tures on property amounted to \$60.1 million. Of this amount, \$7.2 million was provided by the Government of Canada as a contribution towards the Canadian content premium costs for the *Anik C* and *D* spacecraft programs and \$52.9 million was invested by the company.

Net satellite expenditures during the year amounted to \$38.9 million. Both the *Anik C* and *D* series of satellites were under construction during the year. There are three spacecraft in the *Anik C* series, which will operate in the 14/12 gigahertz (GHz) band and two spacecraft in the *Anik D* series, which will operate in the 6/4 GHz band.

Earth segment expenditures during the year amounted to \$14 million of which \$5.6 million related to the 14/12 GHz earth station construction program; \$8.4 million was invested in earth station facilities and equipment for the provision of 6/4 GHz service and satellite control equipment....

## Growth in services

The one-hundredth earth station in the Telesat system went into service at Manouane, Quebec, in January and by year's end there were 109 permanent earth stations in service in the system. At various times during the year, up to 19 transportable earth stations were in service, providing temporary broadcast, message and data service for customers.

A ten-year agreement for satellite services on up to ten *Anik* radio frequency channels was reached between the Trans-Canada Telephone System and the Canadian Broadcasting Corporation. This agreement was filed with the Canadian Radio-Television and Telecommunications Commission (CRTC) and has been partially approved on an interim basis.

Negotiations between the company and Bell Canada for the renewal of existing services were nearing conclusion at the end of the year.

In September 1979, the company filed with the CRTC an all inclusive tariff. The proposed Telesat tariff provides a broad and extremely flexible schedule of radio frequency channel services for both full period and occasional use.

In the spring of the year, the decision by the Federal Government to permit outside ownership of television receiveonly stations was greeted with enthusiasm by the cable television industry, some of whose members almost immediately placed sizable orders for earth stations to implement several proposed national and regional satellite-distributed cable TV networks. At the same time, serious negotiations were begun by cable consortia for the radio frequency channel services which will be required to implement their services.

This renewed interest in commercial broadcasting application of satellite technology was further spurred by the findings of the Consultative Committee on the Implications of Telecommunications for Canadian Sovereignty, commissioned by the Minister of Communications and headed by J.V. Clyne. The report included 26 recommendations for statutory, regulatory and institutional changes affecting the Canadian telecommunications system and aimed at enhancing

## Satellite program before Telesat

In 1962, ten years before the launching of *Anik A 1*, the world's first geostationary domestic communications satellite, Canada launched *Alouette I*, the first of a series of Canadian-built scientific satellites.

Alouette I and its successors, Alouette II and ISIS I and II were Canadian-built satellites which formed this country's contribution to joint Canada-U.S. experimental programs to chart the ionospheric environment in which future commercial, military and scientific satellites of both countries would operate. The four Canadian satellites were launched by the U.S. as its contribution to the joint program, and the information gained in the programs was shared by both countries.

The historic reliance of Canadians on communications and transportation to link their vast country, and the early entry of the country into satellite technology made it natural that Canada was quick to appreciate the potential of satellite communications for domestic service.

Legislation to create an organization to plan, design, build and operate a national system of communications by satellite was introduced in the Canadian Parliament in 1968 and the statute, the Telesat Canada Act, was passed and received Royal Assent in the summer of 1969; on September 2, 1969 Telesat Canada first opened its doors for business.



In 1979, a delegation from the People's Republic of China visited Telesat. Heading the delegation were (right) Li Yukui, Vice-Minister of Posts and Telecommunications, and Jinag Xikui, Managing Director of Posts and Telecommunications Appliance Corporation.

the ability of the system to contribute to the country's economic strength and to its industrial, political and cultural sovereignty.

The Clyne Committee Report was followed by a series of meetings of representatives of the federal and provincial governments, telecommunications carriers, broadcasters, cable operators and others to attempt to construct a Canadian satellite broadcasting package which would meet the often diverse needs of the consuming public for services and of the suppliers and regulators to provide these services.

In November 1979, the federal Minister of Communications and the Acting Chairman of the Canadian Radio-Television and Telecommunications Commission (CRTC) announced that the CRTC would hold public meetings to deal with the questions of extending television services to remote areas, satellite distribution of television programming and the introduction of pay-television services in Canada.

## Satellite-to-home programming

Another stimulus to these efforts to take maximum advantage of present and future satellite technology has been the encouraging results to date of the Department of Communications experimental program (Continued on P. 8)