

consult each interested company would be impossible. The most appropriate approach to this problem seems to be through the medium of the Canadian Radio Technical Planning Board and I would urge you to review your problems, think of the future of telecommunications in Canada--with particular emphasis on radio frequencies-- and have your representatives present them to the Canadian Radio Technical Planning Board for discussion with the Department so that they may be taken into consideration by our delegates.

These are our immediate problems--but what does the future hold for telecommunications? What more do we need in the line of public communications?

We are bound to see, I believe, the extension of telegraph and telephone service to remote areas as yet unserved, increased capacity on all communication systems to permit expansion of the private wire teletype and data processing services, and increased telephone cable capacity and intercity dialing on our telephone systems which will, of course, necessitate extension and expansion of existing microwave systems.

These things present a challenge not only to the communications companies but also to the telecommunications manufacturers who, in the final analysis, provide the tools of accomplishment.

As for broadcasting, colour television is, without question, the next forward step. Manufacturers have an important job in this field. Techniques must be evolved which will permit lowering colour television equipment costs. Once this is done, a fertile field will undoubtedly be opened up.

Dealing with the "special services", one of the most outstanding needs of aviation and marine users is an "area coverage" position fixing system suitable for short and long range navigation. This, of course, should be related to some international standardization and difficulties are anticipated in this regard.

At home we are approaching a point where the speed and density of air traffic will make it necessary to have faster and more accurate means of aircraft control. This need is already felt at the larger airports and is becoming a problem on most of the heavier travelled air lanes. Possibly, the answer lies in the establishment of some sort of centralized control where data processing equipment can be used to correlate information essential to the control of aircraft in flight. This could involve continuous position finding for all aircraft in a given area as well as their height, speed and direction of flight.

Strategically located radar stations might obtain this information and pass it by coaxial cable or microwave to computers at control centers for analysis and any necessary instruction to the aircraft.