Cable TV

Seventy-four per cent of Canada's 7.2 million television households can have cable television and more than half do.

There are over 450 cable companies of which Rogers Telecommunications Ltd.—Canadian Cablesystems Ltd. (675,038 subscribers) and Maclean-Hunter Cable TV (273,747), both of Toronto; Premier Cablevision, of Vancouver (446,122); and Cablevision Nationale of Montreal (234,643), are the largest.

The companies are required to provide community channels and some cover town meetings, high school football games and other local activities. Typically, they spend between five and ten per cent of their gross incomes on such coverage, and in 1978 the industry spent some $16.3 million.

In Quebec a new cable television network—La télévision française au Québec—was inaugurated last September. It broadcasts the best of the three French networks as well as fifty hours of original programs repeated twice each week to 550,000 cable subscribers in twenty-three Quebec regions.

The cable companies are currently not allowed to offer pay-TV services, but the Canadian Radio-television and Telecommunications Commission is considering ways in which a pay-TV system could be developed.

The Clyne Report

The Consultative Committee on the Implications of Telecommunications for Canadian Sovereignty, chaired by J.V. Clyne, Chancellor of the University of British Columbia, was convoked in 1978 and filed a report last year.

It recommended (among other things) that:

• The Canadian Broadcasting Corporation's services be recognized as the main national instruments for the preservation of Canadian social and cultural sovereignty.

• Private broadcasters be required to provide continuing expression of Canadian identity.

• The Canadian Radio-television and Telecommunications Commission regulate rates for TV cable companies and cable companies be allowed to provide non-broadcast services.

• Pay-television be introduced in Canada with the payments per-program, not per-channel.

• The CRTC be authorized to issue broadcasting licenses to independent corporations established by provincial governments.

• The CRTC introduce a point system for measuring Canadian broadcasting content in terms of quality, quantity and timing.

• A portion of the revenues from cable TV subscriptions be used to produce Canadian TV programs.

• When a Canadian broadcaster buys exclusive rights to a program originating in the United States, cable companies be required to respect those rights. (Two members of the committee dissented on this point.)

• The suggestion that Canadian cable companies delete all commercials from programs originating in the United States be rejected on the grounds that it would be unethical.

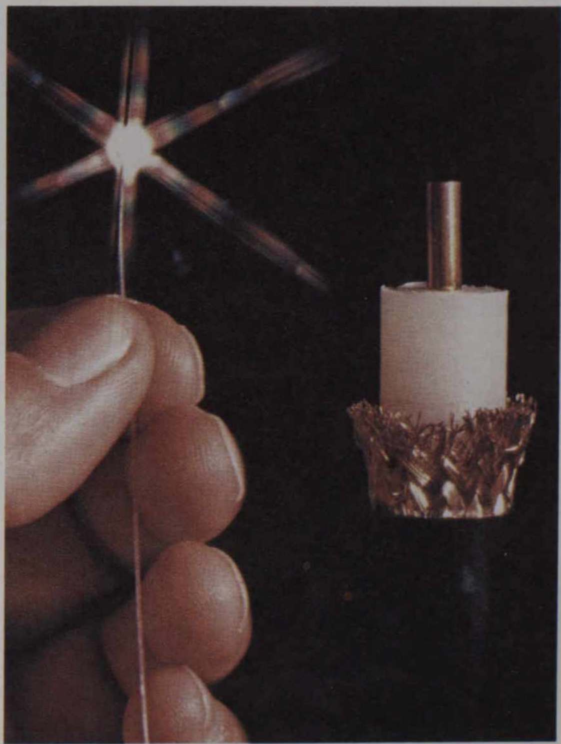
• Canadian satellites be used more fully in the distribution of Canadian TV to all parts of the country.

• The federal government promote plans for the manufacture and marketing of the **Telidon** information system.

• The federal and provincial governments and private industry stimulate the creation of Canadian-owned private databanks.

• A national awareness campaign explain the social, economic and cultural implications of the new electronic information society.

Fibre Optics



The fibre at the left can replace the cable at the right. (The fingers' red tinge indicates the intensity of the beam.)

Information can be carried on intense, tightly focused streams of light such as those produced by lasers (the acronym for "Light Amplification by Stimulated Emission of Radiation").

These can be transmitted through the atmosphere through hollow tubes called waveguides (such as those used in microwave towers) but only for short distances and in straight lines.

Fortunately they can also be transmitted consistently, practically and cheaply through hair-thin,