water-power surveys in Alberta and reclamation and water-power investigations in Saskatchewan.

Until 1913 the hydrometric survey operations carried out by the federal government were limited to areas in which it had a proprietary interest; that is, in the prairie provinces, where waste lands and ungranted lands were reserved (until 1930) to the crown in the right of Canada, in the railway belt, and in the Yukon and Northwest Territories. In 1913, however, the federal government entered into a co-operative agreement with the government of British Columbia, at the latter's request, whereby the surveys already conducted in the railway belt would be gradually extended throughout the province. This agreement was the forerunner and the model of corresponding agreements signed with the other provinces. Terminated during the depression of the 1930's these agreements were afterwards succeeded by individual agreements with each province (Prince Edward Island excepted) for the continuation of a uniform hydrometric program by the federal government. In 1950 an agreement with Newfoundland extended the survey to that province.

The centralized direction and control of the hydrometric survey has marked advantages. The logical unit for the investigation and development of water resources is the individual drainage basin. In Canada political divisions do not often coincide with phyical divisions, and many important drainage basins extend across interprovincial and/or international boundaries, imposing special responsibilities upon the federal government. Under a national hydrometric survey, stream-gauging stations can be established at the most suitable locations without regard to internal boundaries. Methods of field investigation and of office computation can be standardized from coast to coast. Duplication of survey work by federal and provincial authorities is avoided.

While the collection of stream flow data is an essential part of the branch's activities, it is the application of these data to the solution of the many hydraulic and hydrologic problems that are referred to the branch that offers continuous interest and challenge to the trained minds of the engineers on the staff.

For many years the department and branch have had responsibility for advising the Department of External Affairs on international water problems. The branch officers and facilities have assisted the International Joint Commission on innumerable occasions and the branch has continuing membership on some twenty Boards appointed by the International Joint Commission or the government of Canada to prevent or dissolve irritations arising from water use problems along the international boundary.

In the national field the branch becomes involved in many other challenging water problems and there is every evidence that these will increase many fold as the country's growth places greater and greater demands on our water supply and its wise use and as the need for conservation and flood control measures become more urgent.

There have been distributed to you samples of branch publications which convey some part of our activities and together with the foregoing introductory statement permit a closer look at the detail of our organization. With your permission I would suggest that you next hear from Mr. J. D. McLeod, Chief Engineer of the Branch.

The CHAIRMAN: Thank you very much, Mr. Patterson. Anybody have any questions of Mr. Patterson?

Mr. ROBICHAUD: Mr. Chairman, would it be more convenient for the members if any further reports be presented, either by officials or members, that mimeographed copies be submitted to the members? It would be much easier to ask questions if we had those copies in front of us.