



the south. In 1978 it added an Anik B geostationary satellite to the three Anik A satellites already in space and brought its total number of communications earth stations to one hundred.

The Telesat system has a reliability factor of better than ninety-nine percent. It provides such service as global television relay with local-area television distribution, multiple and single circuit telephone service, computer-data transfer, teletype, facsimile and all forms and combinations of electronic information. Its major customers are the Trans-Canada Telephone system, Canadian National/Canadian Pacific Telecommunications, Bell Canada, Teleglobe Canada and the Canadian Broadcasting Corporation. The CBC uses three channels on a full-time basis, two for English and one for French network television.

The New Generation Satellites

The Anik C and Anik D series have been planned for commercial operation in the field satellite service of the 1980s. Both series were successfully launched during the latter part of 1982.

The 24-channel Anik D 1 was launched on 26 August 1982 and became the fifth satellite to be put into orbit by the United States National Aeronautics and Space Administration (NASA) for Telesat Canada. The satellite, carried by a two-stage Delta rocket, was first injected into an elliptical 'transfer' orbit with an apogee of 22,597 miles. It was then placed in a stationary orbit

22,240 miles above the Earth. Once the spacecraft has drifted to 104° west longitude—its assigned operating station over the equator on the longitude over Saskatchewan—the on-board hydrazine-fuelled reaction control system will synchronize the speed of the satellite with that of the Earth below so that the satellite will appear to 'hover' in one location.



Photo: National Aeronautics and Space Administration

To find which services are or could be available match the number on the station location on the map with that on the key above. Optional services are shown in a white box on the key. Locations not yet in operation are shown as a white circle on the map.