

MARITIME RESEARCH DIRECTORATE

Increased interest in maritime activities by Canada's defence forces, together with expanding technology in the fields concerned, has necessitated the establishment of a Directorate of Maritime Research (DMR) at Defence Research Board Headquarters.

The small new directorate will concern itself with co-ordinating maritime research generally and, in particular, with scientific aspects associated with ocean surface and sub-surface environments, underwater acoustics, submarine detection, tracking and killing, and countermeasures against the submarine threat.

Scientific advances in maritime warfare involving the Royal Canadian Navy, along with greater participation by the Royal Canadian Air Force in similar activities, were factors in dictating establishment of the new directorate. Its object will be to effect closer co-ordination of scientific research relevant to maritime defence activities.

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NEWFOUNDLAND MAP COMPLETE

Publication of the last map-sheet completing the topographical 1/50,000 (1.25-inch to the mile) map coverage of the island of Newfoundland has been announced by Mr. Paul Comtois, Minister of Mines and Technical Surveys. The map-sheet, Dashwood Pond, covering an area in the southwest corner of the island a few miles inland from St. Georges Bay, is the last of the series of 170 map sheets of the island to roll off the presses at the Map Compilation and Reproduction Division of the Department's Surveys and Mapping Branch.

Completion of the topographical mapping of Canada's tenth province in less than ten years reflects much co-ordinated planning and extensive field work by the Branch's Geodetic Survey and Topographical Survey.

At the time of Newfoundland's entry into Confederation in 1949, such mapping as had been done covered only limited coastal areas and certain regions of military importance. The Federal Government was faced with the urgent task of establishing geodetic control and of the topographical mapping of the island proper, an area of over 42,000 square miles, and of Labrador, almost four times that area. Topographic mapping is an essential tool for general economic development, and particularly that of natural resources.

Within two years, the aerial photography of the entire area and much of the basic geodetic survey work had been successfully carried out. Confronted with great, all-but-inaccessible areas of rough terrain that could only be crossed by means of a 547-mile rail line, topographical ground-survey parties worked from improvised bases on the fringe of such areas and, with the valuable aid of helicopters, completed their part of the job by 1954.

The Dashwood Pond map-sheet depicts an area of approximately 408 square miles (half-sheets cover half the area) giving particular emphasis to such features as natural drainage, elevation heights and contours, permanent and winter roads, rapids, falls, bridges, dams, harbours and wharves, and the general outlines of wooded areas, urban centres, etc. Such maps are a valuable working aid for the surveyor, geologist, prospector, engineer, in addition to meeting many other civilian and military requirements.

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UNIVERSITY GRANTS PROPOSAL

A new proposal was recently advanced by Prime Minister Diefenbaker to the premiers of all Canadian provinces which will, it is hoped, make it possible for universities in all provinces to participate in the university-grants arrangements.

During the past eight years, universities and colleges in all provinces other than Quebec have been accepting grants offered by the Parliament of Canada. The universities in Quebec have not felt able to accept these grants because of the attitude widely held in that province that federal tax revenues should not be collected and distributed to higher educational institutions. The sums allocated to Quebec universities and colleges have been accumulating, and the National Conference of Canadian Universities (the disbursing agent) now holds some \$17.5 million in trust for the Quebec universities.

If approved by Parliament, the new proposal would allow any province which wished to do so to provide these additional grants, amounting to \$1.50 per capita, out of an increase of one per cent in the provincial corporation income tax. In return, the Government of Canada would allow an abatement of one per cent in the federal corporation tax paid by corporations in that province. Provinces accepting this new offer would undertake to provide the eligible universities and colleges in the province with grants at the same rate as at present.

The reduction of the federal corporation taxes and increase in provincial taxes would not exactly equal the amount of the university grants payable by the provincial government under the new plan. Consequently, there would be a supplementary adjustment. If a province received from this additional one per cent tax an amount more than was required to pay these additional grants, the difference would be returned to the federal treasury. If the province received less from the tax than was needed to pay the grants, the province would receive a supplementary amount from the federal treasury.

The words of Mr. Diefenbaker is announcing the new offer bear repetition: "There has been a deep desire to devise an equitable plan that would make it possible for universities in all the provinces to benefit. I am confident that