

For the CHRS Website, Events, year 2027

The Rainbow Kids in the year 2027, visit the Museum of the California Historical Radio Society:

(By and Copyright Bart Lee, 2017)

-- "Daddy, what's radio?"

-- "You'll see in a moment, Sweetie!"

The Rainbow Kids, or at least the eleven of them in Rainbow Cloud number 9 (Oakland), gaze up at the old building on Alameda's Central Avenue. The flight of stairs leads up to two flanking columns. They climb up. It reminds them of some ancient temple they studied, maybe in Greece. At the vestibule, a totally life-like robot, an animatronic young man, greets them.

-- "Hello, Rainbow Kids! Welcome to the Museum! My name is Charles Herrold, but you can just call me 'Doc.'" And needless to say, animatronic-Doc looks just like the historical Doc Herrold.

("Sweetie" whispers: "Daddy, what's a museum?" Once again, Daddy replies: "You'll see in a moment, Sweetie!")

Doc Herrold continues: "Please come into the Great Hall," Doc asks the kids. The Rainbow kids marvel at all the weird old stuff in the Great Room, and have no idea what any of it is, or was. Doc goes on: "A docent, each of whom is a trained volunteer, will hand each of you a special set of wrap-around glasses. You may have something similar in your VR games. These glasses are our programed Augmented Reality spectacles. Once you have them on, I will appear before each of you in the middle of the Great Room."

"I see him, I see him!" many shout out at once. And there he is in the center of each Rainbow Kid's field of vision, in full color

and three dimensions. Doc starts out, as they hear through their specs: “We here at RadioCentral want to tell you the story of radio. Radio was, and is, and art and a science. It made it possible for people all over the world to hear each other for the first time. You will first see today, and you will hear, one of the first such radios, called crystal sets. I will explain them to you and answer any questions. Keep in mind that these primitive devices are the forerunners of your hand-held communicators of today. Those are radios, too! Ready to start?”

“Let’s go!” Some of the more enthusiastic kids yell, as others merely look dubious. Doc says: “Behold a crystal set” pointing to a funny looking board with some wires in a coil, and various little things connected, that sits as real as can be on a real table. “Gather around,” Doc says, as he points to a wire going out the window. “That’s an aerial, a wire up in the air. Some thirty miles north of here is a radio station, known as KCBS. You may have heard it when your auto-car travels around if your parent or guardian chooses to drive it. KCBS tells drivers if any traffic has failed to manage itself, every ten minutes. I started that station in 1909, and by 1912 I was broadcasting. Here’s what it looked like then, or rather in 1916.”

Each kid sees the photo of the station with its two conical coils, and Doc in the background with his slide-rule (although they haven’t the faintest idea what it is or does). But the image is three dimensional, in full color and the men seem to move a little.

“So,” Doc goes on, “in those days nobody had any thing to carry around to keep in touch or amuse themselves with.” The kids are aghast. “So boys built crystal sets like this. They put a big earphone to their ear (not like your little earbuds), and touched a ‘cat’s whisker’ to a mineral crystal, like this...” As soon as he touched the wire to the crystal, each kid heard music, weird old

music to be sure, but music just like what would have been heard on a crystal set more than a hundred years prior. They marveled.

“Now I will do a little time-trick,” says Doc with a twinkle in his eye: “Watch and listen...” He adjusted the cat’s whisker, and suddenly each kid could hear old Stan Bunger on KCBS, telling all about the traffic on the new San Rafael to Silicon Valley over-bridge.

Before many could react, a young lady appeared. She wasn’t much older than the Rainbow Kids, but she wore a very old style and very long, pink dress with lots of buttons. (Some of the Rainbow girls wondered how she ever got in and out of *that* costume.)

“Hello” she greeted all warmly, as Doc faded away. “My name is Kathleen Parkin. I lived in Marin when Doc lived in San Jose. I liked radio too, although we called it wireless telegraphy then or just plain wireless. I liked it so much that at age 15, I took and passed the government exams to become a professional wireless operator on ships and land, as well as an amateur radio experimenter, in 1915. My brother and I started a company in San Raphael to make crystal sets and parts. Several of our radios are right here on this next table.”

As she turned to the table, each kid saw before ’em the cover of the 1915 *Wireless Experimenter* with Kathleen Parkin on the cover, in her pink dress. As that image faded, Ms. Parkin began to point out the Parkin radios and talk about their features. She called several of the Rainbow Kids by name. Parents in advance of their visit had volunteered that personal information about them. The kids really liked that. She held their attention, and really interested them when she told them: “Next you will hear from the inventor or one of the most important devices of the last century, known as the

vacuum tube.” She too slowly faded away, and a crusty old man faded in.

“Lee De Forest’s the Name, and Radio’s the Game” the old guy introduced himself. “I invented radio. I practically invented wireless too. Yale bestowed on me a Ph.D., which is something none of those other would be claimants to my fame can claim. I’m the ‘Father of Radio’ according to my own book, titled ‘*Father of Radio*.’ I made a lot of money in radio stocks. And then when I got tired of radio, I put sound into movies... Well, “movies” are like VR-vids for you kids, but simpler. And then I married a movie star, which in those days was like a VR-star. And this is what I invented” he went on, pointing to a small round glass ball.

A dubious kid spoke up: “That doesn’t look very important...” to which Lee De Forest responded: “Well, now sonny, just look at this!” At which point each kid saw a 3-d color cartoon explaining vacuum tubes, radios, transistors, and silicon chips -- how we got from the crystal set to the Internet of Things. The museum calibrated this sort of presentation to each anticipated audience. De Forrest continued: “And look at these beautiful old radios for home entertainment my company made as I amused myself in Hollywood.” He walked by one on display, and seemed to turn it on, whereupon, it lit up, its vacuum tubes aglow. After he turned the loop antenna on top, each kid heard President Roosevelt saying “The only thing we have to fear is fear itself...” as an image of that President in one of his radio broadcast “fireside chats” appeared to each kid.

De Forest beamed, taking credit for the 20th Century, or at least the good parts. “Before we move on to Television” [a term that mystified the kids], there is someone else you should meet. He did help invent wireless, even though he was a limey” [another term that mystified the kids]. “Kids,” De Forrest continued, “meet Bill Marconi...”

Lee De Forrest faded away and before each kid appeared a young man, very well dressed in a very antique sort of way. In a plummy upper-class English accent, he opened with: “Good morning, you young ladies and young men.” My name is Guglielmo Marconi, but you can call me Bill, just as that annoying Yank did. As a boy, I lived in Italy with my parents. My father sold silk, quite a lot actually. My mother was Annie Jameson, whose grandfather practically invented the modern form of an adult beverage called Irish Whisky -- which you should not drink under any circumstances.... But I digress.”

The kids next see Annie Jameson, in another one of those many-button dresses, who tells them: “I knew my young Bill was onto something, so I supported him and introduced him to all my rich relatives in England. His blockhead of a father, although we love him dearly, just wanted him to sell silk.” She fades away.

“As a boy in Italy, [Marconi continues] I heard about a German by the name of Hertz” [who appears for a moment, making sparks] ... I knew of a Professor with similar interests in Italy. I studied briefly with him. I set out to show that a spark here could cause a response there, wherever. Others knew this, such as my later employee Oliver Lodge [his image appears]. But I thought I could send telegraph messages, simple texts. Perhaps ‘War Declared,’ that sort of thing. Ships at sea would surely want to send messages back to shore. [Here the sounds of wireless telegraphy ring out of the crowded ether, and their ephemeral messages appear and disappear]. Perhaps, heaven forefend, even ‘We’re sinking!’”

Marconi now moves to a display of early wireless gear on a nearby table. He adjusts various components. He uses a large telegraph key to start and stop a large and real rotary spark gap.

The room fills with the smell of ozone from the spark. The Rainbow Kids sort of like the smell, even if it is rather sharp.

“And in 1912, that’s exactly what the RMS *Titanic* had to send [here appears a scene from the movie]. The North Atlantic iceberg and the Captain’s foolishness cost many their lives. But my wireless got word of the distress of the *Titanic* -- S O S -- *Save Our Souls* -- out to nearby ships, and they saved many lives by coming to the rescue.” Marconi pounds out S O S -- *dit dit dit - dah dah dah - dit dit dit* on the key and the sparks spell it out. “Here, let me show you the wireless room in the *Titanic*. [Here appears the CGI reconstructed wireless room, now in 3-d].

“Now you will,” says Bill to his young guests, “trade your Augmented reality specs for full Virtual Reality helmets.” Docents walk among the kids to help. “You will be one of the two Marconi wireless operators on the *Titanic*. You will sense the movement of the ship. You will hear the wireless messages coming in to the passengers and warnings of ice from others ships. You will feel and hear the iceberg tearing the hull of the *Titanic*. You will see all the results of the panic of the sinking. You will send the S O S and the last messages. You will abandon ship at the Captain’s order. One of you will die in the frigid sea...”

The Rainbow Kids, and their parents and leaders, stand transfixed as all of this does indeed appear before them in Virtual Reality. Ozone fills the air as they can see their own spark transmitter trying to save everyone. Soon the dark, cold water of the winter North Atlantic closes in. The kids shiver. Then they see the lights of the rescue ships. Marconi reappears to each of them.

“Well,” he tells them, “that terrible sinking proved the worth of radio. The Great War that started a couple of years later did too. And after that war, my company put together a worldwide system of radio and cable communications that sustained the British

Empire. [Rotating global maps appear, with the sounds and texts of messages flying around the world]. But now I'd like to turn you over to my colleague Doc Herrold again, to tell you about radio as entertainment.”

Doc reappears as Marconi fades. “After that war, many people took up broadcasting, even De Forrest. Big companies started to manufacture crystal sets [he points to some on a table] and so did many little companies such as Uncle Al's in Oakland. [Pointing one out among the displays]. Radio stations appeared using wartime technology. Companies like RCA made better radios for homes, using the vacuum tubes invented by De Forrest. Radio broadcasting brought music, news, sports, and dramatic daytime ‘soap-operas’ for housewives, everything into the home, including weekend dance music from the local hotel. [Radio program sounds fill the air]. The radio broadcasting I had pioneered in San Jose in 1912 in ten years filled the airwaves around the country and in Europe too. [Various historical images and sounds appear]. Radio became the unifying medium of the western world -- at least for a while. These displays around you, as I will point out as I walk among them, are the radios of the 1920s. [Each radio, he approaches, comes alive with a program, heard through its horn speaker, and he talks about each radio]. As I said in my old age in 1946: [Herrold's recorded voice] ‘I am very happy to have contributed to this wonderful development of radio.’”

Herrold fades away, and Roosevelt re-appears. “In the 1930s I used my radio talks to cheer America during the Great depression. Well-off Americans listened on radios like these.” [He walks among this set of displays of consoles, and each comes alive with a program, its dial glowing and its tubes glowing.] “Radio soon came to reach internationally, by using shorter wavelengths. These shortwave signals created a War in the Ether. Here, listen to that madman Hitler -- [Roosevelt turns on a 1930s Black-dial

Zenith console, and tunes it to Germany; Hitler's voice booms out. Roosevelt continues:] "Scores of millions of people died in that madman's wars, and those of his allies [Roosevelt goes on] but after we won that war at very great cost, prosperity ensued. And in that connection, I'd like to introduce you to San Francisco's own Phil Farnsworth. He invented, right on Green Street, "television" the dominant medium of the second half of the 20th Century.

Roosevelt fades away, and young Phil Farnsworth appears: "I was 14 years old when I got the idea for television ...

[End Of Part One, v 1.1.1] ##