The key to the exploitation of these resources as anyone who has participated in their development will tell you, and I am sure that there are a number of such people here today - lies in the provision of adequate transportation facilities. The first transportation routes in northern Canada were, as in the rest of the country, the great river systems - the Mackenzie and the Yukon. The Klondike gold rush of 1898 caused the White Pass and Yukon Railway - a narrow gauge road - to be built from Skagway in Alaska, across the Coast Range to Whitehorse, in the Yukon. Apart from this railroad, which is only 110 miles long, and a few local roads around Dawson and Mayo, the rivers and packhorse trains across the mountains remained the only means of surface communication in the Yukon until the construction of the Alaska Highway and the Canol Road during the war, and the building of a road from Whitehorse to Mayo, and later to Dawson, by the federal government after the war.

In the Northwest Territories the Mackenzie River System was the only means of surface transportation into and through the Mackenzie District, apart from tractor trains during the winter, until the Mackenzie Highway was built from the Peace River District to Great Slave Lake after the war. There is still no railroad into the Northwest Territories.

The development of the aircraft, of course, has been of tremendous assistance in developing northern Canada but even so it provides by no means a complete solution to the problem. The airplane has done wonders in opening up the country, particularly for prospectors, and it will continue to play a dominating role in this field. In the Northwest Territories, because of the plethora of lakes in the Precambrian Shield, planes can take prospectors into remote areas, provision them, and even bring in such equipment as drills. In the Yukon the prospector is less fortunate, because lakes in the Cordilleras are few and far between. Once the resources have been proved and production is planned, however, whether the property lies in the Shield or in the Cordilleras, surface transportation becomes essential both for moving heavy equipment into the area and for moving out the product - unless it be gold, which can profitably be carried by air.

In surface transportation lies the principal difficulty of northern development. Water transportation is slow and limited to a short season, and thus involves the costly storage of large inventories. Winter transportation by tractor train is feasible but very costly. Air transportation is, of course, feasible during both winter and summer, but except where landing strips are available for wheeled aircraft, it is interrupted during the freeze-up and breakup.

Railroads and roads are expensive both to construct and maintain, and the terrain sometimes makes long detours necessary. Economies can sometimes be achieved by crossing rivers by ferries in summer and ice bridges in winter, but this means a substantial period during the freeze-up and the break-up when the road is unusable. However, costly though they may be, roads are required even for a relatively small development and railroads will be essential before the full potential of the region can even be remotely approached.

ļ