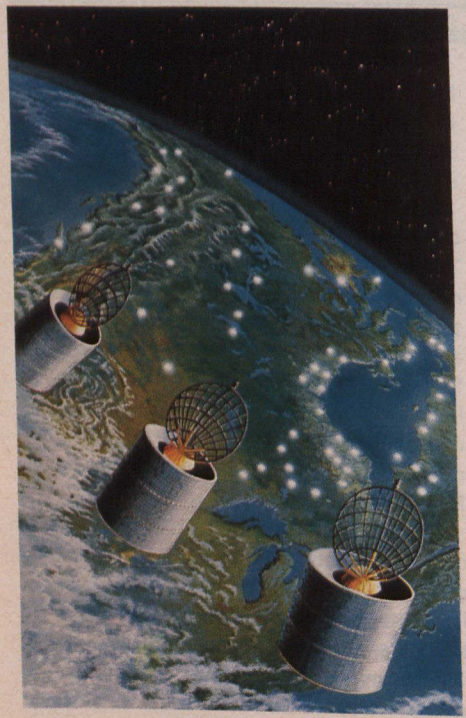
Mitel Corporation products which were displayed at Telecom 83, in Geneva.

also provides consulting services to a number of countries.

Spar Aerospace, the Toronto-based firm that built the highly successful remote manipulator system, *Canadarm,* for the United States space shuttle, recently signed a $65-million contract to build solar energy panels for the *L-Sat,* a 50-metre new generation communications satellite being built by three members of the European Space Agency for a 1986 launch.

The company is also providing two communications satellites for a Brazilian domestic satellite system. This $150-million contract includes the ground control stations.



Artist's impression of Canada's Anik *communications satellites.*

Digital excellence

In the early 1970s, Northern Telecom, in co-operation with Bell Northern Research and Bell Canada, began developing digital switching and transmission systems. Northern Telecom was the first in the world to produce a complete family of fully digital switching and transmission systems.

The digital model is reshaping the whole telecommunications industry. Canadian digital PABX equipment has won wide acceptance in international markets and two Canadian manufacturers, Northern Telecom and Mitel, are among the world leaders in this product.

The electronic office

Like other western countries Canada is in the midst of an information revolution. In 1980, the federal government initiated field trials of integrated electronic office systems within its departments. The aim was also to develop services for national and international markets. About $12 million has been budgeted for the project which will run until 1985 and create some 5 000 work stations for professional and executive employees across Canada.

World's first teletext

In February 1983, Teleglobe Canada, a Crown company responsible for Canada's external communications services, announced it had inaugurated the world's first overseas teletext service, which makes it possible to transmit a business letter from Canada to West Germany or Sweden in ten seconds. Teletext uses computer terminals and transmits data in digital form.

Fibre optics

Fibre optics technology (optical fibres that carry light instead of electricity) has been used in Canada since 1976. In Elie,

Northern Telecom's DMS-100 (digital multiplex system) switching machine at Telecom 83. It has a capacity of up to 100 000 lines and can relate to Integrated Business Networks, integrated voice and data terminals, Autovon military network, Maintenance and Administration Positions (MAP) and Traffic Operator Position Systems (TOPS).

Manitoba, some 150 households were connected by fibre optics in the first field trial of fibre optics systems in a rural community.

Three years ago, the Saskatchewan Telephone Company began to install a 3 400-kilometre fibre optics broadband network linking a number of communities in the province. This digital system is the world's longest commercial fibre optics network and provides full