

Proceedings on Adjournment Motion

they have spent four, five, six, seven or eight years acquiring training and talents for which the country has no use? What does that do to young men or women, and how can we accept the necessity to make that statement?

In social terms, the waste represented in not having appropriate employment available for our engineering and science graduates is of a magnitude that makes the *Bonaventure* debacle pale into total insignificance. The losses, in terms of the employment these people would generate if properly employed and in terms of technological developments forever unrealized, are incalculable. How can we as a society afford to lose the productive capacity that these people, properly employed, would represent?

• (10:10 p.m.)

The Science Council background paper suggested that one of the ways to meet the need to find suitable employment for graduates in science and engineering, and at the same time to provide maximum benefit to society, would be to place greater emphasis on expanding the research and development capacity of this country. A number of suggestions on how such an expansion might be managed were put forward. When I questioned the ministers involved about their intentions with respect to the suggestions, their replies were to the effect that all recommendations would be studied.

My main purpose in speaking tonight is to suggest to the government yet another possible avenue for encouraging the expansion of this country's R and D capacity. In order to place the suggestion in context it might be worth while to devote a few seconds to examining the reasons for our failure to develop an R and D establishment equal to Canadian needs and matching our capability to such activity. Obviously, in seven minutes I cannot touch on all factors but two predominate. Firstly, our industry is dominated by the branch plants of international, especially American, corporations with the result that expansion in our industrial capacity has not meant a concomitant increase in our R and D capacity, as would normally be the case. The bulk of the research and product development for most foreign-owned corporations, predictably, takes place outside Canada. We have as a result, with some all too rare but notable and important exceptions, become copiers rather than innovators in industry.

Secondly, the vast majority of domestically-owned corporations, with a few and obvious exceptions, are too small to support their own research establishments. Presumably, re-establishing Canadian control over our economy would have salutary effects on this situation. Of greater immediate impact, I suggest, would be the creation by the government of a research and development establishment which would make its services and facilities available to Canadian industries on a fee for service basis. Industries not large enough to themselves undertake the development and testing of product improvements and new inventions could then go to the government research establishment, which would possess the necessary capacity, and ask it to undertake research into

product improvement and the testing and development of new products. Financing arrangements could be flexible enough to permit either a flat fee, a royalty arrangement or a combination of the two.

The creation of such a government-operated research and development establishment oriented toward industry, toward product development and improvement, toward the market rather than toward pure research could do much to place Canadian industry in the forefront of technological development, improve our export position and at the same time provide appropriate and fulfilling employment for some of our science and engineering graduates.

I hope that in studying the implications for government action in the Science Council background paper the government will give consideration to the suggestion I have made this evening.

Mr. Alastair Gillespie (Parliamentary Secretary to President of the Treasury Board): Mr. Speaker, in his remarks this evening the hon. member for Selkirk (Mr. Rowland) has touched on a number of important items covering this vast area of public policy. It will not be possible for me, in 2½ minutes, to do much more than highlight one or two of those items. His suggestions with respect to the improvement of development of innovative capacity in Canada will be well received in government circles, I am sure. I think his concern that the branch plant could discourage Canadian innovative capacity might be overstated. As I recall, studies that have been done in this area indicate that foreign-controlled plants in Canada do as much in the way of R and D as Canadian-owned corporations in Canada. That is not to say that Canadian corporations do as much as corporations in other countries. What I am trying to suggest is that he may be overstating the ownership aspect.

There are three things I want to touch on quickly with respect to the manpower aspect of the hon. member's suggestions. The National Research Council introduced quite recently post-doctoral industrial fellowships aimed at assisting small companies over what might be described as the transitional stage. I am talking about small companies that cannot afford the expense, say, of PhD assistance. The post-doctoral industrial fellowship is a step in that direction. Similarly, the Industrial Research Assistance Program, or the IRA program, is designed to help small companies or those not using R and D to develop R and D capability.

The last point the hon. member talked about had to do with creating new R and D establishments. Perhaps the hon. member knows that the National Research Council at present does some testing. It does some testing on a fee for service basis. It does testing, for instance, on products for the building trades and some that is connected with the mechanical engineering trades. It also does testing in the general area of the National Aeronautical Establishment capabilities.

Mr. Deputy Speaker: Order, please. I regret to interrupt the parliamentary secretary, but his time has expired.

[Mr. Rowland.]