Mr. BROWN: That is where we do most of our work, but not all of it, by any means. We have just finished photography on the St. Lawrence Seaway for the seventh time, and we have also photographed agricultural areas, as, for instance, the PFRA area in the west.

Senator MCDONALD: Do you do aerial survey work for the Government?

Mr. BROWN: Yes.

Senator MCDONALD: All over the country?

Mr. BROWN: Yes. My actual work is on the interpretation of photographs for engineering soils, that is, drainage, depth to bedrock, texture, richness and stoniness.

Senator MCDONALD: Well, that is very important work, and of very great assistance. Of course in agriculture, as you know, Mr. Brown, our great problem so far as water is concerned is to drain it out of the soil, wheras in the Canadian West it is to put water into the soil for irrigation; and we are wondering how the Prairie Rehabilitation Act would apply to the eastern lands so that we can get assistance in the draining of the lands there. Also erosion is another important problem with us.

The DEPUTY CHAIRMAN: Not going too far into the technical side, how do you detect the texture of a soil in a foot of ground?

Mr. BROWN: Well, there are two sample books here showing some of the work we do, and if you would like to pass them around it will give you an idea. The main basis of this work is a knowledge of landform, how a unit of land is constituted, its origin and its material. Now, all units of land or landforms have a specific shape, more or less, that is surface photography, and a specific origin associated with it, and depending on the climate a type of forest or non-forest vegetation develops there. From training and field training I have built up a key to using the indicator value of various vegetation types, and landform positions. When we do a job on soil typing in any specific area we use the information already available to us from experience of surveys in the area, or from information from a limited field survey. In all cases we try to do some field work, and we set up a key to the landforms and vegetation types.

Senator WALL: In other words, you extrapolate from extensive information?

Mr. BROWN: That is right.

Senator WALL: I wonder if I could return to the brief in its broad details and just go over it here and there. I take it that the fundamental points you are making is that Canada as a whole is lagging behind in the study of land use, and that would be an internal assessment, and it would be an assessment vis-a-vis the Russians, for example?

Mr. BROWN: Yes.

Senator WALL: How do we compare with other democratic nations?

Mr. BROWN: I would say that we are far behind Great Britain, and we are far behind the United States, but not so far behind the United States in part. As I understand it, many of the workers of the United States do have a great deal of overlapping, and their surveys cost them a great deal because of the overlapping of services, but they have done a great deal of work. They have a nationwide forest inventory that they are working on at the present time, for example, which is supported by the federal and state governments. It is a fantastic survey which they intend to keep up, and it will certainly provide them with very accurate information on the drain on their forest resources.

The important point here is that we are lagging behind because for one thing we do not spend as much money in proportion to the area as these other countries and we do waste a lot by setting up a survey for one specific purpose.