

providing a wide range of voice, data and facsimile services to Canadian businesses and rural areas across the country.

1983: Canadian astronaut program

Marc Garneau was chosen to be Canada's first astronaut from among the six members of the Canadian astronaut team formed on December 5, 1983. He has had one of the shortest preparation periods of any astronaut.

Born in Quebec City on February 23, 1949, Marc Garneau was educated in Quebec City and London, England. He has been involved with the development of weapon systems since 1974 and, in 1983, was promoted to commander and transferred to Ottawa to become design authority for all naval communications and electronic warfare equipment and systems.

Canada's other astronauts are: Bob Thirsk, 31, a medical doctor born in New Westminster, British Columbia, who was the chief resident in family medicine at Montreal's Queen Elizabeth Hospital; Roberta Bondar, 38, of Sault Ste. Marie who has a medical degree from McMaster University; Steve MacLean, 29, from Ottawa, who received a doctorate in physics in 1983 and was a visiting scholar in laser physics at Stanford University; Ken Money, 49, of Toronto who was senior scientist at the Defence and Civil Institute of Environmental Medicine in Toronto and has worked with



Canada's six astronauts (left to right): Roberta Bondar, Bob Thirsk, Steve MacLean, Bjarni Tryggvason, Ken Money and Marc Garneau.

NASA on a variety of experiments on space motion sickness; and Bjarni Tryggvason, 39, born in Iceland, and educated in Canada, has become an aerodynamics expert, who became an associate research officer with the NRC in 1982 and recently completed a study on the winds that affected the *Ocean Ranger*.

In recognition of its close co-operation with NASA in the shuttle program, Canada was invited to select its own astronauts to

carry out Canadian experiments in space. Marc Garneau was the first of three Canadians slated to conduct scientific experiments on US space flights. The other two will be selected from among Canada's other five astronauts by NRC.

The policy behind the Canadian space program is to concentrate on programs that offer the maximum economic and social return.

(From *Apogee*, Vol. 1, No. 2 1984.)

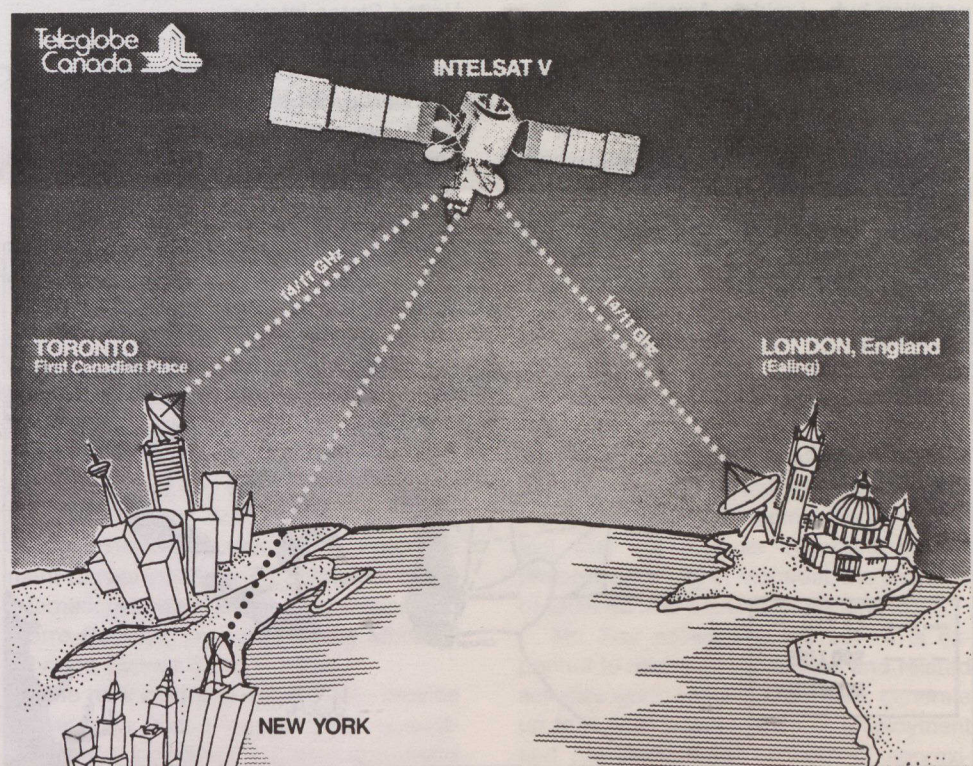
Canada-Britain-US satellite link

Teleglobe Canada has reached agreement in principle with several American international telecommunications carriers to extend its GLOBESAT private satellite business service — now operating between Toronto and London, England — to the United States.

The new agreements, reached in principle with TRT Telecommunications Corporation of Washington, D.C. and ITT World Communications Inc. and International Relay Incorporated, both of New York, would allow multinational corporations to establish private "triangular" intra-corporate communications networks between their operations in Canada, the United States and Britain. The service of the new triangular-type applications is expected to begin in early 1985.

Teleglobe Canada is working to make similar arrangements with other American international telecommunications carriers, as well as additional overseas telecommunications administrations in the near future.

GLOBESAT service uses advanced satellite technology and digital communications in its integrated communications networks.



Configuration of "triangular" satellite business network between Canada, the US and Britain.