Mr. J. D. McLeod (Chief Engineer, Water Resources Branch): Mr. Chairman and members of the committee. The work of our branch Mr. Patterson has just given you is a general outline of the fields of work covered in the branch, and he has asked me to supplement this as far as I can with a little more detail on the organization of the branch, with particular reference to its work in stream measurement.

The shortage of time did not permit me to prepare a formal paper. However, I am going to refer to some extent to an address which was given before the Royal Society of Canada about two years ago on this same subject, and with the permission of the chairman I have here 50 copies of that document which perhaps you might want to have distributed.

The CHAIRMAN: Thank you very much.

Mr. McLeon: I should warn you specifically that I do not intend to follow it page by page and paragraph by paragraph, but it does provide perhaps a little reference material which you may find interesting.

Now, as Mr. Patterson has said, the work of the branch in the stream flow and water level measurement field is carried out through the operations division of the branch which consists of 141 full time classified employees plus a number of prevailing rate employees, student assistants and casual labour.

Those people are distributed among the seven offices, that is, the branch head office in Ottawa and the district offices at Vancouver, Calgary, Winnipeg, Guelph, Montreal and Halifax as well as in the 15 small sub offices which are operated in conjunction with the district offices of the districts where they are located.

Perhaps I can give you—although this is not the best map—an indication of the area covered by each district office.

Vancouver covers the entire province of British Columbia plus the Yukon territory, and an adjacent strip of the Northwest Territories. For work purposes we have the country divided along lines which have in part been dictated by convenience of access and transportation rather than specific provincial or territorial lines.

Under the district office at Vancouver we have a sub-office at Whitehouse, another one at Prince George, another one at Kamloops, another one at Nelson, and another one at Cranbrook. These are all small offices with from one to four employees at each and their purpose is principally to have a field representative in these areas for convenience of operation.

Similarly, we have in Alberta a large part of Saskatchewan and a strip of the Northwest Territories, including much of the Mackenzie river drainage with a district office at Calgary. We have sub-offices at Saskatoon, another one at Shaunavon, which is a very small community in the southwest corner of the province of Saskatchewan.

The Winnipeg district office covers the province of Manitoba, a strip of Keewatin territory immediately northward from Manitoba, a small part of the province of Saskatchewan where the run-off is from the Souris and Assiniboine rivers, that is, to rivers which flow through Manitoba and also that part of Ontario from Lake Nipigon west. That is principally a geographic convenience. Winnipeg is so much closer to the western Superior area and the Lake of the Woods and Rainy river area than it would be from Guelph.

The Guelph office covers the remaining part of Ontario from a line approximately east of Lake Nipigon throughout the whole area. There are two sub-offices in Ontario in the northwest which are responsible to the Winnipeg district office. They are located at Keewatin, the outlet of the Lake of the Woods and Fort Frances, the outlet of Rainy lake and a staff is kept there primarily to secure recording information for certain of the governments international and inter-provincial commitments with regard