

and better than disc recorders under certain circumstances. There are two types of tape recording machines, the portable and the fixed tape recording machines.

Now, at the beginning, tape recorders, I mean the portable ones, were not so very good that we cared to employ them. Our engineering division opposed very strongly the purchase of tape recorders and even wire recorders because at the time they were not up to our standards. As soon as they became perfected to give better results we did buy some portable recorders. They can do a very good job under certain circumstances, but they certainly are not up to our standards for musical shows. You cannot record a good musical show on a portable tape recorder with any satisfaction so far as we are concerned. We use them on outside programs, special events, where they can do a fairly good job and sometimes a very good job.

Now that there are on the market some good fixed tape recorders we use them, and we buy them. We bought them for Winnipeg because in Winnipeg we do a lot of recording for delayed programs originating in the east, holding them there for a number of hours and re-broadcasting them in the western provinces at the proper time. We have them in Sydney for the same purpose with respect to Newfoundland. We have four now in the new Montreal Radio Canada Building and we propose to buy some more as soon as we have the money to buy them.

Mr. GAUTHIER (*Portneuf*): How many tape recorders have you in Toronto?

Dr. FRIGON: We have none in Toronto. We have portable ones, but no fixed ones. You simply cannot scrap \$2,500 recorders overnight because there is a better tape recorder on the market. We are gradually changing from disc to tape recorders. No doubt Toronto will get some. I do not know when but probably pretty soon. The tape recorders on the market now are good machines and are cheaper to operate than the disc recorders but the reason we do not buy tape recorders for all our studios is because it would cost so many thousand dollars that we cannot afford it.

The CHAIRMAN: What is the cost of these tape recorders?

Dr. FRIGON: About the same as a disc recorder, a little more expensive. They come to a little under \$3,000 apiece. The figure I have here is for the best tape recorder we can buy. Now, the cost of these is about \$2,400.

The CHAIRMAN: Portable ones?

Dr. FRIGON: No, that is a fixed tape recorder., the corresponding turntable for a disc recording machine is \$2,200 or \$2,300.

Mr. RILEY: Doctor, I gather that tape recording machines do not meet the standards of the C.B.C. in regard to musical programs?

Dr. FRIGON: Pardon me, they do when you talk about the portable machines; those \$2,800 machines they are very good for that,—

Mr. RICHARD: What are those we saw in Montreal?

Dr. FRIGON: —but the portable ones do not give the same high quality or fidelity as the fixed ones, but in recording rooms such as we have in Vancouver, Sydney, and Montreal just now, we would rather use tape recorders than the others, and in the long run they are cheaper.

Mr. GAUTHIER (*Portneuf*): And as to the cost of recording, which is the cheaper?

Dr. FRIGON: Well, the tape recorder is cheaper because you may use the same tape over and over again; you can wipe it out and start over again.

Mr. RILEY: How many recordings can you put on the one tape?

Dr. FRIGON: It all depends on the length. It is forty-five minutes per tape.