

fairly generally circulated. Where large amounts of power are available rabbit ears will work.

For example, I have seen rabbit ear reception in Windsor on UHF television receivers from UHF stations in Detroit. Generally speaking, however, taking receivers as a whole, I believe that UHF receivers require a little better antenna than does a VHF one. But the main shortcoming is that the receivers were just not built for UHF capability and the UHF capability that has been provided has been done only in a halfhearted way to meet the requirements of both the U.S. and Canadian laws. As you have said, it is an extremely difficult tuner to use. It is not well understood; it is an inconvenient thing to use.

**Senator Smith:** You almost get the feeling you are lucky when you get the station?

**Mr. Switzer:** And you really don't know what station you have tuned to.

**Senator Prowse:** No.

**Mr. Switzer:** I should point out in elaborating the role of cable television, for example, on cable T.V. systems in Southern Ontario, we receive UHF Channel 17 from Buffalo. That appears on the receivers of our cable subscribers as a VHF Channel Station. For example, in Toronto, that is Channel 10. Our subscribers in Toronto when they wish to tune to Channel 17, which is the UHF Channel, tune to Channel 10. They don't have to fool around or anything like that.

**Senator Prowse:** Just go to Channel 10 and that's it.

**Mr. Switzer:** And there it is.

**Senator Prowse:** They receive the station you have picked up for them?

**Mr. Switzer:** Yes.

**Senator Prowse:** On the services that you provide now, how many channels are you providing?

**Mr. Switzer:** Well, even in Toronto...

**Senator Prowse:** Even if the sets had the capability. Let me put it this way. Suppose our sets had an unlimited capacity. How many channels can you carry for programs you can carry at the same time?

**Mr. Switzer:** Generally speaking, 12. This is in practice reduced, in Toronto for example,

to 10 because of the technical problems of their being two high powered television stations on the air in Toronto which cuts us back from 12 to 10.

We don't find it technically feasible to distribute at UHF frequencies—we have to convert them. We feel restrained at the present time from using channels which are not normally assigned to television service. This is for fear of either causing interference to other radio services or being interfered with by other radio services. We feel, at this moment, constrained to the use of the 12 normal UHF channels and due to local circumstances this is sometimes reduced to 10.

In Montreal for example, where there are four powerful transmitters its number is reduced even further.

**Senator Prowse:** In other words, the situation is that your limitation at the moment is created by the receiving sets in Canada?

**Mr. Switzer:** Yes.

**Senator Prowse:** Which has what...

**Mr. Switzer:** 12 channels.

**Senator Prowse:** And then out of those you have to deduct those channels where, even with the rabbit ears taken off, you could still have a shadow coming in from another station?

**Mr. Switzer:** A direct pickup from the local powerful transmitter.

**Senator Prowse:** So that it cuts you down to about 10?

**Mr. Switzer:** Yes.

**Senator Prowse:** We have had information put in front of us, I think chiefly through our researchers, that you can run up to eventually 1,000 channels or thereabouts. With the cable you have today, suppose we had sets that had the capability of picking up a great many more channels than they have now. Let's leave it in a general way like that. What would be involved in providing let's say a 40 channel capacity instead of the eight channel capacity?

**Mr. Switzer:** A principle consideration, Senator, is the electronic equipment and what we call the passive things—the dividers that take one line and branch into two. In practical terms the only part of our plant that we could reuse is probably the cable itself—the