troduced DATAROUTE, the first digital data network in the country. It was followed by DATAPAC, a packet-switching network.

1974: The two railroads jointly followed suit with INFODAT. In 1977, they inaugurated INFOSWITCH, a cross-country, data circuit-switching network.

1978: The Department of Communications announced the development of **Telidon**, an advanced interactive television service, permitting exchanges of information between home TV sets.

Satellites

Canada is a pioneer in communications satellites.

Telesat Canada, jointly owned by Canadian telecommunications carriers and the federal government, was incorporated by Parliament in 1969 to establish a commercial system of satellite communications serving all points in the country.

ANIK-A, the world's first domestic synchronous communications satellite system, with three units, was launched in 1972. (Anik means brother in the Inuit language.) **ANIK-B**, a single satellite, was launched in 1978 and **ANIK-C**, a series of three, will go up in the early 1980s.

Canada has no launching facilities, so all its satellites have been launched from American rockets at the Kennedy Space Center. They orbit 22,300 miles above the equator and, since their movements are synchronized with the rotation of the earth, they appear to be stationary.

They relay messages—telephonic, telegraphic and digital data—and radio and television programs between their ground stations that serve the vast, thinly populated areas of the North. Their principal ones, called heavy route stations, are at Allan Park, Ontario, and Lake Cowichan, British Columbia. They have dish antennas nearly 100 feet in diameter. There are also remote earth stations at Frobisher Bay and Resolute Bay. Some stations are mobile.

Satellites have become increasingly sophisticated. **HERMES**, which was the world's most powerful communications satellite, cost $60 million. It was designed by the Department of Communications Research Centre and launched in 1976 by NASA in the United States. The United States also provided its 200-watt travelling wave tube, and the two countries used it on alternate days. It was intended to have only a two-year life but it lasted until December 1979. **HERMES** was the first satellite which could transmit to very small earth stations, some only eighteen inches in diameter. It was used in dozens of experimental programs. In one, medical information, including x-rays and electrocardiograms, was transmitted between London, Ontario, and Moose Factory and Kasechewan in the North. Patients hundreds of miles from hospitals were given complete diagnostic tests.