

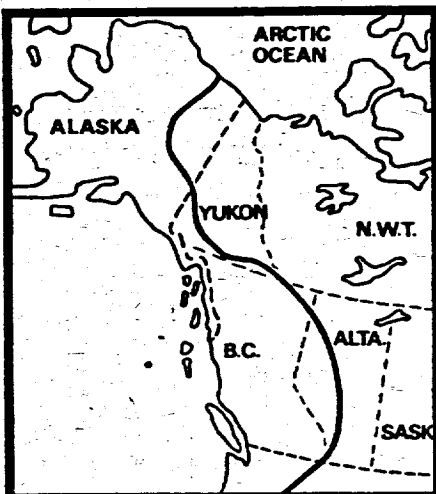
countries sell in the world market.

In 1975 Saskatchewan passed enabling legislation permitting it to buy into the potash industry, some of which is owned and operated by subsidiaries of U.S. companies. In the dispute that developed, the U.S. Government made its concerns known to Saskatchewan which gave assurances that potash supplies to the U.S.A. at reasonable market prices would not be interrupted. This provincial matter is something Americans find difficult to understand. The Canadian provinces have the legal power to expropriate and have a very decisive say in the development and taxation of natural resources within their borders.

Co-operation is the name of the game

On the international front, there is a basic similarity in Canadian and American approaches to long-term energy problems. A Canadian has served as Vice-Chairman of the Governing Board of the International Energy Agency (IEA) since its foundation, an organization in which both countries contribute to energy research and development.

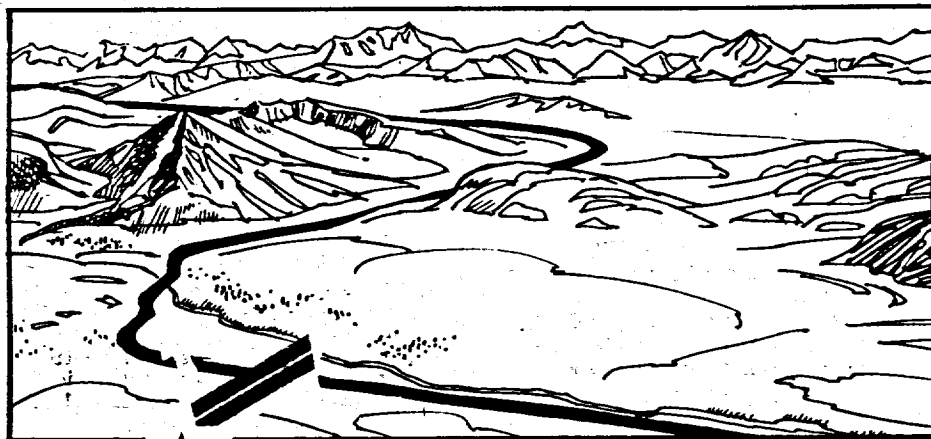
On the home front, in the area of resource sharing the Canada/U.S. relationship continues to evolve. Americans are increasingly aware that we have our own domestic needs to satisfy, as well as having a genuine concern for the problems and needs of our neighbour. Both sides of an issue are given a fair hearing through regular bilateral discussion. Co-operation is very much the theme in energy relations, as demonstrated by the successful negotiations of the northern gas pipeline agreement.



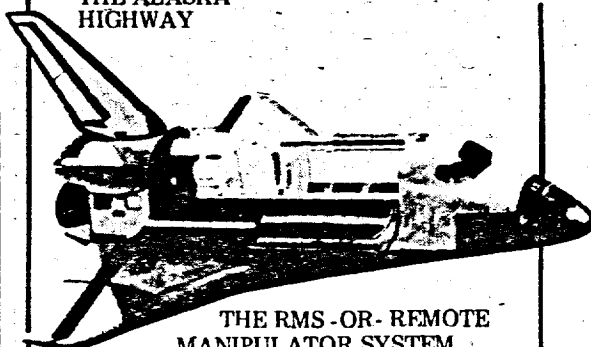
September 1977 - CANADA AND U.S.A. SIGN PIPELINE AGREEMENT. ALASKA HIGHWAY ROUTE CHOSEN.

After weeks of tough negotiations, Canada and the United States have agreed on a gas pipeline route to bring northern natural gas to southern markets in the U.S.A. and Canada. Beginning at Prudhoe Bay, the privately-financed pipeline will wind through Alaska, parts of the Yukon, British Columbia and Alberta, on to the lower 48 states. There is the possibility that eventually a spur line, the Dempster Line, will be built from Dawson, connecting with the main line at Whitehorse, to carry gas from the Mackenzie Delta. The U.S.A. will pay up to 100% of the spur line provided any cost overrun of the main pipeline does not exceed 35%. Its cost share would then be reduced. The builders, Foothills Pipe Lines Ltd., will pay a property tax to the Yukon of \$30 million maximum annually for the life of the pipeline. This tax, which could amount to a billion dollars, is to provide compensation for social and economic costs. An advance payment of \$200 million will be made to cover the building period.

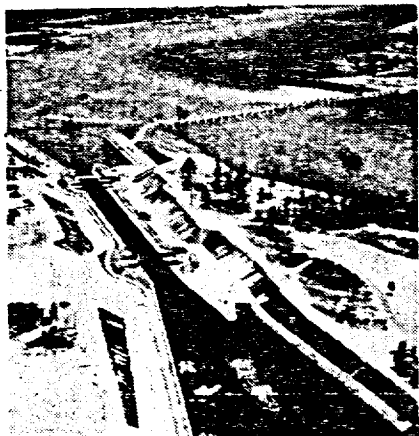
JOINT VENTURES



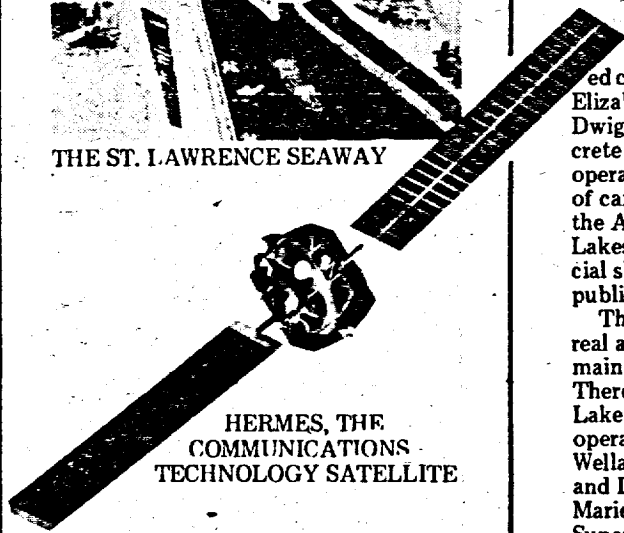
THE ALASKA HIGHWAY



THE RMS-OR-REMOTE MANIPULATOR SYSTEM



THE ST. LAWRENCE SEAWAY



HERMES, THE COMMUNICATIONS TECHNOLOGY SATELLITE

YESTERDAY THE ALASKA HIGHWAY

One of the construction triumphs of the world, the 1,523-mile Alaska Highway took a little more than nine months to build back in 1942. Built by the United States through mountains, muskeg, and mosquitoes, the Highway was a joint defence project with Canada, stretching from Dawson Creek, British Columbia, through the Yukon to Fairbanks, Alaska. In 1946, Canada assumed exclusive control of the Canadian section. Once an emergency wartime road, the Alaska Highway is today a vital transportation link between the principal industrial regions of the U.S.A. and Canada and the rich natural resources of Alaska and the Yukon, contributing much to the development and economy of the North.

THE ST. LAWRENCE SEAWAY

The St. Lawrence Seaway, opened ceremonially in 1959 by Queen Elizabeth II and the late President Dwight Eisenhower, is another concrete example of Canadian/U.S. co-operation. The Seaway is a system of canals, locks and channels linking the Atlantic Ocean and the Great Lakes for the navigation of commercial shipping. The pleasure-boating public also uses the system.

There are 16 locks between Montreal and Lake Superior, and Canada maintains and operates 13 of them. There are seven in the Montreal/Lake Ontario section, including two operated by the U.S.A.; eight on the Welland Canal between Lake Ontario and Lake Erie, and one at Sault Ste. Marie, between Lakes Huron and Superior, also U.S. operated.

TODAY HERMES, THE COMMUNICATIONS SATELLITE

As part of a continuing Canada/U.S. collaboration in the peaceful uses of outer space, this unique satellite - said to be the world's most powerful - was launched from Cape Kennedy in January 1976. Canada designed and built the spacecraft whereas the U.S.A., which provided its high-powered transmitting tube and pre-launch support, carried out the launch.

Hermes, named for the Greek god of science and eloquence, is the forerunner of a new type of high-powered orbiting transmitter, designed to provide a wide range of expanded communications services in the 1980s. At present, it is being used for a series of social, technological, and technical experiments by various groups on both sides of the border.

For example, with *Hermes*, Canadian and American radio astronomers have developed a way of linking several telescopes in real time to more accurately measure the size and shape of distant galaxies and quasars. Students at Ottawa's Carleton University and Stanford University in California have shared lectures over a 45,000-mile earth-space-earth-link. And this is only the beginning.

TOMORROW THE RMS-OR-REMOTE MANIPULATOR SYSTEM

Sometime in 1980, a Space Shuttle will take off from bases in Florida and California, putting a manned spacecraft into orbit for up to 30 days. From the flight deck, an astronaut will be able to retrieve malfunctioning satellites already in orbit, maybe even repair them with a mechanical arm - the RMS - more than 15 m long.

This Remote Manipulator System is being designed, developed, and built in Canada by a consortium of Canadian firms under contract to the National Research Council of Canada. The NRC and NASA, the U.S. National Aeronautics and Space Administration, are co-chairmen of the joint management and engineering working groups for the project.

The RMS resembles the human arm in form and function with shoulder, elbow, and wrist joints, and a hand. It will be capable of handling satellites as big and heavy as a bus.