

**Hydro.**—The Quebec Hydro-Electric Commission, The Hydro-Electric Power Commission of Ontario, Manitoba Hydro, the Saskatchewan Power Corporation, the Calgary Power Corporation and the British Columbia Hydro and Power Authority utilize considerable microwave radio systems for control and communication purposes. These organizations use portions of the radio spectrum from 450 to 10,000 Gc/s.

**Television.**—The two main television interests in Canada, the CBC and CTV, lease private microwave facilities for the relay of television programs from coast to coast. In addition to this, studio transmitter links are used by various television stations where the television transmitter is situated some distance from the studio and interconnection is required. In sparsely populated areas, off-air pickup signals from primary television stations are sometimes relayed via microwave to rebroadcasting sites. Microwave facilities are also used in connection with portable and mobile television pickup where program material is intended for the main studio.

**Industrial.**—Many industrial firms utilize existing public communication facilities. However, some organizations have installed private microwave systems; for example, The Aluminum Company of Canada uses a multiple hop 6,000 Mc/s system in the Arvida, Que., area.

#### **Subsection 8.—Miscellaneous Radio Communication Services**

In addition to radio communication services provided by the Federal Government, extensive radio communication systems have been established in the provinces, mainly for police, highway and forestry protection purposes.

Municipal government departments have steadily increased their use of radio to facilitate operations, particularly as a medium of communication with vehicles—police, fire, engineering, hydro, etc. Such services as taxi, heavy construction, ready-mix concrete, oil pipeline construction and operation, veterinarian and rural medical are participating extensively in the use of radio.

Public utilities, power companies, provincial power commissions, oil exploration and mineral development organizations have expanded considerably their use of radio in both mobile and point-to-point radio fields.

The telephone companies provide an extension of land telephone service, by radio, to suitably equipped vehicles. This service is available in all major cities in Canada and along many of the nation's arterial highways. Restricted common-carrier mobile radio service (this service to vehicles does not permit interconnection with the over-all telephone system but only with specific dispatchers) is available in most major cities in Canada as well as in a number of smaller urban centres. The latter service is provided by telephone companies as well as by other organizations. In 1962 a General Radio Service was established authorizing the licensing of low-power radio stations to permit short distance personal and private business radiotelephone communications. This new service has proved quite popular, nearly 14,000 licences having been issued during 1962-63.

#### **Subsection 9.—Radio and Television Broadcasting\***

Broadcasting in Canada has developed over a period of some forty-five years as a combination of public and private enterprise. Since the opening program from the first radio station was beamed into a few Montreal homes in 1918, the role of the radio and television program in the daily life of the Canadian family has grown to startling prominence. Today, radio service reaches 98 p.c. and television service about 92 p.c. of the Canadian population.

\*Textual information in this Subsection was supplied by the Canadian Broadcasting Corporation, the Board of Broadcast Governors and the Canadian Association of Broadcasters; statistical data were prepared by the Public Finance and Transportation Division of the Dominion Bureau of Statistics.