The Address-Mr. Pepin

same PAIT program. It is anticipated by the company concerned, Riley's Reproduction Limited, that the market will amount to \$10 million in the first five years, with a substantial part of it being in export business.

Most people have heard about the PT6 series of gas turbine engines. This popular engine, developed by United Aircraft of Canada Ltd. with DIP support, is used in 45 aircraft manufactured throughout the western world. Sales of this engine have reached a total of \$153 million. With the potential future sales this total is expected to reach \$600 million. I could continue to give success stories in all parts of Canada. There is one in British Columbia. Gluham Products Ltd. was assisted, by PAIT, in developing a new highspeed glue laminating machine which reduces drying time from 16 hours to 30 minutes. A new \$500,000 capital facility is now in successful operation. Many of the glued laminated beams used for the construction of the Canadian Pavilion at Osaka were produced on this machine.

Huntec Ltd. of Toronto—I saw their exhibit recently in Tehran at the Asian Fair—have developed a new mineral prospecting system, again with PAIT assistance. The resultig instrument offers both performance and economic advantages over competitive products. A large part of the sales are expected to be in the export market. The point I am making is that these incentives have contributed substantially to the growth of technology the growth of innovation in Canadian industry. I hope I made my case.

I said I would also refer to a number of recent decisions of the government having to do with research and development. I should first mention the formation of the Department of Communications. This department has a communications research centre which has \$10.4 million to spend in 1968-69. I have already reminded the House of the Telesat communications satellite, and I have said that an allocation of \$25 million has been made by the government as its share of Telesat's development in its initial stage.

As important is the fact that the government, notwithstanding its efforts to limit expenditures, has authorized that for the coming year, 1970-71, the funds allocated for direct assistance to industry in my department can be increased by 10 per cent. This is with a view to achieving a better balance in the expenditures of the government in the three sectors of the economy, namely, industry, government and university. Our three

research and development incentive programs, IRDIA, PAIT and DIP, will contribute some \$72.8 million to the estimates for 1970-71 as compared with the latest estimate for this year's expenditure of \$54.5 million, a figure to which I have already referred.

As a further indication of the activity in research and development I should mention that the government programs I have named coming under my department and other agencies are being reviewed, and some of them will be changed. One of them, the PAIT program, is going to be broadened, in terms of the wider coverage of the innovation process that will be permitted under the proposed amendments. I shall have something more to say about this in a few days. Attention is being given by the department and the minister to rationalization and specialization, especially in Canadian subsidiaries of American firms. We ask the "parents" to better integrate their Canadian operations within their international or North American complex. I have said that what we expect from them is not mini-plants; we want specialized sections, part of the total structure of these international companies.

We try also to encourage more research development in smaller, generally Canadian companies. We also promote a more active relationship between university and industry. The general impression that I am trying to give is that we as a government and as a department, are becoming much more practical in allocating money for scientific research than we have been in the past. I am not trying to minimize the importance of pure science; I am just trying to boast the importance of applied science. There is no doubt that in a country like ours with limited financial and human resources, realism is of the essence in matters of scientific research of both government and industry. When I say this I am in very good company, and in this connection I would like to quote Mr. Anthony Wedgewood Benn, the British Minister of Technology.

We have come to the end of those days when any project, sufficiently big and spectacular, could almost automatically expect to win approval and the funds needed. The lobbyists for glamorous programs of scientific research will in future have to prove their merit against the claims of others seeking to solve more mundane but more pressing problems.

## • (8:20 p.m.)

three sectors of the economy, namely, industry, government and university. Our three same theme. The Fifth Annual Review of the