

GEOGRAPHICAL BRANCH

92. It is apparent that the main difficulty in this branch is in getting geographers, partly due to inadequate numbers being available, but largely due to the inadequate salaries paid. Your Committee recommends that the government consider providing a stronger inducement in higher salaries in order to strengthen this important part of the department's activities. The main role of the Geographical Branch is to provide geographical information for other government departments. It is apparent that this role will keep expanding with the increasing need and demand for land use studies. Given the necessary funds, the department could play a part in increasing the supply of geographers by a geographical-scholarship program which would take advantage of the increasing number of high school students who are now taking geography.

93. None the less important are the land use and classification surveys which the branch is carrying out. For the geography of the land is constantly changing and in this process of change, development and redevelopment such surveys are vital in providing objective reports of the existing situation from which our national progress can proceed in an orderly fashion. But your Committee is convinced that it would be in the national interest to accelerate this work on a country-wide basis so that we will build up a geographical series of land use maps similar to the series of geological, soils, topographical and forestry maps now in existence. The land use maps should be on scales similar to these other series, ranging from approximately 1 mile to 1 inch to 4 miles to 1 inch in southern Canada and 8 miles to 1 inch in northern Canada. Such a program would not only be of service to the people of Canada but would also be of benefit to those who are concerned with the total world picture and are endeavouring to encourage the individual countries to produce such records.

DOMINION OBSERVATORIES

Geomagnetism

94. A satisfactory network of magnetic stations has been established but the magnetic survey of the Arctic has not yet been completed. A much greater density of stations will be required to meet future demands, not only for general mapping and further geological studies but also for use in conjunction with airborne surveys searching for economic minerals.

95. The success of airborne magnetometers in deliniating mineralized areas depends directly on eliminating the effects of magnetic disturbances originating on the sun, which cause induced disturbances within the earth's crust. The records from the fixed magnetic observatories are therefore of paramount importance to the geophysical exploration of the Canadian Arctic.

Gravity—Seismology

96. Gravity and seismological studies have been progressing satisfactorily. It is important to observe that the various gold and base metal discoveries already made in areas like Yellowknife and Rankin Inlet make it practically certain that other discoveries will eventually be made further north, and undoubtedly gravity and magnetic methods of geophysical prospecting will be