

Space Agency

By participating in the space platform project, Canada will be able to put to use its know-how in robotics and artificial intelligence. Great benefits will flow from this project, a cost-sharing venture with our partners, that is the United-States, the 13-country European Space Agency and Japan.

All regions of Canada will benefit from this project. The Canadian project manager, Spar Aerospace Ltd, has set up a group of Canadian companies from Nova Scotia, Québec, Ontario and British Columbia who will supply equipment and services. Canada's contribution to the space platform project will generate economic spin-offs of more than \$5 billion over the next 15 years. The design and construction of the mobile servicing center will enable Canadian industry to develop many advanced technologies which will be applied and adapted to traditional earth-bound industrial activities.

In 1982, Canada made some preliminary studies on the spin offs generated from our contribution to the space platform project and the robotized service centre I just mentioned, which is being built by the National Research Council. Those studies concluded that Canadian industries and universities along with the federal government would gain major scientific, technological, economic and social benefits from this project.

I can assure you that today, perhaps more than ever as we are on the threshold of the 21st century, that conclusion still holds true.

Through another aspect of its impressive space program, the RADARSAT project, the Canadian government is opening up to the world.

Canada acts as the project manager on the final building stages of RADARSAT, a sophisticated satellite scheduled to be launched in 1994 and to collect, using radar equipment, sharp pictures of earth, even in the dark or during cloudy periods. It would give us reliable up-dated data on ice floes, navigation in the Arctic area and along the shores, humidity at ground level and caused by vegetation. This data could help develop new methods for farm control and forest development. RADARSAT is a Canadian initiative also involving the United States, several provinces and business enterprises.

RADARSAT will be the most sophisticated of its kind. Its distinctive feature would be its synthetic aperture

radar, a powerful instrument capable of emitting and receiving very high frequency signals through clouds and darkness. Through RADARSAT, Canada will confirm its position as a leader in the field of remote sensing and its applications.

At close to 800 kilometres above the surface of the earth, the satellite will have a polar orbit, surveying the entire globe along 500 kilometre bands and producing high resolution images of lands and oceans.

The spin-offs will be felt worldwide. For instance, SAR is particularly useful in the tracing of geographical maps of areas under dense vegetation or heavy clouds. So RADARSAT will prove to be an invaluable instrument for tropical countries where the jungle and persistent heat haze make it very difficult to collect data through conventional methods.

Once again, the economic spin-offs of this project will be most important. The development of this system should require 10,000 persons-years in Canada and bring benefits of \$1 billion to the private and public sectors.

The Canadian industry will therefore become a leader on the world market of radar data and services in the twentieth century. It is an achievement we can be proud of because, according to estimates, before the year 2000, this market should represent 30 percent of the space world trade.

Mr. Speaker, although I only touched upon some aspects of this ambitious space program, you realize how important it will be for the development and the future of Canada.

In addition, the establishment of the space agency that will ensure an effective and strong co-ordination of all those programs will allow Canada to reap benefits as yet incalculable.

March 1, when the federal Government announced that the Canadian Space Agency would be located in Québec, in the metropolitan area of Montreal, should be remembered as a very important day for Québec and Canada, because on that day, we ensured that Canada would attain new peaks of excellence in space and technology. With a budget of \$3 billion for the next decade and a staff of 300, the Agency will become a focal point for the development of advanced technology that will help Canadian industry make the switch to the twenty-first century.