N	.E. 35.	
1515	10 m. N	. of As	talu Island G	.S. 90. 7500 i	ft.
	G.S. 98.			, .,	
	G.S. 103				
1547	Ormara.		100 a/s 93.	Wind 300 20	m.p.h. at
1652	G.S. 102	a/c	106.		
1727	G.S. 103 Karachi Drigh R	. Vis.	3 miles.		
1730	Drigh R	load.			
1731	Landed.				
	~ .				Total
Tim	ne. Dista	ince. A	Average speed.	Total time. 51 h. 28 m.	distance.
2 11. 30	5 III. 23 C	э ш.	91 m.p.n.	51 II. 28 III.	3003 III.
			7/1/27		
		K	arachi—Jod	HPUR	
I.S.T.		_			
1120			Oust haze.		
1123	Took o		t course 65.	a/s 90 m.p	h. Wind
T T 2 2			d Mahr Rive	r. G.S. or	
1200	5000 ft.	Wind	E. 10/15.	G.S. 90.	
1255	a/c 80.	Vis. in	nproving.)	
1305	a/c 85.		10.		
	a/c 75.	G.S. 8	4.		
, ,	1 17		•		

I.S.T.

1407 Crossed railway. G.S. 82. a/c 73. Wind E.N.E. 15.

1442 Kaors. G.S. 91. 2000 ft.

1547 Jodhpur, fine and clear.

1552 · Landed.

Time. Distance. Average speed. Total time. distance. 4 h. 32 m. 390 m. 86 m.p.h. 56 h. 0 m. 5473 m.

8/1/27

JODHPUR—DELHI

I.S.T.

0907 Taxied out. 0910 took off.

0915 Set course 56. Wind N.E. 25. 2/8 98.

0921 2 m. N. of Banar. 1500 ft. G.S. 80.

0950 Gotan. G.S. 86. a/c 50.

0959 Rhaladi. a/s 102.

1018 Crossed railway at Mami. G.S. 89. a/s 108.

1036 Salt Lake. G.S. 92. Ht. 2000 ft. Fine and clear.

1125 G.S. 90. a/c 45.

1134 Narnaul. a/c 50. Wind N.N.E. 20.

1145 Slowed down 2/c 95. Ht. 3000 ft.

1200 5 m. N. of Patanchi. Courses various.

1220 Delhi Aerodrome.

1223 Landed.

Time. Distance. Average speed. Total time. distance. 3 h. 16 m. 290 m. 89 m.p.h. 59 h. 16 m. 5763 m.

SUMMARY OF ACTUAL TIMES

27/12/26	Croydon-Dijon	373]	641	(4 h. o m.
	Dijon-Marseilles	268	041	\2 h. 40 m.
28/12/26	Marseilles-Pisa	295]		(3 h. 10 m.
•	Pisa-Naples	279	574	2 h. 58 m.
29/12/26	Naples–Ĉatania	246]		(3 h. 5 m.
	Catania–Malta	124	370	1 h. 30 m.
30/12/26	Malta-Khoms	230)		∫2 h. 32 m.
	Khoms-Benghazi	344	574	l2 h. 53 m.

SUMMARY OF ACTUAL TIMES—continued

31/12/26	Khoms-Sollum	350)	650	(3 h. 24 m.
	Sollum—Aboukir	300	Oyu	3 h. 2 m.
1/1/27	Aboukir–Gaza	275)	-66	(3 h. o m.
• • •	Gaza-Ziza	91}	366	th. om.
2/1/27	Ziza-Rutbah	278)		(2 h. 32 m.
, , ,	Rutbah-Baghdad	242	520	2 h. 11 m.
3/1/27	Baghdad–Basra	285)		(3 h. 7 m.
21 1 1	Basra-Bushire	238	523	2 h. 24 m.
4/1/27	Bushire-Lingeh	316)	,	(2 h. 53 m.
-1/-/-/	Lingeh-Jask	200	516	2 h 3 m.
6/1/27	Jask–Pasni	355)		(3 h. 39 m.
0/-/-/	Pasni-Karachi	236	591	2 h. 36 m.
7/1/27	Karachi-Jodhpur	390 390		4 h. 32 m.
[],* ,*		~ ~		
8/1/27	Jodhpur–Delhi	290		3 h. 16 m.
		6005		62 h. 27 m.

12/1/27

Delhi-Ambala

I.S.T.

1043 Took off. Wind N.E. 15. Vis. 5 miles. Fine.

1045 Set Course N. a/s 90. Ht. 2000 ft. G.S. 90.

1120 Paniput.

1133 Kamaub.

1159 Ambala.

1203 Landed.

I.S.T.

Time. Distance. Average speed. 1 h. 19 m. 120 m. 94 m.p.h.

Machine put in hangar and inspected and overhauled and adjustments made to controls, etc.

30/1/27 (Sunday)

Ambala—Delhi

1120 Took off, weather dull and overcast. Sky alt. cu.

1123 Set course 156. Wind E. 25. a/s 95. Ht. 1000, revs. 1500.

I.S.T. 1132 Shahabad. G.S. 92. Wind 80° 30. 1142 Thamesan. G.S. 85. Wind 100° 25. G.S. 92. Wind 80° 30. a/c 160. 1157 Karnaul. G.S. 92. a/c 166. Wind 100 15 m.p.h. 1209 Paniput. G.S. 95. a/c 156. Wind 90 22 m.p.h. 1248 Delhi Aerodrome. 1250 Landed. Time. Distance. Average speed. 80 m.p.h. 1 h. 30 m. 120 m. 1/2/27 I.S.T. 0800 Dense fog Delhi. Awaiting weather reports from Aimer and Rewari. 0900 Ajmer reports good visibility, light cloud. 0910 Rewari reports weather clear. Jaipur reports fine and clear, some low clouds. No 0915 appreciable wind. Rewari report stated to be unreliable by Station Supt. 0930 Delhi. From Station Supt. Fog all the way down the line 0945 to Ajmer. 1000 Dr. Norman at Simla reports weather O.K. from Jaipur onwards to the West. Station Supt. Delhi reports rain Rewari. IOIS 1110 Visibility improving. Wind S.W., indefinite. 1/2/27 Delhi-Jodhpur-Karachi Course 236-298 m. I.S.T. 1117 Taxied out. Vis. 500 yds. 1118 Took off. Fog. 500 ft. high, revs. 1500. 1119 Set course 236. Ht. 900 ft. G.S. 95. 1126 a/s 102. G.S. 109. 1130 Farruhnagar. 1141 8 m. North of Rewari. Surface wind N. a/c 240. G.S. 115 at Ateli. Sky alt. cu., upper wind 1152 west.

I.S.T.				
1157 2/c 246. Wind 350/22.				
1200 Narnaul. G.S. 108. Clouds fr. cu. 2000 ft. 6/10.				
1202 a/c 240.				
1214 4 m. South of Bubaru. Sky o/c fr. cu.				
1218 Crossed Kantli River. 1 m. N. of Somari Ht. 1500 ft.				
1221 Passing through Rho gorge. Sky 5/10 fr. cu.				
1227 a/c 230.				
1238 8 m. North of Salt Lake. G.S. 105.				
1250 Lohsul sky o/c. ci. st. and fr. cu.				
1255 Damkoli, a/c 233.				
1311 Ranaigoun.				
1317 Crossed railway, wind light and indefinite. a/c 220.				
1334 ,, ,, 10 m. N. of Mertu.				
1344 Kharia.				
1409 Jodhpur.				
1410 Landed, wind calm, fine and clear. Total				
Time. Distance. Average speed. Total time. distance.				
2 h. 53 m. 298 m. 103 m.p.h. 2 h. 53 m. 298 m.				
2 h. 53 m. 298 m. 103 m.p.h. 2 h. 53 m. 298 m. 1/2/27				
1/2/27				
1/2/27 Jodhpur—Karachi				
1/2/27 Jodhpur—Karachi I.S.T.				
I/2/27 JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling.				
I/2/27 JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E.				
I/2/27 JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off.				
I/2/27 JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575.				
I/2/27 JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky o/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming o/c. ci. cu.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky o/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming o/c. ci. cu. 1632 a/c 265. G.S. 110. Sky 9/10 alt. st.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky 0/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming 0/c. ci. cu. 1632 a/c 265. G.S. 110. Sky 9/10 alt. st. 1652 Uterlai. a/c 266. G.S. 110.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky 0/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming 0/c. ci. cu. 1632 a/c 265. G.S. 110. Sky 9/10 alt. st. 1652 Uterlai. a/c 266. G.S. 110. 1659 a/c 260. Wind indefinite. G.S. 106.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky 0/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming 0/c. ci. cu. 1632 a/c 265. G.S. 110. Sky 9/10 alt. st. 1652 Uterlai. a/c 266. G.S. 110. 1659 a/c 260. Wind indefinite. G.S. 106. 1740 Ht. 500 ft. Surface wind N.E. 5 m.p.h.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky 0/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming 0/c. ci. cu. 1632 a/c 265. G.S. 110. Sky 9/10 alt. st. 1652 Uterlai. a/c 266. G.S. 110. 1659 a/c 260. Wind indefinite. G.S. 106.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky 0/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming 0/c. ci. cu. 1632 a/c 265. G.S. 110. Sky 9/10 alt. st. 1652 Uterlai. a/c 266. G.S. 110. 1659 a/c 260. Wind indefinite. G.S. 106. 1740 Ht. 500 ft. Surface wind N.E. 5 m.p.h. 1815 a/c 270.				
JODHPUR—KARACHI I.S.T. Petrol pump broke down and delayed fuelling. 1553 Taxied out. Surface wind light N.E. 1555 Took off. 1557 Set course 250. Ht. 1200 ft. a/c 98. Revs. 1575. 1600 a/s 98, fine and clear sky 0/c. 5/10 wind indefinite. 1625 Pachblatra. G.S. 112. Sky becoming 0/c. ci. cu. 1632 a/c 265. G.S. 110. Sky 9/10 alt. st. 1652 Uterlai. a/c 266. G.S. 110. 1659 a/c 260. Wind indefinite. G.S. 106. 1740 Ht. 500 ft. Surface wind N.E. 5 m.p.h. 1815 a/c 270. 1838 12 m. S. of Hyderabad. a/c 265. Wind N.E. 5/10.				

I.S.T.

1913 18 miles West of Karachi. Very bumpy, in the vicinity of a peculiar convectional cloud which appeared to indicate the meeting of an easterly and westerly wind.

1919 Drigh Road.

1920 Landed.

Time. Distance. Average speed. Total time. distance. 3 h. 27 m. 382 m. 111 m.p.h. 6 h. 20 m. 680 m.

3/2/27

KARACHI-CHAHBAR-JASK

I.S.T.

0930 Taxied out. Wind N.E. 18.

0932 Took off. Fine and clear sky ft. alt. cu.

0934 Set course 300. a/s 98. Revs. 1500.

0937 a/c 310. Ht. 900 ft.

0944 a/c 316. G.S. 109. a/c 105. Wind 40°/33 m.p.h.

0949 Crossed coast. G.S. 112. 1500 ft.

0957 a/c 300.

1000 a/c 290.

1015 a/c 270.

1032 G.S. 110. a/c 260. Wind becoming E.N.E.

3/2/27

KARACHI—CHAHBAR—JASK

I.S.T.

1040 Surface wind E.S.E. 15.

1103 Ormara. G.S. 108. Sky cu. 7/10. 2000 ft. a/c 270.

1116 G.S. 120 of Basol River, rain and overcast.

Heavy rain, sky nimbus vis. 3 miles. Wind E.S.E. 20/25.

1129 Astalu Is. Heavy rain. 1000 ft.

1142 Pasni Village, floods.

1146 Pasni Aerodrome flooded.

1148 Set course 270. Weather improving. G.S. 112,

Gwadur. Fine and clear, ground dry, passed the Cyclamen.

I.S.T.
1230 More rain.
1238 Heavy rain, low clouds. o/c nimbus.
1240 Wind N.N.W. 15/20.
1250 Over Gwator Bay, weather fine and clear. Sky 3/10 ci. cu. and fr. cu. Wind S.W. indefinite.
1300 Ras Fustan 1307. Ras Bris.
1321 Approaching Chahbar. Heavy squalls to seaward wind westerly 10/15 m.p.h.
1333 Chahbar.
1334 Landed.
Total Time. Distance. Average speed. Total time. distance 4 h. 4 m. 410 m. 100 m.p.h. 10 h. 24 m. 1090 m.
3/2/27
Chahbar—Jask
L.T.
1310 Taxied out. Wind light and indefinite.
1314 Took off.
1317 Set course 272. Ht. 800 ft. 2/s 98. Revs. 1450. Wind becoming 260°. 10/15 m.p.h.
1325 Ras Kuhab.
1335 Ras Rashid. G.S. 87.
1349 Ras Tank. G.S. 88.
1422 Ras Maidani. G.S. 88. 1521 Jask.
1524 Landed.
Total
Time. Distance. Average speed. Total time. distance 2 h. 16 m. 170 m. 75 m.p.h. 12 h. 40 m. 1260 m
4/2/27
Jask—Lingeh—Bushire
G.M.T.
0524 Taxied out.
0525 Took off, fine and clear, wind N.E. indefinite.
0527 Set course 320. Ht. 2500. Revs. 1500.

G.M.T.

- 0533 G.S. 88. Wind North. 18 m.p.h.
- 0611 Bandar Sirik. Wind indefinite.
- 0615 a/c 310.
- 0642 Hormuz Island. G.S. 103.
- 0649 Bandar Abbas. Wind E'ly, indefinite.
- 0652 Set course 243. Wind light and indefinite. 0708 G.S. 106.
- 0749 Lingeh.
- 0752 Landed.

Total Distance. Average speed. Total time. Time. distance. 2 h. 28 m. 237 m. 96 m.p.h. 15 h. 8 m. 1497 m.

4/2/27

LINGEH-BUSHIRE

G.M.T.

- Taxied out. 0947
- 0949 Took off. Wind N.E. 5/10 sky cloudless.
- 0950 Set course 285°. 2/s 95. Revs. 1475. G.S. 100. Ht. 3000 ft.
- Charak. Wind indefinite. 1014
- 1033 Chiru. a/c 306. G.S. 105 passed Lupi.
- 1045 Bandar Muguam. G.S. 90.
- 1059 Shijer. G.S. 107. Wind light and indefinite.
- 1125 Asalu.
- 1136 Tihiri. G.S. 114. 1153 Daiyir.
- 1154 a/c 315.
- 1210 G.S. 112.
- 1227 Turned on second tank. (2 h. 40 m. 150 galls. == gals. 55.5 per hour). G.S. 110.
- Approaching Bushire. Wind N.W. 10/15. 1245
- 1256 Bushire.
- 1258 Landed.

Total Distance. Average speed. Time. Total time. distance. 3 h. 11 m. 310 m. 98 m.p.h. 18 h. 19 m. 1807 m.

145

L

5/2/27

BUSHIRE—SHAIBAH—BAGHDAD

G.M.T.

o605 Took off. Wind N.E. light. Dull and overcast, rain squalls.

0608 Set course 335. 2/s 100. Revs. 1475. G.S. 111.

0625 Heavy rain. G.S. 93. Ht. 1000 ft.

o637 a/c 320. Showery. Wind 40°, 20 m.p.h. Sky o/c st. cu. and ni.

0652 G.S. 86. a/c 290.

0700 a/c 282.

0721 a/c 270. Wind S.S.E. 10/15.

0728 Crossed Khan Mussa.

0735 Wind S.E. 10/15.

0748 Abadan.

0750 Set course 264. G.S. 98.

0808 Shaibah. 0810 Landed.

Time. Distance. Average speed. Total time. distance 2 h. 5 m. 218 m. 105 m.p.h. 20 h. 24 m. 2025 m.

5/2/27

SHAIBAH—BAGHDAD

G.M.T.

1000 Taxied out. Wind S.E. 20. Sky 6/10 fr. cu.

1001 Took off.

1002 Set course 313. a/s 100. Revs. 1450. Ht. 800.

1005 Crossed railway.

1021 G.S. 120.

1029 Chubath. Ht. 1500.

1110 Crossed Shatt el Hai to Dyenzind. Wind becoming N.W.'ly.

1118 a/c 318.

1127 Very bumpy. Sky 5/10 fr. cu.

1152 a/c 320. Wind N.W. 10.

G.M.T.

1155 Bogheid.

1203 a/c 325. Ht. 1208.

1233 Ctesiphon.

1242 Hinaidi.

1245 Landed.

Total Distance. Average speed. Total time. Time. distance. 99 m.p.h. 23 h. 09 m. 2 h. 45 m. 272 m. 2297 m.

7/2/27

BAGHDAD—RUTBAH—CAIRO

G.M.T.

0400 Left Hinaidi.

0407 Arrived Baghdad West.

0429 Taxied out.

0430 Took off, fine and clear. Wind lt. N'ly.
0431 Set course 262. a/s 100, revs. 1475. G.S. 82. Wind West 10 m.p.h. at 1000 ft.

0451 Crossed Euphrates. G.S. 89. 3000 ft.

0506 G.S. 90.5—cold wind—sky 5/10 cu. a/s 100.

0525 Bitumen Lakes. G.S. 95.

0536 a/c 250.

0543 G.S. 100. a/c 248. Wind S.S.E. 28. Upper clouds ci. cu. moving N.N.W./S.S.E.

a/c 252. 0608

0615 Wind becoming more westerly, sky clouda/c 255. less.

0628 L.G.V. a/c 260. G.S. 80.

0636 a/c 255. Wind S.W. 25 at 2500.

0652 a/c 252.

0700 Very bumpy.

0718 Rutbah.

0720 Landed.

Total Time. Distance. Average speed. Total time. distance. 2 h. 50 m. 242 m. 85 m.p.h. 25 h. 59 m. 2539 m.

7/2/27 RUTBAH—ZIZA

G.M.T.

0823 Took off.

0824 Set course 238. a/s 98. Ht. 3200. G.S. 90. Revs. 1500. Sky 7/10 cu. Wind S.W. 30/35.

0852 L.G. XI. G.S. 62. 2/c 236. Ht. 5600 ft.

0902 a/c 245.

0908 L.G.R. G.S. 63.

0914 2/c 239. 921. L.G.P. (by D.R.) Sky 9/10 cu. Wind becoming W'ly. flying 500 ft. above desert.

0942 a/c 236. 1046 a/c 240.

0945 L.G.M. Wind W.S.W. 25.

1009 L.G.L. G.S. 70. 1020 L.G.K.

1026 L.G.J.

1035 L.G.H. a/c 264. G.S. 81.

1050 L.G.F. a/c 270.

1103 LG.E. G.S. 73. 1115 L.G.D.

1150 Khasr Kharuna. Heavy rain, low cloud, sky o/c cu. and cu. ni.

1203 Ziza.

1204 Landed.

Time. Distance. Average speed. Total time. distance. 3 h. 41 m. 281 m. 77 m.p.h. 29 h. 40 m. 2820 m.

7/2/27

ZIZA—HELIOPOLIS Sunset 1515 G.M.T.

G.M.T.

1351 Took off. Wind W.S.W. 20 m.p.h. Set course 254. 2/s 103. Revs. 1500.

1400 Ht. 3000 ft. Sky 6/10 cu. and cu. ni.

1408 a/c 245.

1414 Crossing E. coast Dead Sea.

1421 , W. , , , G.S. 86.

1434 Jebel Kaubil.

G.M.T.

- 1447 Beersheba. a/s 250. G.S. 89.
- 1510 a/c 260.
- 1519 Crossed Wadi el Arish 13 m. S. of Town. G.S. 103. Sunset. Sky 8/10 m.
- 1537 a/c 270. Sky o/c.
- 1615 Kantara. a/c 230.
- 1625 Abu Sueir. a/c 240. 1627 Crossed Railway West of Abu Sueir.
- 1658 Cairo.
- 1700 Landed.

Time.	Distance.			distance.
3 h. 10 m.	310 m.	98 m.p.h.	32 h. 50 m.	3130 m.

SUMMARY OF ACTUAL TIMES

30/1/27	Amballa-Delhi	120 miles	1 h. 30 m.
1/2/27	Delhi-Jodhpur	298 ,,	2 h. 53 m.
• • •	Jodhpur-Karachi	382 ,,	3 h. 27 m.
3/2/27	Karachi-Chahbar	410 ,,	4 h. 04 m.
	Chahbar–Jask	170 ,,	. 2 h. 16 m.
4/2/27	Jask–Lingeh	237 "	2 h. 28 m.
	Lingeh-Bushire	310 "	3 h. 11 m.
5/2/27	Bushire-Shaibah	218 ,,	2 h. 05 m.
	Shaibah–Baghdad	272 ,,	2 h. 45 m.
7/2/27	Baghdad–Rutbah	242 ,,	2 h. 50 m.
	Rutbah-Ziza	281 ,,	3 h. 41 m.
	Ziza-Heliopolis	310 ,,	3 h. 10 m.
		3250	34 h. 20 m.

Delhi-Jodhpur

Practically all the way from Delhi to Jodhpur the land is under cultivation and cut up into moderately sized fields surrounded by hedges of bush. The fields are studded with deciduous trees and stumps, and a possible landing-ground is the exception. Villages and kraals are frequent. A

narrow-gauge railway, not on the map, runs into Sikar. Bromni kites and vultures are a source of danger, flying as high as 3000 ft. The hills rising abruptly from the plain afford good landmarks, as they are well depicted on the map. Water-courses when dry are easily distinguishable by (1) the boulders strewn on the beds, (2) by the lighter colour of the sandy beds in comparison with surrounding land.

In the Merta district the fields are less thickly studded with trees than with scrub, and landing-places might be found if one had time to look round, but in the plains approaching Jodhpur the previous conditions remain, and there is no possible landing. In the immediate vicinity of Jodhpur (to the East) a few clear fields exist and look likely landing-grounds as far as can be judged from the air, but it is possible they are roughly ploughed. The fort at Jodhpur, standing on a high rock, is very prominent from the air, and the town is noticeable by the whiteness of its buildings. The aero-drome is marked by a white circle in its centre and corner L's. A wind sleeve is erected at the N.W. corner.

Jodhpur-Karachi

To the West of Jodhpur for about 10 miles the country is basalt rock, cut with deep gulleys. There are some small fields covered with trees and stumps. Beyond this the country becomes scrub-covered desert with an occasional cultivated patch. North of Balotra there are alluvial plains and salt marshes which when dry might be possible suitable landing-places. Uterlai L.G. is conspicuous. To the West of Uterlai the desert is rocky and hilly with occasional cultivated patches. In the Chotan Hill district the surface is fine sand covered with bush and scrub. Many patches, although clear of scrub, are pitted with wells. When 160 miles West of Jodhpur the country is featureless and barren. On the Sind Desert the land has a peculiar formation of parallel ridges trending generally NE/SW. In the neighbourhood of a kraal any clear ground is pitted with wells. On crossing the West side of the Sind Desert the land is well cultivated and there are open spaces of what appears to be hard firm

sandy soil. To the West of the Indus to Karachi the country is bare alluvial plain, rising abruptly in rocky ridges and cut

by deep gulleys.

A very active depression over Baluchistan on the 2nd caused very unsettled conditions generally. At Karachi there was a strong W'ly wind which occasioned great discomfort by the amount of sand it raised. The sky was 7/10 clouded all day, and a little rain was experienced at 0800 P.M. The upper winds were S.W'ly and W'ly. All along the Makran coast heavy rain was experienced and Pasni became flooded and unserviceable. As a consequence of the rain mostly all the flat plains were flooded.

KARACHI—CHAHBAR—JASK

The land N.W. of Karachi is rough and covered with scrub, with occasional patches of cultivated land. The water-courses are dry.

In the vicinity of Ormara the hills have a peculiar formation, being conical with cylindrical tops. The Kud Dimeh hills appear to be volcanic mud or rock thrown up in fanglike formations. The strata formations appear to have dropped inland, with the result that the view from seaward is that of a sharply serrated and precipitous wall. The whole of Gwator Plain is flooded after heavy rain. Ras Fastax is a peculiar table-land having apparently a lava rock surface somewhat thick, upon a dried mud formation, and as a result of rains and erosion the mud and rock has fallen into jumbled masses on the level, making an extremely bad surface, as the boulders are anything from 20 to 40 ft. across, being of the shape of irregular polygons. The whole of the plain on the Makran coast appears to be mud covered with a fine layer of sand, so that in heavy rain the water just lies, unable to drain away or be absorbed and only disappears through evaporation. In the vicinity of Chahbar the whole country is composed of ridges of serrated hills and mountains. The aspect is truly diabolical. The aerodrome is immediately South of the Telegraph Office.

CHAHBAR—JASK

The country is a repetition of the previous stage, except that there appears to be possible landing-places in the vicinity of Ras Maidani. From Ras Maidani to Jask the low land is practically all mangrove swamp intersected by innumerable creeks.

JASK-BANDAR ABBAS-LINGEH

The land North of Jask presents a hideous appearance. It is all covered with pinnacle-like hills forming ranges with serrated summits. Some of the ranges are of extraordinary regular and parallel formation, whilst others are great jumbled masses. There is not a possible landing-place, as such ground that is not pitted or covered with hills is cut by winding nullahs. Some ranges appear to have been formed by the convex front of successive lava streams. In the neighbourhood of Karia Jump and beyond to the North there is cultivation. Hormuz Island has a peculiar appearance, the soil and rock being of all the metallic colours, and this applies practically all the way down to Lingeh, except that the levels are nearly all covered by mangrove swamp and it is not until the vicinity of Lingeh is reached that cultivation is discernible. Wells consist of holes filled with surface water over which a dome is built to protect the water from evaporation. This is where the graveyards are.

LINGEH—BUSHIRE

From Lingeh as far as Asalu the country is very uninteresting, being a continuous vision of rugged sandstone mountains and mud valleys cut by creeks and ravines. Near Asalu (to the southward) the formation of the mountains is that of a column structure. The column being about 30 or 40 ft. high and then a flat strata. Another peculiar formation appears as though a perfectly level plain had subsided on the landward side and successive series of ridges are formed perfectly parallel, and with knife-edge summits.

The great valley S.W. of Asalu is a vast flat fertile plain, and to the North there is a lot of cultivation. The valley N.W. of Daiyir is cultivated in patches. The hills to seaward assume the column and funnel-like formation. Almost all of the rock formation is volcanic. Towards Bushire there is considerable cultivation.

Bushire—Shaibah

The great plain at the head of the Persian Gulf is mostly inundated with water and the coast-line is very difficult to define and the whole of the plain is featureless. On a clear day Abadan is a good landmark, the smoke from the refineries being very easily discernible. The desert to the West of the Shat el Arab is a flat sandy plain and entirely featureless.

SHAIBAH—BAGHDAD

From Basra the country is sandy plain swamp and marsh until over El Bulita, where the desert is a flat sandy plain. On the whole the route is entirely featureless until approaching the river, where there is plenty of cultivation.

BAGHDAD-RUTBA

To the West of Baghdad the land is well cultivated, but the desert begins near Lake Habbunizah. From there onwards the desert is a featureless plain of alternate patches of scrub and sand. L.G.V. is plainly discernible some distance away by the red mud flat in its vicinity. The waddies are well definable and are good landmarks except that they are dry in the dry weather.

LOG OF THE R.A.F. FRONTIER FLIGHT

The Secretary of State for Air left Delhi on Monday, January 17th, 1927, accompanied by Lord Winterton, Sir Victor Warrender, Group Captain Mills and Mr. Bullock; the first stop was made at Ambala, where lunch was taken and No. 28 (Army Co-operation) Squadron was inspected

(Squadron Leader A. W. Mylne).

The party then left for Lahore, where they were the guests of H.E. the Governor of the Punjab (Sir Malcolm Hailey). On Tuesday, January 18th, the Aircraft Park at Lahore was inspected in the forenoon (Squadron Leader L. L. Maclean). Lunch was taken in the Officers' Mess. After lunch the party left for Peshawar. Lord Winterton and Sir Victor Warrender landed at Rawalpindi, where they stayed as guests of General Sir Alexander Cobbe, G.O.C.-in-C. Northern Command; Sir Samuel Hoare and party being the guests of the Hon'ble the Chief Commissioner of the North-West Frontier Province (Sir Norman Bolton), at Peshawar.

On Wednesday, 19th January, after inspecting No. 1 Wing (Wing Commander A. A. Walser) and No. 20 (Army Cooperation) Squadron (Squadron Leader J. V. Steele) at Peshawar, No. 60 (Bombing) Squadron (Squadron Leader J. T. Hazell) was visited at Kohat, lunch being taken in the Mess, and in the afternoon a flight was made up the Kurram Valley, halting *en route* to inspect Arawali, the R.A.F. advanced post, before returning to Peshawar.

On Thursday, 20th January, the R.A.F. Station at Risalpur was inspected—No. 2 Wing (Wing Commander D. L. Allen), No. 5 Army Co-operation Squadron (Squadron Leader A. J. Capel) and No. 27 Bombing Squadron (Squadron

Date.	From.	То.	Time dep.	Time arr.	Total flying time.	Dis- tance.	Remarks.
Monday, 17th Jan. Tuesday, 18th Jan. Wednesday, 19th Jan. "" Thursday, 20th Jan. Saturday, 22nd Jan. "" Monday, 24th Tuesday, 25th Saturday, 29th	Delhi Ambala Lahore Peshawar Kohat Arawali Peshawar Risalpur Peshawar Miran- shah Peshawar Multan Bikaner	Ambala Lahore Peshawar Kohat Arawali Peshawar Risalpur Peshawar Miran- shah Peshawar Multan Bikaner Delhi	1015 1425 1326 1150 1410 1600 1100 1505 0910 1330	1210 1655 1645 1210 1450 1710 1130 1550 1054 1500 1320 1300 1710	h. m. 1 55 2 30 3 19 0 20 0 40 1 10 0 30 0 45 1 44 1 30 3 20 2 45 3 25	miles 120 180 285 28 75 103 28 60 135 135 260 295	via Malakand

Grand Total:

Flying time, 23 hours 53 minutes. Distance—2059 miles.

Leader L. M. Bailey), luncheon being taken in the Mess and the return flight being via the Malakand Pass.

Friday, the 21st January, was spent on a visit by road to the Khyber Pass, luncheon being taken with the Landi Kotal

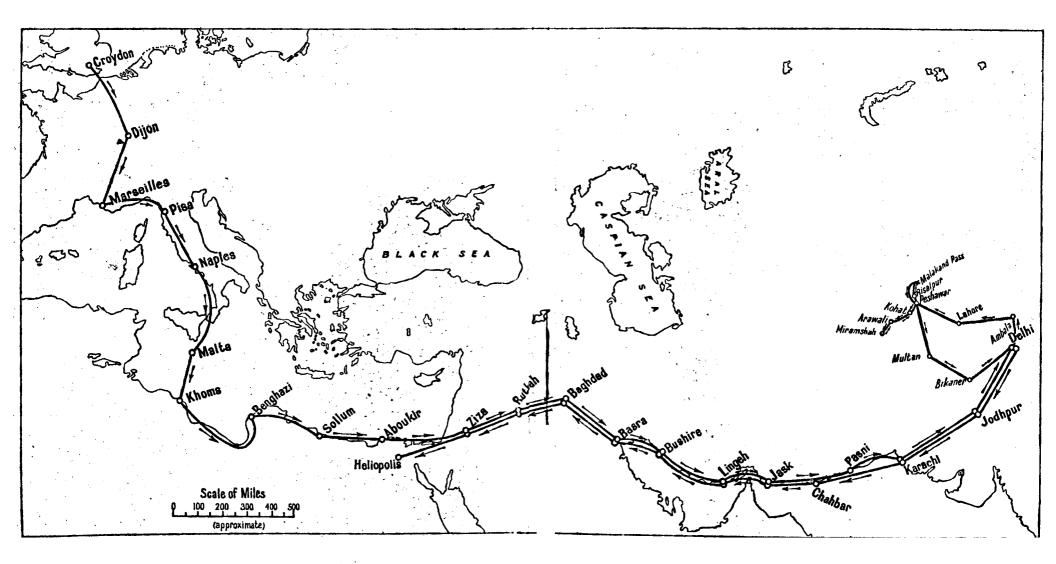
Brigade.

A start was made for Quetta on Saturday, 22nd January, but after reaching Miranshah the weather became so bad that the attempt had to be abandoned; luncheon was taken with the R.A.F. detachment (1 flight No. 27 Squadron), then, after the post had been inspected, the party returned to Peshawar. Time being so very limited, the flight to Quetta had to be abandoned, and Sunday was spent quietly at Peshawar.

On Monday, the 24th January, the journey to Bikaner was begun: Multan was reached at lunch-time, and the party spent the night here as guests of Col. Commandant Moberley, Commanding the 6th Brigade; Bikaner was reached safely on Tuesday 25th, where the whole party were the guests of H.H. the Maharaja.

Sir Samuel Hoare and party stayed at Bikaner until Saturday, 29th January, when the return to Delhi was made in the afternoon.

A detailed table of times and distances covered by air will be found on p. 155.



MAP OF THE ROUTE