The major developments in radio services in the past ten years include: broadcasting—both sound radio and television; telephone and telegraph company microwave systems; and mobile radio service for fire and police departments, taxis, railroads, power and oil distribution, construction operations, etc. The major build-up in military radio defence systems has also been most significant, particularly those installed in Canada by United States forces, because these are fully subject to the provisions of the Radio Act.

Most radio systems are becoming increasingly complex as new types of equipment are installed. For instance, the radio relay apparatus used by telephone and telegraph companies is capable of providing hundreds of circuits on one radio transmitter. Sound radio broadcasting has made use of complex directional antennae to permit the establishment of many more stations than previously thought possible with the limited number of channels available.

It may be noted that it has been the policy in recent years to turn, wherever possible, government-owned telegraph facilities over to private communication interests operating in the areas concerned. Some expansion of public communication services has taken place in other areas, but largely as a by-product at stations established for other purposes.

In addition to the radio services under its own control the Department of Transport is concerned with the regulation of the radio services of other government departments, public and private radio services including radio stations on ships and aircraft registered in Canada, with special reference to the assignment of suitable frequencies and the application of techniques compatible with frequency planning. The following Federal Government departments and agencies use radio to facilitate their operations: the Department of National Defence, the Department of Agriculture, the Department of Citizenship and Immigration, the Department of Fisheries, the Department of Mines and Technical Surveys, the Department of National Health and Welfare, the Department of National Revenue, the Department of Public Works, the Department of Northern Affairs and National Resources, the National Research Council and the Royal Canadian Mounted Police.

Subsection 1.—Radio Services

Services of the Telecommunications Branch of the Department of Transport in aid of marine and aeronautical navigation and meteorological communications are described in this subsection. Details may be obtained on request from the Department of Transport, Ottawa.

Radio Aids to Marine Navigation.—Radio aids to marine navigation are provided for about 4,000 radio-equipped Canadian vessels and almost as many foreign ships using Canadian waters. A safety and communications service for shipping is provided covering the East and West Coasts, the Great Lakes, the St. Lawrence River and Gulf, Hudson Bay and Hudson Strait.

Coast Radio Stations.—Coast stations provide a safety watch and communications service for ships at sea and provide, as well, regularly broadcast weather reports, storm warnings and notices of dangers to navigation. The stations carry out communications by radiotelegraph and/or radiotelephone, and many of them provide connections to land telephone lines so that ships may communicate directly with any telephone subscriber. At Halifax (CFH) and Vancouver (CKN), shortwave facilities are furnished for world-wide communications. These stations participate in the Commonwealth long-range ship communication scheme.

The coast stations on Hudson Bay and Hudson Strait, in addition to the regular services, provide commercial communications for posts of the Hudson's Bay Company and various prospecting and development organizations, make weather observations, handle administrative traffic and assist aircraft with information, landing conditions and direction finding bearings.