

Vol. 6, No. 4.



Royal Meteorological Society

THE CHANGING FACE
of the
CANADIAN ARCTIC

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CANADIAN
BRANCH

25¢

Published by

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by

George Jacobsen

The Tower Company Limited

Presented at a regular
meeting of the Royal
Meteorological Society
Canadian Branch, Thursday,
April 28, 1955.

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INTRODUCTION

The subject is vast and many sided and only a bare outline of a few of its aspects can be given here. Some developments mentioned below are geographically in the sub-arctic and not in the arctic proper, but they represent stages and training grounds under similar conditions of the northward movement. Many of these sub-arctic developments are in regions which represent the same problem and geographical environment as developments in the arctic proper and can be considered as stepping stones.

The arctic has been under exploration by the white man for the last four hundred years in which time most of its territory became known, named, and more or less accurately mapped. However, these exploring expeditions were forays only, without broad population movement to support them. Isolated fur trading posts only were established, most of which were owned by the Hudson's Bay Company. In the first third of this century missionaries and Royal Mounted Police officers added another few outposts to this pattern.

REASONS FOR SPARSE SETTLEMENT

The first and foremost reason was that the only thing the arctic had to offer to the white man was furs. They were, and to a certain extent still are, in great demand. In this connection it might be mentioned that contrary to the popular conception the greater part of the trading posts were really in the sub-arctic. Until very recently the Hudson's Bay Company dealt mainly with Indians. One of the exceptions was the early established post at Fort Chimo where trading was done with both Indians and Eskimos.

The second reason was the difficulty of access, and through it the difficulty of supply. The only feasible and practical means of reaching the northern coast was by sea. The short shipping season, the dangerous ice conditions and the general geographical uncertainty (through lack of accurate geographical and hydrographical maps) made any supply mission a hazardous undertaking.

The third and main reason why the white man stayed away from the arctic was simply that the time was not ripe for arctic settlement. There was a vast country to the south which had to be settled first and which took all the energies and interests of the pioneers. This country to the south was accessible and offered easier living conditions. Population wise it has not reached its saturation point even up to the present. Life in the arctic was hard and the only thing which attracted the white man was furs available in abundance in the sub-arctic which could be reached by inland waterways.

TECHNOLOGICAL ADVANCES MADE THE ARCTIC ACCESSIBLE AND LIVABLE

Historical developments happen when conditions are favourable. In this case it was the technological advances in certain fields which made it possible to reach the arctic with comparative ease and safety, and when there, to live a life comparable to southern latitudes in its daily aspects.

The main technological inventions which started the great opening of the arctic, a process which is continuing at the present time, were the aeroplane, the radio, and the oil heater.

By aeroplane any point in the arctic can be reached within hours. Any post, scientific station or settlement can be supplied the year round. Modern heavy aeroplanes can fly even the heaviest equipment into any site and do not need a runway but can land on an ice strip or on water. Small settlements can be supplied by a variety of small planes on wheels, skis or floats. Aviation also provides mail service which combats the feeling of isolation and loneliness.

Radio links the stations with each other and with centres in the south and gives comfort and security. Illness or accidents, which in former days would have meant certain death in the long run, are reported immediately. The patient is then treated either by medical advice via radio or, in operative or acute cases, flown to the nearest hospital.

Oil heaters were the third great invention which made arctic settlement feasible. Oil is a concentrated fuel and one large plane can carry enough to supply a station for a month. The older fuels like coal and wood had to be transported by ship and therefore were only usable at locations which could be supplied by sea without doubt.

Apart from the above three technological developments which form the basis of the white man's stay in the arctic at the present, numerous modern inventions have made life easier and safer than before, and have helped to alleviate real and imagined hardships: penicillin, light weight winter clothing, concentrated and dried foods, snowmobiles and other mechanical equipment.

OUTLINE SURVEY OF SETTLEMENTS

Arctic Air Bases -

The white man was now equipped with technological means to settle in the arctic and live essentially the same life as in more temperate latitudes. As usual a war accelerated a process which would have been much slower without it. During the beginning of World War Two the Allies were looking for a safe route to ferry bombers across

the Atlantic. Planes at that time did not have the range of present day equipment, and distances between fields had to be comparatively short. A route was established with air fields and bases which stretched from the north shore of Hudson's Bay via Baffin Island, Greenland and Iceland, to Scotland. Hundreds of soldiers, construction workers and service personnel rushed the construction of these bases. The personnel stationed there brought with them the wherewithalls of small towns. After the war some of these stations were abandoned, but many were kept operating for civilian and military purposes and had a steady, although in a large measure, rotating population.

Government Stations -

During the years following the war a string of joint Canadian and United States weather stations was built to give general weather information and to make flying safe between the northern air bases. Resolute on Cornwallis Island was established in 1947 and became the centre of the high arctic meteorological station network. Resolute can be reached by sea usually between the middle of August and the middle of September depending on the ice conditions prevailing in that year, but most stations north and west of Resolute are airlift propositions. The northernmost station "Alert", is on the north tip of Ellesmere Island only about 450 miles from the North Pole. On the west coast of Ellesmere Island on the Foulke Peninsula lies the station "Eureka". There are other stations west and northwest of Resolute on Prince Patrick Island, Ellarf Ringnes Island, Banks Island, and to the south on Baffin Island, Northampton Island, etc., etc.^x

The bigger stations have permanent air strips. The smaller ones receive their supplies on ice strips. As an aside, it is of interest that even stations with no permanent air strip are being supplied during the winter months by wheel planes which use ice strips built on lakes, sea ice or land.

After these meteorological stations had been established, other Government Departments opened administrative, scientific, educational, military, and R.C.M.P. posts nearby and so formed a nucleus of settlement which is quite typical across the arctic today. In size and number these government settlements are still growing.

Again it is to be noted that although these stations are manned the year round, and although more or less permanent Eskimo habitations exist near quite a few of them, their white population is still a rotating one, the rotation period being anywhere from one to three years. Who are the people who live in these stations? Operators, scientists, administrators, mechanics, cooks, from all layers

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For a complete list of arctic stations see R.W. Rae, "Climate of the Canadian Arctic Archipelago", Meteorological Division, Toronto, 1951.

of society. Some come up because they love the arctic or its romance attracts them; some because they have to, like the military or the R.C.M.P.; and many because the higher pay and lack of spending opportunity enables them to save money. Until very recently, the personnel was all male. Lately married quarters are being built in some stations which might induce some couples to stay there permanently.

Military Stations -

Another great group of rotating white personnel will man the stations of the new electronic defence chain which is being built a few hundred miles north of the Arctic Circle. A great many of these stations will have permanent air strips which in turn will serve as footholds and jumping off points for further penetration.

Mines and Government Planned Towns -

From the foregoing it seems that no permanent white population exists in the arctic but there is one, and although not too numerous at present, it is steadily growing. First there is the population in the mining developments. Creeping northward from the end of the rail and often pulling the railway lines behind them, mines spread through the sub-arctic to the arctic. In the east the biggest is at Knob Lake where the Iron Ore Company of Canada works nature's great stock pile of high grade iron ore on the Quebec - Labrador border. A railway built in the years 1950 - 1954 runs 385 miles north from Seven Islands to the brand new town of Schefferville. Upon its completion Schefferville will be a full sized town with schools, churches, clubs, supermarkets and movies. It has a busy airport now which will be paved and enlarged in the near future. The McGill Sub-arctic Laboratory, the first of its kind in Canada, has opened here a centre of sub-arctic research for all branches of science. Last but not least, the railhead at Schefferville will be a jumping off point for tourists, hunters and fishermen.

North of Knob Lake, the geological formation called the Labrador Trough continues to Ungava Bay where extensive staking of copper showings is being done by different companies along the Gerido Lake and Leaf Lake area. It seems that this will become a major area with mines which will ship their ore from tide water ports in Hudson Straits.

On the west coast of Hudson's Bay about 275 miles north of Churchill, are the Rankin Inlet Nickel Mines. The International Nickel Company has a mining camp of its own at Ferguson Lake, northwest of the Rankin mine.

Further west the best known is the uranium mine at Port Radium on Great Bear Lake just below the Arctic Circle.

At Pine Point on Great Slave Lake the Consolidated Mining & Smelting Company is just developing what is believed to be the greatest known lead-zinc ore body in the world. The construction of a railway from Grimshaw, Alberta, to Pine Point is under consideration. This would be the first railway into the Northwest Territories.

The Yukon also has many mines and a considerable network of roads. A Canadian corporation is presently planning to harness the waters of the Yukon River in one gigantic power scheme, which will make cheap power available to many mines in this area and further the opening of many more.

The above mentioned mines are just the highlights of a great number which dot the North from East to West.

Government planned towns are other centres of permanent white settlement which are emerging as a typical pattern of Northern development. Aklavik is a case in point. Starting as a trading post near the mouth of the Mackenzie River, it grew haphazardly into a settlement of fur traders, missionaries and administrators. Built in an area of glacial silt, on a mudbank which was slowly eaten away by the river, it became so big that it needed roads, sewer and water lines, and that so absolutely necessary adjunct of northern development, an airport. The costs of such installations, on an unstable permafrost subsoil, would have been prohibitive in their initial outlay and maintenance. It was therefore decided to select a suitable and advantageous site and move whatever could be moved of the old town to the new location. The new site is being laid out now. After roads, sewer, water lines and an airfield have been built, all movable buildings of old Aklavik will be moved over and new ones erected for those which are not movable. A well planned modern town will rise near the shores of the Arctic Ocean.

The opening of a modern section of Whitehorse across the Yukon River connected by a bridge to the old town is a less spectacular but nevertheless considerable project. Apart from opening up much needed serviced building lots, the new town of Whitehorse will house a huge hospital which will be the great health centre of the Yukon.

Hospitals and nursing stations play a significant and important role in northern settlements and planned towns. Few Canadians are aware that although we have not yet a National Health Insurance plan similar to the one in Great Britain for our white population, such a plan exists for the Indians and Eskimos. The Indian Health and Welfare Department, (which also looks after the Eskimos), provides a complete free health service from cradle to grave. It evolved, unconscious of any state welfare ideas, from the responsibility the Canadian Government felt for the health of our native tribes, but it might well be that it will turn out to be a trial run for a National Health plan.

In the East, two more Government-planned towns are in the making. One at Frobisher Bay, Baffin Island, and one at Chimo, on Ungava Bay. The former is being started this year, the latter is in the planning stage.

Summing up the above, we have on the one hand the scientific, administrative and defence stations populated presently by a rotating white population, and on the other hand the mines and Government planned towns where the white man becomes a permanent or at least quasi-permanent settler.

Some of the bigger scientific and administrative stations might in time also become centres of permanent settlement, especially if raw materials will be found nearby.

IMPACT ON THE NATIVES

A word must be said here about the impact of this northward push of our civilization on the Indians and Eskimos. The Indians have been in touch with the white man for many years and their story is well known. Contact with the white man was gradual although none the less fatal. However, they have lived side by side with the white man and have seen his technological civilization developing gradually.

The Eskimos on the other hand have to make the bewildering jump from the stone age to the atomic age in a very short time. In spite of this they seem to have a better chance of integration into our scheme of things. Maybe our conscience still bothers us from what happened to the Indians, or maybe we live in more socially conscious times, at any rate the Department of Northern Affairs and National Resources and other Government departments are sincerely trying to help the Eskimos to come to terms with us and our age. This is made easier by the great aptitude for mechanical trades the Eskimos possess. Although wherever possible they are left to follow their original life. Some of them are being successfully trained as diesel operators, mechanics and carpenters.

CONCLUSION

The above just touches a few highlights of the continent-wide developments happening in our north country today.

One of the last frontiers of the earth is being opened and populated by the white man with the help of technological means for better and for worse.

It is a challenge and opportunity for all Canadians.

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