

Science Council of Canada

and the humanities—especially in teaching—require massive doses of money with some solid assurance that programs can be set up and carried through to a conclusion. To emphasize this may I quote from an article in the magazine *Contemporary*, an organ of St. Francis Xavier University, published on March 15, 1966:

Only a bold, imaginative and massive program of government-financed scientific research can save Canada from early and certain defeat in economic competition with the other industrial powers of the world.

It is an urgent matter of national security, said Dr. E. M. Clark, head of the physics department of St. Francis Xavier University and one of North America's leading physicists. Canada, he said should be spending an additional \$500,000,000 on crash research programs in her universities.

He went on to say:

"We are spending huge sums on Canada's military forces in Europe... In the long run, however, the real threat to Canada is not a military but an economic one. Our scientific research should be getting at least as much money as our air force wing in Europe."

I would like to say here that I agree with him wholeheartedly. In fact that might be a good place to get the money.

"I think we can safely say that the military situation in the world today is stabilizing", said Dr. Clarke. "But the economic war is rapidly sharpening, and in this field Canada is falling behind.

"Countries like Japan and Russia are making steady inroads into world markets for industrial goods. China will soon be a new and perhaps even greater threat. And much closer to home, of course, is the U.S.A. All of these countries are expanding their industrial plant at a much faster rate than Canada. And they are able to do it because they are spending far, far more money on research."

● (8:20 p.m.)

Lest one think that Dr. Clarke holds this opinion alone I would like to direct your attention to what the brief submitted to the Commission on the Financing of Higher Education by the Association of Graduate Schools says on the subject of graduate studies. On page 11 of this brief it is pointed out that the total annual current expenditure for graduate studies in the humanities, the social sciences, sciences and engineering should be of the order of \$90 million in 1964-65—certainly we are far short of that—\$380 million in 1970-71, and \$600 million in 1975-76. In addition to this there should be capital expenditures of \$488 million for the period 1964-65 to 1970-71, and \$353 million for the period 1970-71 to 1975-76.

To put it another way, the association is convinced that extremely heavy investments by the nation—some nine to ten fold higher than in the past—should take place over the

next 11 years. I know that the Budget made some attempt to stimulate assistance for research, but this attempt is problematical of success and certainly will not fill the need.

I re-emphasize what I said before, and what Dr. Clarke said, that the future of this nation depends upon developing a research program which will enable industry and science to provide us with the developments which will lead us forward as an industrialized nation.

I hope that the new Science Council will be listened to by the government, and that through its efforts research will be provided with the funds to meet the needs I have outlined. I note what the Hon. Minister (Mr. Drury) said about the level of scientific advance being dependant upon the state of scientific education and the general education of the people, and I cannot agree with him more. I hope, however, that this is an indication that the government will be prepared to increase substantially not only aid to research but aid to education as well.

Mr. Max Saltzman (Waterloo South): Mr. Speaker, let me begin by joining with the hon. member for Kindersley (Mr. Cantelon) by indicating support for Bill C-149.

The minister gave us a very leisurely delineation of this bill. I think his delivery tonight was perhaps typical of the whole attitude that has generally prevailed about the need for a science policy in Canada. We welcome the news that we will have a council, but we cannot let this occasion pass without expressing regret over the loss of many years to the people of Canada in this regard.

There have been commissions and more commissions, and the Prime Minister on April 30, 1964, when he indicated that he would accept the first recommendation of Dr. Mackenzie's report, missed the opportunity of bringing in the second recommendation which called for the establishment of a science policy. That time has been lost and it will be increasingly difficult for Canada to make it up.

I was somewhat disturbed by the minister's statement that we must wait, or words to that effect, for Canadians to prepare for spending. The truth of the matter is that Canadians have been prepared to spend for a long time but have been waiting for the government to provide some direction in this regard. We hope that with the establishment of this organization, with the combination of the