The Territories are areas of contrast and extremes in topographical characteristics, flora and fauna, and climate. Surface features vary from the treeless plains of the far north, the rolling hills of the Canadian Shield in the east, and the forested valley of the Mackenzie River, to some of Canada's highest mountain peaks in the west; from small streams and lakes to the longest rivers in Canada—the Mackenzie, over 2,600 miles in length, the Yukon, approximately 2,000 miles long, and Great Slave and Great Bear Lakes, both of which are over 11,000 sq. miles in area.

Since the Klondike gold rush near the close of the nineteenth century the Yukon Territory has been an important producer of placer gold. Rich deposits of lead-zincsilver ore occur in the Mayo area from which a substantial production of these metals is obtained. Interest in the mineral possibilities of the Yukon has been increasing steadily in recent years.

Mineral production in the Northwest Territories is still relatively small considering the size of the region but the prospects for a substantial increase seem to be bright. Oil from the Norman Wells area, pitchblende products from deposits at Port Radium on the east shore of Great Bear Lake and gold from the Yellowknife area are the chief minerals produced.

The agricultural land of the Territories lies almost entirely in the extension of the central plains of the Prairie Provinces into the Mackenzie Valley and crops are confined to vegetable gardens. In the northern regions the flora and fauna have their own peculiar patterns. There are immense areas of lichens which at first sight appear to be stretches of broken greyish rock. These, along with sedges, grasses, crowberries, ground-willow, etc., provide food for the caribou and muskoxen.

The winters along the Mackenzie River are bitterly cold, averaging  $16^{\circ}$  to  $25^{\circ}$  below zero but in Yukon they are surprisingly mild and vary from  $2^{\circ}$  to  $21^{\circ}$  below zero.

Hunting of caribou, seals, walrus and whales and fishing and trapping form the principal basis of existence for the native Eskimos, providing food and hides for the manufacture of clothing, sleeping bags, etc. The introduction of reindeer by the Federal Government in the Mackenzie District of the Northwest Territories has provided an important local industry to serve the people's needs.

## MAPPING AND CHARTING IN CANADA\*

Maps and charts are a necessity in the development of a country. They are required for natural resources development, for defence, administration, educational and recreational purposes, and for extending trade and commerce. In fact they are required in most of the activities of present day life.

In Canada government and public demand for maps and charts has grown at such a rate that Federal Government distribution of these in 1955 was well over the million mark—or over five times that of prewar years and double that of 1947. This has been mainly owing to Canada's rapid industrial expansion, the country's large defence needs, and because, at work or at play, Canadians are a map-conscious people.

This article outlines the work of the Surveys and Mapping Branch of the Department of Mines and Technical Surveys and of the Geological Survey of Canada, together with that of the Forestry Branch of the Department of Northern Affairs and National Resources. It is planned, in future editions of the Year Book, to give more detailed descriptions of the mapping responsibilities of the agencies dealt with here as well as to cover the work of other mapping authorities.

## THE DEPARTMENT OF MINES AND TECHNICAL SURVEYS

The formidable task of mapping Canada's vast area of 3,800,000 sq. miles and of charting the thousands of miles of its coast line and its inland waters is being carried out by the Federal Department of Mines and Technical Surveys. On this Department rests

\* Prepared by the Department of Mines and Technical Surveys, Ottawa, except as otherwise indicated.