

added: "to a considerable extent they are unrealistic in view of the present organization and scope of the Canadian Research Management Association."⁴⁸ Bell-Northern Research stated:

This could be a valuable exercise but CRMA does not have a secretariat to carry it out. It is not clear how the required co-operation between industry and university can be accomplished. CRMA lacks strong industry representation.⁴⁹

The Canadian Electrical Manufacturers Association's brief agreed to university-based courses and recommended that they be instituted at one French-language and one English-language university as a beginning.⁵⁰ The Pharmaceutical Manufacturers Association of Canada agreed that the organization of forums where research managers could compare notes would be useful.⁵¹

The Association of Professional Engineers of the Province of Ontario presented an elaborate set of comments that deserve to be reproduced here:

We endorse these recommendations with the proviso that the proposed training program be of a continuing nature and that it be restricted to graduate students who have obtained experience with some parallels to the Post-Industrial Experience Research Fellowship scheme, for example.

We subscribe to the need for a greater component of engineering management in industry, a greater component of management trained persons in industry. We believe that scholarships in management training should be reserved for the mature student who has been working in industry for some time and who stands to be able to benefit from (say) MBA training to a much greater degree than an inexperienced student or a student on a strictly academic sequence.

It is our feeling that there is a real need in government to train people to manage mission-oriented research and development activities, and all other processes which might be termed "innovative." We do not, however, believe that basic research requires the same approach.

Government shared-cost business management training programs, conducted with industry co-operation, appear to be essential. We believe that such programs should be related geographically to industry concentrations where the ingredients of the course and the requirements of the industrial complex can be suitably co-ordinated.

We suggest that the Minister of State for Science and Technology should take the initiative in establishing suitable fellowships in this area. We appreciate that the Ministry is not an "operating agency" and suggest further that the granting programs and the administrative activities relative to the fellowships be "farmed out" to an agency which has built up a substantial body of experience in such administration over many years.⁵²

The response to its recommendations has further convinced the Committee that there is an urgent need for imaginative initiatives in this area. Obviously our proposals will have to be modified, at least as far as they involve the active participation of the Canadian Research Management