

Minister of Industry,
Science and Technology and
Minister for International Trade



Ministre de l'Industrie, des
Sciences et de la Technologie et
ministre du Commerce extérieur

Statement

Déclaration

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CHECK AGAINST DELIVERY

NOTES FOR AN ADDRESS

BY THE HONOURABLE MICHAEL WILSON,

MINISTER OF INDUSTRY, SCIENCE AND TECHNOLOGY AND

MINISTER FOR INTERNATIONAL TRADE,

TO THE

SPACE CONFERENCE OF THE AMERICAS

"CANADA AND INTERNATIONAL CO-OPERATION IN SPACE"

**SANTIAGO, Chile
April 28, 1993**

Mr. Chairman, distinguished delegates:

Thank you for this opportunity to participate in the second Space Conference of the Americas. Credit is due to the Chilean government for organizing this important event as a follow-up to the 1990 San José conference. This conference gives renewed impetus to regional co-operation, development and integration in the Americas, in the field of space activities and their applications.

The space age started about 35 years ago with the launching of Sputnik, the first artificial satellite, in 1957. Five years later, Canada became the third country in the world to build its own satellite -- Alouette I -- and in 1972 became the first country in the world to operate a commercial, domestic, geostationary satellite communications system. Three Canadian astronauts have now had the opportunity to participate in U.S. space shuttle missions.

Canada can rightfully claim to be one of the pioneer nations in the peaceful use of outer space. Why? The answer lies in our immense geography, our varied climate and resources, and our unevenly spread population. Early on, these naturally pushed us to develop space-based communication systems and to investigate the opportunities resulting from the use of remote-sensing data gathered from space.

Space technology unites Canadians through cross-country weather reports, television, telephone, fax, electronic mail, tele-education and tele-medicine. At the same time, it connects Canadians to the world.

Since those early years, the benefits of space activity have become increasingly apparent in many fields of endeavour. Our irrepressible curiosity about the universe has allowed us to leave the earth and has given us a new perspective on our own planet. The challenges presented by space activity have also produced advantages on earth, through the use of new technologies developed in space and a better understanding of human physiology.

Current international circumstances encourage greater international co-operation in space. The two major space powers are themselves engaging in closer co-operation. Moreover, the large costs of major projects -- as well as present budgetary constraints in most countries -- compel us to look for international partnerships to share expertise, risk and resources.

The Canadian Space Program has a tradition of international co-operation, in order to make the most of our investment and to benefit from the know-how and experience of others. This tradition has been successful, and Canada will continue to undertake most major initiatives in partnership with other countries.

Canada's three major space programs are partnerships with other nations. Our contribution to the international space station -- the mobile servicing system -- builds on expertise gained during development of the Canadarm. The space station is a collaboration with the United States, the European Space Agency and Japan.

The other projects being developed are Radarsat, which will be the most advanced radar earth-observation satellite ever deployed, and MSAT, a mobile communications satellite for remote and rural areas. These are both co-operative efforts with the United States.

Canada has co-operated with many partners such as the U.S., France and Sweden in the development of instruments needed for space missions and by participating in joint missions. Future projects include the development of MOPITT, an instrument for the measurement of pollution in the troposphere that will be flown on a U.S. polar platform.

We are also extremely pleased with our co-operative agreement with the European Space Agency. For 15 years, Canada has enjoyed a fruitful relationship with the European space program that has enabled Canadian industry to build partnerships with European space companies by participating in such important programs as Olympus, ERS-1 and ERS-2.

Other international projects of significance include the COSPAS/SARSAT search and rescue system. Originally developed by the United States, Russia, France and Canada, it now includes 24 participating countries. We would like to see as many countries as possible join the program, which is credited with having saved nearly 2,000 lives so far.

Through our national program and international partnerships, the Canadian space industry has honed its competitive edge. It has achieved an enviable level of expertise and excellence in such fields as telecommunications and robotics, as well as the space and ground segments of earth-observation satellites and related applications, and the industry has developed a dynamic export market. Some representatives of these successful companies have accompanied me to Chile and are participating in the exhibition being held during this conference.

An important focus of this conference is the use of remote sensing data from space for monitoring the environment. The Earth Summit, held less than one year ago in Rio de Janeiro, succeeded in impressing three vital facts upon us.

First, we can no longer ignore the consequences of human activity on the environment without jeopardizing the well-being of future generations.

Second, problems such as climate change, the loss of biodiversity, ozone depletion, atmospheric degradation, depletion of ocean resources and the expansion of deserts require worldwide co-operation for global solutions.

Third, the environment and development are closely linked: they cannot be dealt with in isolation from each other.

The purpose of Agenda 21 is to promote sustainable development. Our meeting here in Santiago should help identify the best uses of space activity to achieve the objectives set in Rio.

Long before a satellite is built, before new applications are found, people from different backgrounds and different parts of the world must get together and exchange ideas. Broad objectives are then defined, and projects identified.

Education is the fundamental requirement for the emergence of scientists and engineers who are able to elaborate such ideas. It is therefore appropriate that one of the working groups of this conference deals with education issues.

With the priority of education in mind, Canada developed an interactive encyclopedia on global change, called *Geoscope*, as its contribution to the international space year. The first version of this software will be available this fall. This encyclopedia vividly illustrates the environmental changes occurring on earth and in the near-earth environment. *Geoscope* will provide hands-on experience to people around the world, and will confirm the vital importance of satellite data in monitoring the global environment.

Research is of paramount importance, and for many years Canada has had a significant global environmental research program. On March 25, Canada signed an agreement to establish the Inter-American Institute for Global Change Research. We believe this institute is a prime example of how regional co-operation in the Americas can be organized.

Last year, in co-operation with the European Space Agency, Canada carried out an airborne radar remote-sensing project over six countries of Latin America, as part of the Sarex '92 campaign. The results of this component of Canada's tropical forestry initiative were communicated to you by a representative of the Canada Centre for Remote Sensing on Monday. This project was so successful that it is serving as a model for Globesar, a similar campaign being planned for this fall in Europe, Africa and Asia that will demonstrate and investigate the applications of radar remote-sensing data in a wide variety of fields.

Through the International Development Research Centre (IDRC), Canada is contributing to follow-up projects related to the Sarex campaign in Costa Rica. Moreover, IDRC has contributed to

projects involving the use of remote-sensing data in Bolivia, Colombia, the Dominican Republic and Chile -- and new projects are being considered.

The Canadian International Development Agency (CIDA) has also participated in projects in many Latin American countries that use expertise, equipment and technology developed by the Canadian space industry. These projects use remote-sensing data, as well as data from ground instruments originally designed for satellites, to support the sustainable development of natural resources that will lead to economic recovery and the alleviation of hardship.

In January 1995, Canada will become a source of remote-sensing data for the international community with the launching of Radarsat, the first earth-observation satellite dedicated exclusively to using radar technology. This innovative technology allows the satellite to collect data throughout the day and night, as well as through cloud cover. By varying the direction of the radar beam, users will be able to select the specific sites where they require imagery. Latin America, like Canada and the United States, will be covered every seven days or less, depending on the kind of radar image selected.

One of the objectives of this important program is the involvement of the private sector. To achieve this, a consortium called Radarsat International Incorporated has been awarded exclusive international distribution rights for Radarsat data in exchange for a contribution to the Radarsat ground segment. There are also provisions for revenue sharing from the sale of Radarsat data to support the cost of operating the satellite.

In the field of telecommunications, Canada participates in regional organizations such as the Inter-American Telecommunications Commission. It has also been successfully pursuing satellite co-ordination agreements with Latin American countries. Recently, Argentina has acquired the services of the two Anik C satellites from Telesat Canada to provide services until it launches its own satellites in 1996.

The night sky continues to fascinate us all. The addition of artificial satellites tracking rapidly across the backdrop of deep space is the tangible result of this interest. The images of earth that we receive from those orbiting platforms have given us all a new perspective on our own planet. The view from space makes us more aware of how unique and fragile earth is. This perception of our planet creates a strong sense of solidarity -- not only among individuals, but also among nations.

The Canadian government looks forward to continuing its fruitful co-operation with countries of the Americas -- co-operation that has produced so much through space activities and their applications -- and wishes all participants success in this conference.