

Canada Explores Vast Interior and Taxies to Gold Fields by Air

Hudson Straits Sea Route Found Navigable Into December—Indians Get Their Treaty Money by Plane—Forests Protected and Maps Made

North of the two Canadian transcontinental railway lines the land is practically unexplored. Indians, a few white trappers and here and there mining camps, constitute the only inhabitants of the great mineralized area surrounding the Hudson Bay. This territory the airplane is now exploring.

Two Viking Canadian-made seaplanes, with two pilots, two surveyor navigators, two photographer mechanics, a photographic officer, and a cook, as well as a fully equipped outfit, provisions, spare parts, cameras, etc., came down out of a clear sky one day toward the middle of September, when the foliage of timber far below was in colorful hue. The two ships landed gracefully on Cormorant Lake, on the Hudson Bay Railway, north of Lake Winnipeg. Within three weeks they had completed an oblique photographic and forest type survey of 24,000 square miles.

The airplane in Canada has been used chiefly in remote regions. Forest fire prevention and reconnaissance service; photography of areas as yet unmaped; sketching of vast forest regions to determine the nature of timber growth; surveying of power sites; transportation of supplies to remote districts—these are some of the uses of the airplane in the Dominion.

The Royal Canadian Air Force in conjunction with the Ontario Provincial Air Force have kept more than 165,000,000 acres of virgin forest under constant surveillance in the summer and late autumn when forest fires are most menacing. Sea-

have been found by the air patrol to have too fast a current for freezing over, and were entirely free of ice up to December 10. That is as long as the Great Lakes, nearly 1500 miles farther south are open. On that day in December a huge ice pan, floating down from Fox Channel, blocked the entrance to the Straits from Nottingham Island to the northern mainland.

Shipping Wheat After Harvest

Here again then, the airplane has proven of value to Canada. It has shown that it will be feasible to ship wheat from the West via the Hudson Bay and Hudson Straits immediately after the harvest. And this season results will show for how long a period the Straits are open: whether they will be navigable from April 15 to December, just as the Great Lakes.

To-day the question of electric power is one of vital interest. It has been discovered on the survey and forestry patrols in northern Ontario and Quebec that there is an abundance of water power awaiting those who care to harness it. Many enterprising concerns have gone north, and by means of airplanes, sometimes those of the Government, have surveyed and photographed power sites, at which they are building huge dams and power houses for the transmission of power to more populated regions.

The time-honored custom of paying treaty money to the Indian tribes living in northern Manitoba and around James Bay is now done by airplane. No longer do the Indian agents set out for a trip lasting sev-

Leviathan of the Clouds Reaches La kehurst Goal After 6,000-Mile Flight



THRONGS CHEER GRAF ZEPPELIN ON ARRIVAL AFTER LONG OCEAN COYAGE

Flying smoothly despite a badly torn navigating fin, the giant dirigible Graf Zeppelin dipped to earth at Lakehurst, New Jersey, at 5:30 Monday (Oct. 15th) afternoon, ending the longest non-stop flight in the world's history. The leviathan of the clouds, with 20 passengers and a crew of 40 aboard had been 111½ hours in the air since leaving Thursday (Oct. 11th), and had covered approximately 6,000 miles in its efforts to avoid storm zones on the Atlantic. The picture is a striking photograph of the dirigible taken as it passed over New York where whistles blew and flags flew to welcome the voyagers of the air.

note places prospecting parties fully equipped with camp, food and mining necessities to investigate possibilities.

That area which is known as the Great Pre-Cambrian Shield, covering nearly two-thirds of Canada, and which investigation has shown to be heavily mineralized, although only a tenth of it has as yet been touched and more than half not yet explored will be rapidly developed by the use of the airplane. In fact, authorities on mining state that with the use of the airplane, the Canadian prospector should be able to do more in the next five years than he has done in the past 50 years.—By J. M. in The Christian Science Monitor.

Stock Farms Will Out Brown Bears in Alaska

Anchorage, Alaska.—Civilization is reaching toward the wide-open spaces of Alaska, and the big brown grizzly bear, which furnishes amusement for hunters, must give way before an advancing array of live stock raisers who are about to pre-empt the haunts of bruta in the Western islands. Especially is this true of Kodiak Island, much of which is taken up under grazing and homestead lease applications. About 600 families will live there within a few years. When it comes to a question of a bear or a sheep taking up room on Kodiak Island, the prospective farmers are for the sheep.

Light Indicates MacDonald Fell Close to Goal

Liner Passengers Saw Flaming Object Drop Into Sea 150 Miles Off Irish Coast

London.—The possibility that Lieutenant Commander M. C. MacDonald, young Briton who was attempting to fly from Newfoundland to England, perished when only 150 miles from the Irish coast was indicated by passengers and crew of the Canadian Pacific liner Montclair, which arrived in Liverpool Sunday. They said that at 6:15 p.m., Thursday, they had seen "a light drop from the sky leaving a trail of flame behind it." The position of the Montclair at the time was 150 miles west of Tory Island, off the northwest coast of County Donegal. The light was too far to the southwest for the observers to be sure as to its nature.

MAY HAVE BEEN FLIGHT'S END. From this position and the time of the incident the Montclair passengers may well have witnessed the ending of MacDonald's single-handed attempt to cross the Atlantic in a light plane. On the other hand, there is the report of a somewhat similar occurrence—the

sighting of "a light resembling an explosion"—from the steamer Mirach, which was several hundred miles further west, at 11:30 o'clock Wednesday night. MacDonald's plane might have been at either of the two places at the times mentioned. He took off from Harbor Grace, Newfoundland, Wednesday noon.

Mother (at bedtime): "Don't mumble your prayers, Helen. I can't hear a word you say." Helen: "I wasn't speaking to you, Mummy."

"Have you ever wondered what you would do if you had Rothschild's income?" "No; but I've often wondered what he would do if he had mine."



FIVE MILES A MINUTE

D'Arcy Greig of the Royal Flying Corps, who attained a speed of 200 miles an hour in a flying-boat trial flight.

planes are used throughout. The country which these airmen watch over abounds in lakes and rivers making ideal landing fields.

Flying Boats

The Ontario Provincial Air Force operates 22 seaplanes. Twelve of these are large H. S. 2L flying boats, used principally to transport men and equipment to the scene of a fire. The other 10 planes are light De Havilland Moth scout seaplanes, used in detecting work.

Photography and sketch work is being carried out in these same little-known regions. Maps have to be made. Formerly these were done under the most hazardous conditions. Canoe was the only means of getting into the country, each of the innumerable lakes had to be circled, portages had to be made, carrying camp equipment and instruments. Today, the airmen fly 5000 feet high above the region he is to photograph, the photographer takes pictures so that when placed together they form a mosaic which allows the draftsman accurately to draw his maps, and trained men record the type of forest growth and physical features.

Studied Sea Route

For many years a new sea route connecting the Canadian West has been advocated via the Hudson Bay and Hudson Straits to the Atlantic Ocean. A railway was partly constructed to Fort Nelson. It is being run to Fort Churchill, both points on the Hudson Bay in Manitoba territory. From the latter the grain freighters will leave for Europe.

It was believed that the Hudson Straits were frozen solid most of the year, or otherwise were so blocked with icebergs, as to be navigable for only a short time. To discover at first hand just what the conditions are on this new route to Europe, a fleet of seven planes, with pilots, mechanics, radio operators, housing materials and supplies to last for 18 months was sent north last summer by the Canadian Government. And daily, for the past year, the towering cliffs and the snowbound regions just below the Arctic Circle, have witnessed the passage of six Fokker planes and one light De Havilland Moth scout plane.

Working from three bases, one at Nottingham Island, in the mouth of the Hudson Bay, where it joins the straits; another halfway to the Atlantic on Quebec territory, and the third at the northern extremity of Labrador, the expedition has covered the Hudson Straits north, east and west, in a daily patrol of 1200 miles. The Straits are from 50 to 100 miles in width and 450 miles long. They

eral months to pay to the first inhabitants of Canada their rightful treaty money. No longer is canoe after canoe packed with camp equipment and provisions to last such a trip. Now the natives of the country see a graceful bird far above their heads gradually come closer, and the roar of engines tells them it is the white man with their annual heritage. Now the seaplanes of the forestry service come swooping down each autumn on lakes and rivers, hundreds of miles beyond the railway and civilization, to bring the Indians what the Great White Queen had promised them 50 or more years ago.

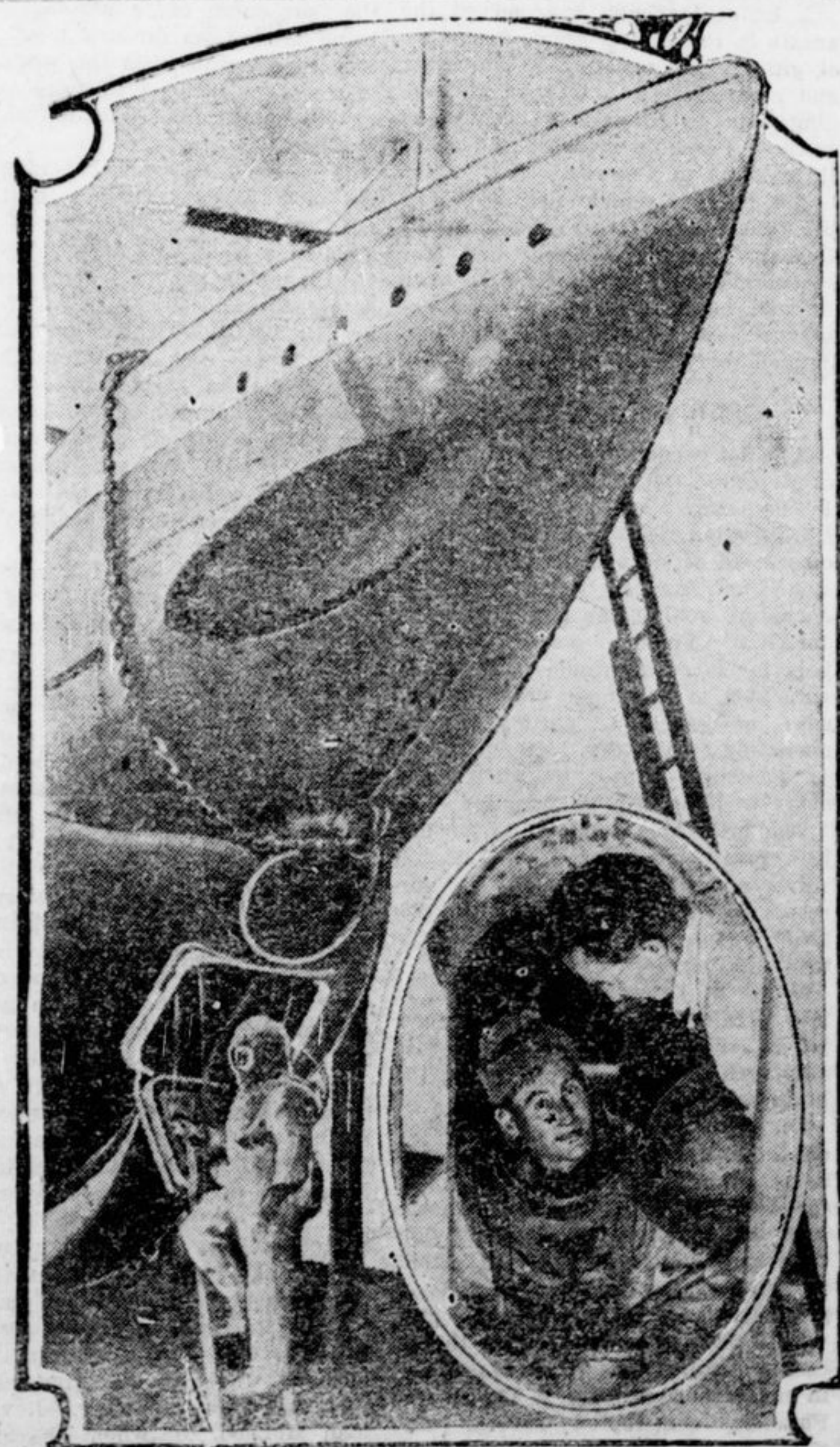
To the Gold Fields

It was these government air services that showed commercial interests the vast use to which the plane could be put in the northland. With the rush to the newly discovered gold fields of Red Lake in northern Ontario in the spring of 1925, three commercial air transport companies went in. One hundred and twenty miles separated the gold strike from Hudson, the nearest railway point. It took something like a week or 10 days to get in through the snow and spruce, hush by dog team and a foot. Canoes were impossible. The airplane did the trip in a little better than an hour, even the old machines making it in two hours. They charged \$200 a passenger, and carried in the season alone nearly 500 passengers and about 11 tons of freight at \$1 a pound.

Another gold field in Quebec, opened about the same time, called for an air service from Halleybury, Ont., to Rouyn, Que. One flying boat carried 575 passengers, 12 tons of freight and 4000 letters in 146 hours flying time, before a railway was run into Rouyn.

Better machines in the field were seen in 1927, and a cut in prices, thus more business. One company, Western Canada Airways, which also ran planes into the newly discovered mining areas of northern Manitoba, and in addition did some special transportation work, carried 100 passengers in 1927, transported 145 tons of freight and express and flew a total of 154,000 miles.

With these facts to base their theories on, two mining companies this year formed air fleets with which to convey their own prospectors and supplies to possible locations. Both have their headquarters in Toronto, their bases at The Pas Manitoba, and at Hudson, Ontario. From these points they convey financiers and directors to claims which are showing possibilities; flying these men in comfortable, heated cabin planes. They will transport to re-



A NEW SALVAGE CRAFT FOR UNDERSEA RESCUES

Invention of Simon Lake, Bridgeport, Conn. A diving compartment under the nose permits divers to work with their base of operations alongside the sunken vessel. Inset, an interior view.

Earl is Bridegroom



EARL IS BRIDEGROOM

The Earl of Bective, heir to Marquis of Headfort, was married at Brompton Oratory to Lady Clarke, widow of Sir Rupert Clarke of Melbourne.

Cold Claimed Three Tests Show Eskimos Not of Indian Blood

Scion of Titled English Family and Two Companions Gave Up Hope Near Thelon River

Winnipeg.—The bodies of three men, believed to be those of Jack Hornby, scion of a titled English family and noted Arctic explorer, and two companions, who have been missing in the far north of Canada for two years, have been found in the barren lands along the shore of the Thelon River. It is not known who Hornby's two companions were.

Such is the story brought to Winnipeg by a party of prospectors who arrived at The Pas, Man., by airplane from Fort Churchill, terminal of the Hudson Bay Railway. The discovery, they relate, was made by the first party of prospectors to penetrate this particular region in the Far North in twenty years, who, traveling by canoe down the Thelon River, found the frozen bodies wrapped in blankets and lying in the snow.

The discovery brings to a close a search which has been in progress for over two years. Hornby, after coming to Canada, passed his early days in the wilds of northern Alberta, later amassing a fortune at Edmonton, Alta. Prior to the fatal journey into the Arctic region, he had gone from Chesterfield Inlet, on Hudson Bay, and was considered a resourceful traveler.

Lack of provisions is believed to be the reason for his failure to return from the northern wilds on his last tour of exploration. Weak from hunger and numbed by the intense cold, the three men are believed to have collapsed, folded themselves in their blankets and perished.

English Explorer Reveals Relationship With Manchurians as Result of Analysis

Professor R. Ruggles Gates of King's College, London University, has just returned to England after a four months' exploration along the Mackenzie River, going as far north as latitude 70, where he made blood tests among the Eskimos and Indians. In talking over his expedition with the scientific editors of The London Morning Post, he said:

"I found that the Indians were suffering from the most serious epidemic of influenza they have ever had. This might have complicated matters had I not been able to turn it to a good account. The method of blood testing consists in taking a drop of blood from the ear, and as the Indians seemed to think that the test was in the nature of a cure for influenza, I had little difficulty in performing it. In fact, many of them confessed that they felt much better for it!"

"Among the Indians I tested were men and children from half a dozen different tribes, with such picturesque names as Dogribs, Yellow Knives, Hairskins and Loucheux. Some of the children traveled 1,000 miles for the test.

"The results were unexpected. The Indian tribes gave results similar to those that have been recorded for other Indian tribes of North America, while those of the Eskimos resembled results that have been obtained from Manchurians and Chinese. From these, one could draw the tentative conclusion that the Eskimos could not have descended, as has been held by some anthropologists, from Indian ancestors, but came independently across the Bering Strait."

France Makes Le Bourget Hub of Airship System

Continent's Main Terminal, Alive With Planes, Was Pasture in Pre-War Days

Sky Travel Loses Novelty Radio Reports Movements of all Craft En Route

Le Bourget, France.—A cow pasture when the war began, the aviation field at Le Bourget, has become the Grand Central terminal of the air in little more than ten years.

Its development and its fame and popularity belong to the great business romances of this fast-moving age. In homeliness, completeness, comfort and efficiency, the airrome just outside Paris combines many of the facilities of a great station and a great port.

In fact, the officials who govern the arrival and departure of the planes—which often come and go at the rate of a dozen or so an hour—remind one who asks about their field that it is "both a station and a port." Planes arrive not only from almost all of the capitals of the Continent, connected with Paris by rail, but they also come from overseas—from Africa, India, England. And one unforgettable night, the silver ship bearing Lindbergh slipped down on the grass of Le Bourget, thirty-three and one-half hours out of New York.

Le Bourget has also witnessed the arrival of America's Round-the-World flyers of 1924, the departure of Costes and LeBris for South America last autumn, and before that the tragic farewell of Nungesser and Coli, when they set out for New York. In the near future it is sure to see many more planes sail away for the new world, and no doubt the day will come when New York will take its place on the bulletin board along with London, Berlin, Copenhagen and the other cities to which there are regular daily services.

Travelling by air is no longer looked on as a novel experience or a sport, and an hour at Le Bourget will reveal what an efficient workaday means of transport the airplane has become. The planes leave with the regularity of trains, on schedule, except when the weather is exceptionally bad.

The position of all the big planes equipped with wireless, which fly between Paris and other capitals, is known at Le Bourget every moment they are in the air. Where the railway dispatcher uses the telegraph, Le Bourget employs the wireless telephone.

It was as a military establishment that Le Bourget got its fledgling wings. That was during the war. Aviators were trained there and it was from there that French pilots took the air to chase away the Germans flying towards Paris.

Have Engine Ready for Strain of Frost

Precautions Needed to Prevent Injury by Unexpected Chill

With frost nipping here and there at unexpected times it is well for the motorists to remember that the following precautions may prevent expensive repairs.

Run a solution of washing soda through the radiator and cooling system while the motor is running for a period of at least ten minutes. Then flush with clear water to drain off the scale and rust that have collected. When the water runs clear the radiator and cooling system are clean.

Carefully check radiator, water jacket, pump, hose and other connections for leaks. Be sure drain cocks are closed. Tighten gaskets, drain cocks, grease cups and pump glands, expansion pipes, hose and pump connections of the cooling system.

After this procedure alcohol and other anti-freeze solution may be added and when freezing temperatures arrive there will be no regrets registered by the motorists.

Canadian Autoists Honor President

Silver Emblem Is Presented to Dr. P. E. Doolittle

In recognition of his services to the motorists of Canada, Dr. P. E. Doolittle, of Toronto, has been elected president of the Canadian Automobile Association, at the closing session of the fifteenth annual convention at Winnipeg. He also was presented with a shield of silver, which contains a scene representing the Trans-Canada Highway, of which Mr. Doolittle has been a strong advocate for many years. This will be the doctor's ninth consecutive term as president.

W. D. Robertson, of Toronto, was re-elected secretary-treasurer.

"How do you mean you make a 'fau pas' last night, John?" "Well, I told Harold I'd never been kissed before, and it appears I was engaged to him last summer."