

from time to time. It is a one-dish meal. No one could possibly eat even a mouthful of cheese if he has done his duty by the chief dish. A glass of cognac is the usual liqueur.

It is an immense meal. You realize why Sunday was chosen when you lean back heavily in an armchair after 'palm-oil chop.' Impossible to work,

to play tennis, to do anything but sleep. And sleep is thrice-blessed here, for you may forget that you are in sweltering Accra. Perhaps, in fancy, you are on board a black-funneled Elder Dempster boat with the low, misty fringe of the Coast astern. That, according to cynical old Coasters, is the best view West Africa can offer.

AIR PATHS AND POLICIES

MAN'S NEWEST CONQUEST

POLITICS OF THE AIR¹

RELATIVELY few inventions have determined the social and economic structure of the world we live in, as well as its political life. The colonial empires of Greece, Spain, and Portugal would never have existed if some genius had not invented the sailboat, the colonial system of the nineteenth century was made possible by the steamboat, and the British Dominions and the United States were developed by the locomotive.

It is unfortunate that no one has thought of writing the history of mankind as a struggle against distance, for that is its true essence. Perhaps the most dramatic chapter of all would be the one that we are all of us living through to-day—the chapter of bird's-eye view policies made possible by the flying machine.

Although distance, the chief enemy of human progress, may not yet be completely conquered, it surely will be vanquished soon. Flying routes will be

developed, and continents and oceans will be spanned at the rate of two and three hundred miles an hour. The antipodes of to-day will be our neighbors to-morrow, and our present boundaries will be as obsolete as the walls of ancient cities.

We have not yet quite reached this point, but developments are under way, and difficulties that were insuperable twenty years ago are now being overcome. The world is contracting, and world empires of the British type that once seemed about to fall apart are now growing stronger as a result of the flying machine. New economic and political problems have arisen, and a complete change of world politics is in order.

Almost every week ushers in some new development in world flying. Systems of airways are being developed, radiating from a few important political centres. No Great Power with oversea possessions is allowing any portion of its domain to be left unprotected, and every strategic point is being developed and equipped. The struggle to maintain these points is

¹By Karl Figdor, in the *Vossische Zeitung* (Berlin Liberal daily)

becoming an increasingly vital element in world politics.

A few examples will clearly show how the development of air traffic is influencing world history and world policies. Hardly more than a night is required for an Englishman to fly over friendly France to the Mediterranean, which is now the aeronautical centre of the British Empire. By far the most important district in this part of the world consists of the triangle formed by Port Said, Suez, and Cairo. In the course of the next few years this triangle will form a part of a gigantic air system by which England will spread its wings over the entire Orient and Southern Orient. Cairo will be more important to the future British Empire than the Suez Canal is at the present time or than the Panama Canal is to the United States.

Three great airways radiating from Cairo are now being developed. They will knit together India, Australia, New Zealand, and the South African Union, to say nothing of the East African Dominion that will be developed from British East Africa, German East Africa, and Rhodesia. On these three lines all the pearls of the British Empire except Canada and Newfoundland will be strung.

The first air line will run from Cairo over Arabia and the mandated territories of Palestine, Transjordan, and Mesopotamia, and across India to Singapore, where the Gibraltar of South Eastern Asia is now being built.

The second line will follow the course of the first as far as Singapore, and then branch to the Commonwealth of Australia and the Dominion of New Zealand. The third air line will extend southward the entire length of Africa. It is an overland route crossing Egypt, the Sudan, Uganda, British and German East Africa, Rhodesia, and the South African Union to Cape Town.

Work on this route is already under way, and gasoline depots, landmarks, and landing fields are under construction. The other two routes will be opened as soon as beacons have been erected for the benefit of night flyers. The official flying time on the two eastern routes is fantastically short, and has been estimated at the following figures in hours:—

London to Cairo.....	35
Cairo to Karachi.....	33
Karachi to Rangoon.....	30
Rangoon to Singapore.....	18
Singapore to Port Darwin.....	33
Port Darwin to Melbourne.....	30

British policy in the Mediterranean and the British attitude in the Egyptian conflict are thus made abundantly clear. London will never tolerate a change of the present balance of power in the Mediterranean, and Mussolini's hopes of Italian expansion in the Eastern Mediterranean cannot be realized. If Mussolini would take the time to study the new air policy he would soon discover that all his ambitions in this direction will find themselves directly or indirectly thwarted by England.

It is therefore clear that England can follow only one course in any conflict with Egypt, no matter whether Conservatives, Liberals, or Laborites are in power. The *status quo* in Egypt must be maintained, and even strengthened if possible. All concessions that England will make will be limited by the fact that she requires absolute control not only of Cairo and the Suez Canal, but also of the overland air route to the Sudan and South Africa. Whatever the League of Nations may say, the Egyptians who demand independence will never attain it except by triumphing over the English will to power.

France is also seeking to consolidate her empire by air. Her flyers have just made the trip from Marseille to Timbuktu in a single day. The Sahara and the Mediterranean no longer separate the old France from the new France beyond the seas, from her black empire in Africa and all its resources of land and labor. Marseille is the great future airport of France, just as Cairo is the great future airport of England. From Marseille lines radiate to Tunis, Algiers, Oran, and Casablanca, and from those points further lines extend into Africa.

Mussolini's dream of a Roman Empire encounters its second insuperable obstacle at this point. Tunis will never be Italian, since it occupies a position on the flank of the French network of air routes over Africa.

In Eastern Asia the Philippines are still fighting for an independence that they will never attain, since the position of the United States in the Pacific Ocean and in relation to China demands more than ever the possession of these islands. The Philippines together with Hawaii form America's future line of approach to the East in both peace and war. Air routes will soon be radiating from this line, and will dominate the entire Far East extending to Singapore, where the two great Anglo-Saxon Powers will join hands.

In South America the Argentine Republic is developing air lines over its wide level plains. Buenos Aires will be the most important airport on the continent.

The time will come when flying machines and airships will cross the Atlantic Ocean regularly, and Ireland will then find itself the chief European port for traffic with the West, and will attain an international importance she never enjoyed before.

The most fascinating element in the air services and air policies of the future has to do with the ocean stopping

places. An American company has already been formed to place a number of floating airplane bases across the Atlantic Ocean. The question of freedom of the seas at once arises. To whom will these islands belong? What flags will they fly? Will they be internationalized? Whoever controls them not only controls the ocean and the air, but all the seas that England used to rule.

In spite of our European airways, we Germans are mere spectators. We cannot participate in the great policies of to-morrow, for the World War has reduced us to a continental Power. Who knows, however, if that is not the better part?

SOUTH AMERICAN AIR ROUTES²

THE *Berliner Tageblatt* has announced that the last German Aeronautical Mission to South America has just closed its offices in Buenos Aires. Three lines are sufficient to state this piece of news, which marks a serious defeat for German aviation.

We have already commented on the rivalry that has been going on for several years in South America between French and German aviation interests. The great air line between Europe and South America that Pierre Latécoère established in 1918 stimulated our neighbors across the Rhine to attempt a vast intercontinental line from Spanish soil with German material and German personnel. The Spanish Government listened attentively to the proffered constitution of an ostensibly Spanish consortium that would actually be German and that would establish fifteen thousand kilometres of airways to South America as far as Buenos Aires, all dominated by the Reich. As a result of this ambition,

² By Georges Bruni, in the *Journal des Débats* (Paris Conservative daily)

extraordinary envoys paid many visits to the countries of South America, the most famous of these envoys being ex-Chancellor Luther, who went from capital to capital spreading propaganda in behalf of a German transoceanic air line. These efforts have not succeeded. The progress made by the Société Latécoère and its methodic development of land and sea organization have convinced our transatlantic friends that this company alone is able to establish the desired connections with the maximum of regularity, speed, and safety.

The recent return of the last German mission to its native land proves that Germany has abandoned the struggle, and that, although her future may be in the air, South America will not be involved. The success of the Société Latécoère, now known as the Compagnie Générale Aeropostale, is complete. It is an honor to our aviation, for its 12,795 kilometres that comprise the France to South America air line make it by far the longest commercial air line regularly used.

The history of this line's development and the present conditions under which it functions must be familiar to everyone interested in the economic expansion of France. The Toulouse to Buenos Aires route was developed in the following stages: September 1919, Toulouse to Casablanca, 1845 kilometres; June 1925, Casablanca to Dakar, 2850 kilometres; November 1927, Natal to Montevideo to Buenos Aires, 4650 kilometres; March 1928, Dakar to Natal, 3450 kilometres; making a total of 12,795 kilometres. All the land flying is done in airplanes, and the sea is negotiated in amphibians and dispatch boats. Within a year the dispatch boats will be removed and the amphibians that are just being completed will be put into service. At the present moment one trip a week is

made. The time taken for the first five voyages, including stopovers, was 374 hours, 431 hours, 380 hours, 305 hours, and 287 hours. Thus the longest of these trips took eighteen days, whereas now the average is ten days, with better time being made each week. Long before the lapse of the six months' period specified in the contract to the Compagnie Générale Aeropostale, the service will be functioning in less than eight days.

When the personnel becomes familiar with its duties, and when the amphibians have replaced the dispatch boats, the time will be cut still shorter. Let us suppose that the ordinary letter takes nearly a month to get from Chile to Paris by boat. It now takes thirteen days by air, and next year the trip will take only six or seven days at the most. These figures are so eloquent that comment is unnecessary.

The personnel that is now required to run this enormous service includes seventy-two pilots, two hundred mechanics, four hundred laborers, forty naval officers, three hundred sailors, thirty radio operators, and thirteen base commanders. The material includes two hundred airplanes, ten amphibians, three hundred motors, six rapid dispatch boats, six watchtowers, three reserve gasoline tanks, and two reserve water tanks.

The recruiting, training, and development of a skilled personnel, the construction and coöperation of such a large naval and air fleet, and the organization of thirteen landing fields have cost millions of francs and have involved an enormous amount of work. The chief difficulties lay between Natal and Buenos Aires. But in spite of everything, a total distance of three hundred thousand kilometres has been flown during seven months, and during the last two months the service has been one hundred per cent regular.

Is it necessary to add that the number of letters carried is increasing at a formidable rate?

Such is the achievement of a thoroughly French air service organized in a superior way over a space of some years. It is the fruit of determined, intelligent will power, and the reward of prodigious labor. M. Pierre Latécoère and his faithful collaborator, M. de Massimi, have silently, methodically, and faithfully created a marvelous tool whose world-wide importance public opinion is just beginning to recognize.

FLYING ACROSS AFRICA³

I LISTENED on Monday to an account by Mr. Gerald Bowyer of his adventures in traveling from Cape Town to London by motor car—the first time a standard motor car has made this trip. Mr. Bowyer refuses to call Africa the Dark Continent; he calls it the Light Continent. He says that throughout his journey he saw but one leopard, a few buck, a couple of hyena, and an odd jackal or two. Roads, whether they are the better roads of the Uganda, the narrower native tracks of Tanganyika, or the very occasional roads that thread the swamps in North Rhodesia, all bring a certain amount of civilization close to them, for civilization follows the path of transport. But in flying over Africa one is unable, much as one would like to, to stick to the safer lines of civilization and roads, and is obliged to get from landing place to landing place across anything that may lie between, whether it be swamp or forest, or craggy mountain ranges with desolate valleys in between.

Looking back on my flight, I am chiefly impressed by the minute scratches human effort has made on the surface of Africa. Over great areas

there is no sign of living habitation. The fever and damps of the swamps make life impossible, and in other closely wooded areas there is depopulation owing to the ravages of sleeping sickness. Even in the more highly civilized parts there are great areas of lonely country—mountainous stretches of veldt in South Africa, and still more mountainous areas of desert to the north. But the centre of Africa cannot be called mountainous. From all its coasts Africa slopes upward to a great central plateau, on which are found, far away from the ravages of civilization, the lowest forms of animal and vegetable life. Many pilots have flown this route, and I have heard one of them say that on the whole trip he saw no game or anything alive. I can only surmise that this man did not know his Africa and did not know what the living things looked like when he saw them. The natural instinct of game is to stand stock still when it hears a suspicious sound, and to remain still until it discovers the cause and direction of that which startles it. It is therefore not so easy for one who has not actually walked and shot over the country to distinguish wild life. For my part, having lived in all three of the British East African territories, and having traveled through all our other possessions in that continent, often with a gun in search of game, my eyes were quick to see wild animals, and there was an abundance of them.

As far south as Livingstone—twenty miles south of it, in fact—I saw rhinos in the bush, and flying low over them was horrified to observe the devoted mother of a baby rhinoceros run headlong from her charge when she heard the machine. Other game behaved quite differently. On the Serengeti plains in the west of Kenya the great herds of buck, numbering often many thousands, ran like a frightened

³ By Lady Heath, in the *Saturday Review* (London Baldwin-Conservative weekly)

herd of sheep from the noise of the engine. But two or three times on the edge of the plains when I passed over groups of lions, either sunning themselves in the morning heat or ranging from place to place, I was surprised to find that they took apparently no notice of my machine. They probably regarded me, as the natives did in various wild places in which I landed, as an 'act of God.' In the Southern Sudan I found the rhinos more quiescent, the white rhino, a creature peculiar to that region, ignoring my presence completely; and the large herds of elephants took but little notice. Of the smaller game hidden among the undergrowth I can say little, the tiny buck, guinea fowl, and snakes being altogether hidden from my view. Other birds than the guinea fowl, such as the great eagles which frequent the granite hills rising out of the forest plains, drifted by with complete contempt, sometimes only a few yards off.

I retain wonderful memories of the beauties of Central Africa. On the Equator itself there is no great heat, owing to the height of the central plateau, and where there is not forest or swamp there are vast rolling plains of agricultural land, which the white settler is beginning to discover and to exploit. As soon as the powers that be help him by laying down transport and postal facilities — for those are the two things necessary to open up Central Africa — we shall have a great storehouse of mineral and agricultural wealth. A railway runs northward from the Cape for five days' journey before it branches off toward the Belgian Congo. Westward a line runs inland through Portuguese East Africa from Beira, and again another line runs from Dar-es-Salaam to Lake Tanganyika. Another line is gradually creeping eastward from Lobito, but in the very centre, where there are gold and

diamonds, and that still more priceless possession, a rich virgin soil, there is nothing except impossibly bad roads which cannot be used during the rainy season, from March to October. Never shall I forget the beauty of climbing at nine thousand feet over the ridge of the Rungwa Mountains on the southern side of Tanganyika. The drifting white clouds that held the coming of the rains were flecking the sky and gilding the crest of the next range. Underneath them, intersecting the mottled ground of the valleys, were the silver ribbons of watercourses flowing to Lake Rukwa and the semidry swamp which lies to the north. In this valley there are hundreds of white people finding a living by washing the gold from the rivers. A little farther north a new diamond mine has recently been discovered. Two or three hundred miles still further north, on the shores of Victoria Nyanza, there is an enormous meat-canning industry starting. All these industries are begging for transport facilities to connect them with the Mother Country. Unless the Imperial Government can find means to provide the help that is required these people will have to go elsewhere, and their industries will be lost to the Empire.

From a navigational point of view, flying over Central Africa is child's play. The visibility is wonderful. One can see fifty or seventy miles with the greatest ease, and in Africa things are built on a big scale. A single range as large as the Pennines, a lake as large as Ireland, a solitary hill as big as Vesuvius, are common occurrences, so that one does not have to concentrate on the details immediately beneath one, such as roads, crossroads, railways, and the twists of tiny rivers, as one does in the small area and perpetually bad visibility of the British Isles. An hour before reaching Lake Bangweota the shining stretches of its waters and the

glittering silver of the bend of the Nile can be seen. The extreme beauty and bigness of things make one forget the possibility of a forced landing.

This danger is really an ever-present one, and it is a danger that could be greatly lessened or altogether removed if the governments of Central Africa would combine to provide a chain of wireless stations such as they have in the Sudan and such as the Italian and French colonies so proudly possess. To my mind, Abercorn is the centre of Africa, and for five hundred miles to the south there is a single telegraph line which lies on the ground for nine months out of twelve owing to the

thefts of wire-loving natives or the pell-mell rush of careless giraffes or the ravages of storms. To the north of Abercorn to Tabora there are four hundred miles of forest and swamp over which the trans-African aviator must fly and through which the trans-African traveler must go, and here there is no line for communication of any kind. To herald one's advent or to warn the villages of one's coming means a ten days' job by runner, and one might be lost for weeks in the forest before the country people became aware that it was even necessary to send out a search party. These things must be remedied.

LIFE AND DEATH OF A STATION AGENT¹

BY H. AND A. DE CURZON

ONCE upon a time there was a station agent named Panouille — Camille Panouille. He directed all by himself a little station whose responsibilities he alone assumed. He was an excellent man, conscientious and modest, who lived in the fear of God. His superiors had never been able to level any reproach against him, for the simple reason that he was lamentably low-spirited. But 'Blessed are the poor in spirit,' as the rest of this story will prove.

Such a polite, humble man was naturally well thought of, and that was why he had been given his tiny little station on a tiny little line where one train a day passed in each direction, with a six-hour interval between.

¹From *La Nouvelle Revue* (Paris Republican literary and political semimonthly)

Under these circumstances there was no danger of making a mistake at the switch, and no accidents could possibly be feared. Moreover, there was only one track, and, although the station did possess the regulation switch, the rails of the extra track were devoured with rust, and the switch itself was overgrown with ivy and clematis.

Even so, Panouille could never witness the approach of train Number 153 or of train Number 154 without a certain feeling of apprehension. Long before either train was due he was standing at his post, very excited, with his little red flag in his hand. He was also rather alarmed whenever any traveler who had wandered into these parts expressed the desire to buy a ticket from him even half an hour before the iron monster arrived. But