

This is a test ---This is a test!

I'm writing this just to find out, if db prints it, whether anybody out there is interested in the early years of radio - audio was secondary then! If someone is interested, please let db know about it. If so, I'll write more.

Next April 17th I'll be 79 years old. I think I've outlived most of the people I used to work with. There may be one or two here or there--if so, I'd like to hear from them.

More than 60 years ago there was no audio to speak of, unless you could call the bird-like whistles on the crystal receiver audio. Those bird-calls were the arc transmitters which were mostly occupied in transmitting business messages from the rest of the world to the U.S. I think I was 11 years old (1916) when I finished my first crystal set. I followed all the instructions printed in the old New York Sun. The Sun had a page devoted to "experimenters", as we were then called, I waited anxiously until the round box of oatmeal was finished and empty so that I could wind my first coil, tapped as per those instructions. Then the variometer, I think, I don't believe tuning condensers were available then. I had saved up my nickel allowance for more than a year and finally came the grand moment. I went into a store and bought a crystal, imported from Germany. It came in a little blue plush box, like a diamond or some other valuable jewel. Indeed it was valuable. It cost \$10. and left me broke for a year. And the following week magnetite was discovered in Michigan, I think, and a large hunk of crystal could be bought for a dime. Ah, how I regretted my rush to buy that first one! I still had to buy another necessary piece of equipment-Brandes headphones. Whether they were the only headphones available then or the cheapest I could get, I don't remember. But they worked fine as far as I was concerned.

Radio was my premier hobby, photography came next. I had acquired, somehow, a Kodak pocket Premo 3A, I think, which produced a negative about 3" x 5". In spite of the howls of protest from the rest of the family, I used the bathroom as my darkroom and produced a few murky prints which may yet exist somewhere. But I soon put photography on the back burner - radio was much more interesting.

I had an intimate friend then named Bobby Nespor. Once he told me that his father, who was blind, would love to have a crystal set of his own - so I made one and Bobby's father came over to try it. I don't really know why he found that so sad. Tears rolled down his cheeks.



It was quite a few years before I could buy my first tube. I think it was a WD11. With it I made my first tuner using a variable condenser for tuning the grid circuit. The WD11 was a 3-element tube (I forget when DeForest invented it) and I learned the secrets of using a grid-leak and a plate by-pass capacity. It was a bad year for me then-I think it was 1918 and my favorite unckæe, Max, died of the flue in Camp Yaphank on Long Island. Also my sister Sara, whom I still mourn.

In 1920, at 15, I was admitted to Boston Latin School. I didn't consider that any great feat at the time, but when I look back, considering I left school while a senior in the Class of 1923, I must have been a bookish bore! When I left Latin School there was a great divide in my life. I was surprised one day in our homeroom by overhearing my homeroom teacher, a Mr. Stone, make a remark about a "dirty Jew"! Although there was one other Jewish kid in the class I could not suffer that remark to pass unchallenged. Therefor I got up and asked Mr. Stone to opologise. This he would not do, especially since I would not accept an apology unless it was delivered before that same class. With Mr. Stone's refusal, and that of the headmaster, I had no further recourse, so I left school that day and have never again enrolled in any school, if you will except the two semesters I taught tape editing at N.Y.U. in 1951-2.

There wasn't much work I could do at 18. I knew a bit about radio and tried to get work in that field. When I was younger I had got work at a summer resort in an amusement park. But that job, although highly paid, I thought, at the time, only provided work during the long summer, from May through September. That was my summer work for a few years, while in the winter I finally found work in a radio factory. Of course, the reason for no manufacturing jobs in summer was because of electrical noise on radio - AM only at that time, of course. My first job, in Boston, was with Automatic Radio, then a one room shop on Hanover Street in Boston. I think that we made everything but the tube - or tubes, if we added the usual 2-stage audio amplifier. My bosses were Dave and Jack Housman. Jack Housman did the engineering, Dave did everything else, while I and one rather buxom Italian girl did everything else there was to do. Mostly I spent a lot of time putting together variable condensers from stamped aluminum plates and adjusting the plates so that stations were received approximately on the correct wavelength.

In the fall of 1924, I think ( this is all from memory, so if I strike out on a few dates please excuse) I got work as a wiring foreman plus assistant to Dr. Green-whittier Picard, who was then experimenting with antennas at



Wireless Specialty Apparatus Manufacturing Company, Jamaica Plain, Massachusetts. That place was located only a short distance from where we lived at that time, in Dorchester, Mass., another suburb of Boston. Wireless Specialty manufactured radios for anybody who could pay for them. I remember R.C.A. mostly, although I think we then made radios for Westinghouse and G.E. too. I was kept busy teaching a bunch of girls how to use soldering irons. I don't know if they were the first girls to be taught how to solder, but I had quite a job with teaching them to hold a soldering iron correctly. They absolutely refused to hold an iron like a man would, so I designed an apparatus whereby the iron was suspended over a pulley, with a weight on the other side. Thus, the girl could learn to grasp the iron by its wooden handle, draw it down to the joint to be soldered, apply the iron until the solder "ran" properly, then let the iron go. In the early 6-tube RCA catacomb (the guts of the first superheterodyne) we had learned to leave a lot of slack in the fine -wire leads in the set, because if the leads were made tight they broke upon being immersed in the wax mixture. Many of the first "cata" were just junk after those leads broke-it didn't pay to melt them out and rewire.

Al Paley and I spent a lot of time devising a low-voltage system for waking ~~the~~ girls up after lunch, when they were inclined to become somnolent. We rigged a thin wire you could hardly see to all the metal stools the girls sat on and hooked it up, through a pot, to the legs of the stools. With the first shock those girls ~~was~~ really woke up in a hurry. Production for the first week after that rose greatly. After a while I guess they got used to the shock routine and wiring output lagged.

I was fired from Wireless after <sup>ward,</sup> <sup>be</sup> in a misgotten desire to improve the tom-cat (the power-pack that fed the catacomb). The tom-cat was wired conventionally for that time. The only thing unusual was that 4 vitreous enamel covered wire resistors were hooked up in paralell (parallel?) with a wire soldered to each lug of the four lugs on the resistor. That looked like a waste of a lot of wire to me so I wired all the lugs in paralell with one bare wire and used the same wire, insulated, to its proper place in the circuit. The tom-cats worked fine, of course, but I didn't figure on the way things are done when design engineers have the last word. The superintendant fired me, with a little too much satisfaction, I thought, for not adhering to specifications. But I did notice, thereafter, when I got an RCA tom-cat to repair, that they continued to be wired ~~the~~ <sup>my</sup> way.

Luckily, I was fired in time to get to work on my summer job at Nantasket Beach, "barking" or "bally-hoo" man for any of the novelty rides that needed more

Customers.



For a couple of months I "barked" in front of the "Custer Cars", little battery operated cars with big rubber bumpers. People, especially kids, loved the things.

There were still a couple of weeks before I could report for work at Paragon Park at Nantasket, so I occupied myself fixing radios for my friends and neighbors. There was a real estate man in the next block who was having trouble, his daughter reported, with a radio he had just bought. He had bought a DeForset "tombstone". The name was applied to this otherwise excellent radio on account of its shape; with a papier-mache enclosure on top coming to a point, the thing did resemble a fancy tombstone. I visited the place, together with a friend of mine from Wireless Specialty whose name I no longer remember, Jack something or other. We examined the radio completely - batteries, circuits, loudspeaker etc. and could not find anything wrong at all. I must tell you that this receiver was a 4-tube reflex with a loop concealed in the bottom of the cabinet. Jack and I ruminated for a while; then both of us came up with the same idea. We grabbed that tombstone and moved it about 15 feet away from a cast iron statue it was next to. When we then turned on the radio it worked fine, even getting a few stations more than 25 miles away. Astonishing for an AM radio in those days.

Paragon Park, it was rumored, was owned by a man named Dave Stone, a dour man who very rarely smiled. It was a typical amusement park of that era, with a roller coaster and a Virginia Reel and just about every other novelty ride of that time. I especially remember the Caterpillar ride, because I still remember, with horror, an event that has troubled me for many years. The Caterpillar was about 30 feet in where I usually stood in front of the Custer Car ride. In front of the ride itself were almost always a number of women, with their children playing around them. Many, many times a day I would warn those women, through my megaphone, to watch their children carefully. But, one day, what I had dreaded happened. A child of about 3 years old crept up onto the platform surrounding the Caterpillar and stuck his head under the then stationary car. I did not see the actual event but my attention was alerted by the screams I heard. One of the fellows on the ride ran over to see what had happened. I ran over too, just in time to carry the cut off-head to the Park office.

Usually things were routine. Once in a while tragedy struck. One of my chores was to announce acts and cue the drummer of the band to give his "drum roll". Once or twice I cued in the drum roll and nothing happened. One I remember was when, the act, a trained dog act, was slated to appear and did not. We all rushed down under the Palm Garden, where the dressing rooms were, to find out what had happened. There was the trainer, with his throat ~~gone~~ torn out, and his dogs running around slavering blood. Joe Stone, Dave's son, took out his gun and killed all

THOSE CRAZED SIBERIAN WOLFDOGS. Thus ended that dog-trainer!



There were other accidents which disturbed our accustomed tranquility. There was a motorcycle act one summer which continued, for a while, to amaze the customers. This cyclist drove his motorcycle down a steep incline, turned over in the air, motorcycle and all, and landed upright to great applause and a clash of cymbals from the band. One day this act had its final performance. The cyclist, who drank (I knew) for his false courage, landed with the cycle on top of him. That act was over!

Not all was tragedy at Paragon, however. Sometimes Tragedy was averted at the last moment. Like that time a drunk fell out of a roller coaster car and stuck in a crotch of a crossbeam of the coaster. When we retrieved him by extension ladder he was still drunk but unhurt. There must be a special angel in heaven to save drunks from harm! Another thing I remember was when the girl diver froze on the 92-foot up diving platform and remained there. I cued the drummer 3 times and still she did not move. Sensing trouble I ran over to the base of the ladder with, I think, Tim O'Brien and we both climbed up to where she stood. I could hardly unclench her hands from the handrail. She was stiff and almost unconscious. Tim and I carried her down the ladder and to the first aid room. Then I remembered the reason behind her terrible fright. A week before, at another resort, a woman diver was killed when her head struck the edge of the tank. We had many diving acts at Paragon but the best, in all seasons, was a husband and wife team, Swedish, I think, who never missed, in any kind of weather.

We even had a public address system at Paragon. It was an amplifier which probably generated 20 or so watts of audio. I think it had two W.E. bottles plus a few small tubes. I don't remember the microphone but it was fairly distortion-free for its range. Fishermen told me that they heard me talking about six miles out to sea, which is not bad for Class A 20 watts. The speakers were two horns mounted on top of the Palm Garden roof at one end of Paragon. I believe that this mike was an early W.E. dynamic. (Was that available in 1923?).

The Park opened to the public at 1PM. Before that time I used to swim a little and run a lot for exercise. The beach was about 3½ miles long, so I used to run its full length and back. It was some time before I was able to get my second wind; before I got my second wind it was close to agony to keep running, but I did and things got better with time. Once, only once, I volunteered to take an oar in the lifeboat when it was undermanned one day. I had my usual bad luck - the surf was so high when we got back that we couldn't land on the beach without taking the chance of smashing the boat. So we stayed out, I with only swimming trunks for clothing. When we finally made it to shore the boys took me right down to the hospital, where I remained under a spray for sunburn for a couple of days.