MONTGOMERY WARD

CHICAGO 7

October 10,

Mr. John S. Penn WHA Historical Research Project, University of North Dakota, Grand Forks, North Dakota

Dear Mr. Penn:

I have your recent letter and apologize for being so late in replying. Frankly, we were somewhat confused where to send the information. The letterhead shows the University of Wisconsin at Madison, and it also indicates you are from the University of North Dakota at Grand Forks.

I am very happy to in any way help on compiling the memoirs of Professor Terry. In my contact with him, both as a friend and as a tudent, my radio days date back to approximately 1912 or 1913. At that time, I was in grade school and early high school. In 1915 I had my first radio license, the call letters were 9NQ. At that time, I believe there were only about ten or twelve licenses in the entire State of Wisconsin. Since there were so few licensees, it is quite easy to imagine that all the boys holding a license knew each other well. Living fairly close to the University, I of course took every opportunity of visiting the Engineering Department whether I was invited or not.

My contact with Professor Terry was very encouraging and probably was the reason why I continued with the hobby that finally led to my bread and butter work. Very little was known about wireless in those days. There was no such thing as a commercial part that one could buy over the counter as we can today. Each piece had to be made. Everything was "cut and try", and without the encouragement and advice I had from Professor Terry, I doubt whether it would have been possible to continue on.

There was one particular event that is outstanding in my mind with Professor Terry. I believe this incident happened in 1917 or the early part of 1918. In those days radio tubes were as strange as flying discs. They were called "aladdins lamps". By saving a nickel here and a dime there out of a meager allowance, and also by doing odd jobs during the summer, I accumulated enough money to buy an "aladdins lamp". The price was \$55 which was a lot of money for any boy to accumulate and then to spend it for what my Father thought an electric light globe. I probably had a greater thrill out of that "aladdins lamp" than anything I have ever owned since. It was so much more sensitive than the crystal detector and very superior to the electrolytic detector.

After the tube was in operation for some time, it ceased operating because it became "hard" and tended to oscillate and of course, it became practically useless. I took the problem to Professor Terry. He explained what the difficulty was and that there was only one cure for it, and that was to soften the tube by reducing the vacuum. This had to be done by partially collapsing the glass bulb

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or envelope. If you are familiar with radio tubes, you will understand that this could only be accomplished by heating and softening the glass and then hoping that the tube would not collapse completely. You could imagine how I felt as Professor Terry was holding this tube over the Bunsen burner. I felt as though my life was hanging by a slim thread. The operation however was successful and the tube functioned wonderfully well from them on.

Incidentally, I still have that tube today inits original

form.

In your letter, you ask if I recall listening to 9XM. I surely do. In fact, I distinctly recall never wearing the headphones to hear 9XM, since it was plenty loud by laying them on the operating table. I also can distinctly remember the attempt of broadcasting music. Some of Professor Terry's early experiments on music broadcasting were with an arc modulated with an air jet and also with electronic tubes. I distinctly recall seeing the apparatus in operation and also listening to it from my home. The first attempts to broadcast music were only legible for a few seconds. However, it could be distinguished as music and of course at that time, even with this distortion and the continuous breakdowns, it was something marvelous to hear. Over a period of a year, the improvements were noticeable and speech finally came through were it was very understandable.

I don't know if this is the type of information you want. If it is, I think it might be possible to have actual discussions with friends of mine who were in radio in the early days. I am sure that with a "bull session" and a little reminiscing, I might be able to give you some additional information.

Also, I might mention that I still have most of my early apparatus that was used from the period of 1917 to 1923. I have the tuning equipment, the transmitter, rotary gap and the old original tube. You can understand I connect a lot of sentimental value to these pieces of early apparatus because my hobby finally turned to be my life's work. If you are interested in photographs of this apparatus in use, I can supply them, or I will be glad to loan you the apparatus.

Again, I don't know if my letter will convey information you are interested in but understand that I do feel grateful for the help that I got in the early days and if I can in any way be of help, I will be more than pleased to do so.

Sincerely, MONT COMERY WARD & COMPANY

P. J. Faber, Manager Radio and Television

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