

Canada and U.S. sign agreement on satellite photography

A memorandum of understanding was signed on September 19 between Canada's Department of Energy, Mines and Resources and the United States National Aeronautics and Space Administration (NASA), on co-operative experiments to be carried out in Canada using NASA's new proof-of-concept radar satellite, SEASAT (see *Canada Weekly* dated February 8, 1978, Page 1).

The agreement was signed on behalf of the department by Dr. J.D. Keys, Assistant Deputy Minister for Science and Technology, and Dr. Robert J. Frosch, Chief Administrator for NASA, on behalf of the agency. There will be no exchange of funds between NASA and EMR under the agreement.

EMR is using its satellite-receiving station at Shoe Cove, near St. John's, Newfoundland, to acquire sensor data over the northwest Atlantic and eastern Canada.

Although there are five different sensors on the satellite the one of chief interest to Canada is the synthetic aperture radar which will give radar images, regardless of weather conditions, produced from reflections from icebergs, sea ice,



Chief of the Remote Sensing Centre, Larry Morley, studies satellite photo.

ocean waves, and ships. Dr. Larry Morley, Director General of the Canada Centre for Remote Sensing, says the sensors would be a natural aid to the Canadian Coastguard.

Information from SEASAT is also useful for showing geological structures, crops, forestry and water resources. Microwave sensors can cut through foliage on the ground to show formations underneath, helping in mineral and petroleum exploration. A photograph in Dr. Morley's office of the northwest Arctic taken by the LANDSAT satellite, which uses more conventional photographic equipment, took nearly four years to complete — prepared from 700 images gathered during cloud-free conditions.

The Departments of Environment, Communications, National Defence, Indian Affairs and Northern Development, and Supply and Services, as well as the National Research Council, are participating in more than 100 experiments designed to demonstrate whether an operational satellite of similar nature would be a cost-effective way of providing surveillance of Canada's 200-mile coastal zone.

The agreement was signed during Dr. Frosch's first visit to Canada since his appointment as NASA Administrator nearly two years ago.

UNESCO delegation

Ambassador Yvon Beaulne leads the Canadian delegation to the twentieth General Conference of the United Nations Organization for Education, Science and Culture (UNESCO), being held in Paris from October 24 to November 28. Mr. Beaulne is Canada's Permanent Delegate to UNESCO in Paris.

At this biennial gathering, representatives of 144 member states are discussing the two-year program of UNESCO in education, the exact and natural sciences, social sciences, humanities, culture and communications.

Napoléon LeBlanc, director of Continuing Education Services at Quebec's Laval University and former Canadian member of UNESCO's Executive Board, is vice-chairman, with:

Delegates — G.H. Waldrum, Deputy Minister of Education, Ontario, Miss M.E. Bayer, Assistant Deputy Minister for Cultural Affairs, Manitoba; V. Décarie, President, Canadian Commission for UNESCO.

Alternate Delegates — Dr. J.M. Harrison, Vice-President, Canadian Commission for UNESCO; Dr. J. Loubser, Executive Director, Social Science Federation of Canada; P. Roberts, Assistant Under-Secretary of State, Secretary of State Department.

Advisers — C. Lussier, Secretary-General, Canadian Commission for UNESCO; R. Haeblerlé, Co-ordinator of Interministerial Relations, Ministry of Education, Quebec; Dr. C. Wallace, Chairman, Maritime Provinces, Higher Education Commission, New Brunswick; and Mrs. M. Raletich-Rajicic, Department of External Affairs.

Arctic explorers tell their tales

The men and women who opened up the Canadian North, who discovered new islands, plotted new territory, found minerals and uncovered a wealth of knowledge about the land, sea, animals and plants of the Arctic, have been pre-

senting accounts of their adventures to the public at the Ontario Science Centre in Toronto since October 13. The series continues until December 17.

The 40 guest speakers include miners, Mounties, surveyors, scientists, pilots, prospectors, architects, fur traders, native people and former Governor-General Roland Michener.

The program for November and December begins with a delivery by Roy M. Koerner of "My Walk to the North Pole", November 5, followed by "Arctic Vegetation and its Protection" by Pierre Danse-reau, November 12; "The Giant Squids of Jules Verne and the Labrador Sea" by Frederick A. Aldrich, November 19; "Ice Research at Tanquary Fiord on Ellesmere Island" by Elton R. Pounder, November 26; "The Role of the Petroleum Explorers in the Arctic" by Robert Horsfield, December 3; "Around the Horn and Through the Northwest Passage on C.G.S. *Hudson*" by Bosko Loncarevic, December 10, and "Our Final Frontier: The Underwater Arctic" by Dr. Joseph B. MacInnes, December 17.