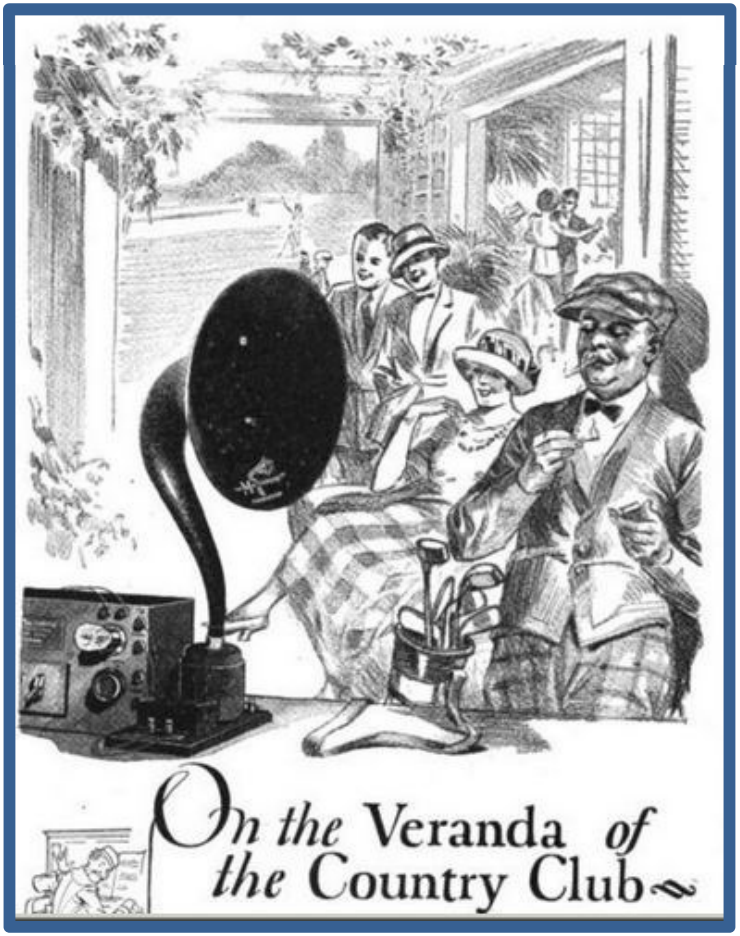
The Bald Letter

FREE FOR THE DURATION

August 15, 2020



Social Gathering

- Edition #7

2020 Virus Edition #7

Table of Contents (revised)

Federal Telephone and Radio 2
Nostalgia from Pete Peterson 4
Quarantine Show and Tell 6
The Radio Beginner 8
Oregonian's KGW from Art Redman 10
Fade-OMeter 13
Readers Write 14
He Rest of the Story 15

This is the seventh issue of a fun history hobby e-letter. Share it and pass it around. It's free. It's for fun.

Go to www.relivingradio.com for past issues of the **Bald Letter**. Help yourself and forward them to others. They're FREE.

The **Bald Letter** is the work of Dick Karman who is solely responsible for its content. He would welcome your comments, complaints and corrections. dick@karmans.net

While we are getting a little more used to staying home, this reading material is here, about the middle of each month, to help us pass the time. There are memories of vintage technology, some hints and tips, and pictures of radio gear we only wish we could find. Let's enjoy it while we can.

Many thanks to Art Redman, Howard Marriotti, Sonny Clutter, The California Historic Radio Society, The Late Pete Petersen, The Colorado Radio Collectors, The New England Vintage Electronics Club, and The Puget Sound Antique Radio Society.

The ***Bald Letter*** will be distributed on the 15th of each month, Lord willing. [DK]

Federal Telephone & Telegraph Co.

From Radio Manufacturers if the 1920s by Alan Douglas

In January 1901, the Federal Telephone and Telegraph Company of Buffalo, NY was the major telephone service providers in New York. It was associated with AT&T and used parts and components which were manufactured by Century Telephone Construction Company of Buffalo. By 1908 it was incorporated as Federal, having disposed of its operating interests in AT&T and having absorbed the manufacturing interests and facilities of Century Telephone.

During the First World War, Federal Telephone made components for military use. Navy-type air core transformers, buzzers and the famous "Liberty" headphones were some of the products made for the Allied Forces.

In 1921 the company began to made radios for initial unveiling at the 1922 New York Amateur Radio show. However it had not retooled for parts like rheostats, and attempted to buy them from other companies who were their competition.

The Federal radio sets did not do too well at the Radio show. But the Federal Junior (pictured), their first crystal set, which was constructed with all Federal parts, was a winner. Later in 1922, the company offered two other models. According to Mr. Douglas, “The amplifiers, nos. 55 and 56, are so rare that it is questionable how many were actually marketed, but no doubt exists about the 57 or 58.” The type 58 was a double circuit tuner marketing to those who wished greater distance reception. Its successor, the type 60, was marketed for use with earlier detectors.

To build on what they had, Federal took their type 58, increased its panel size, and placed it in a mahogany cabinet to

make it a type 59. To make the type 61 they added 2 more RF stages (and all the dials and knobs to go with them) that would work with a loop antenna. It was an impressive radio, with an impressive price of $223.

Once again to quote Mr. Douglas directly:

> "Federal was lucky. In those days when all radios were technical-looking black boxes with frightening arrays of knobs and dials, the 61 didn't scare the fans away. In fact the number of dials was a status symbol for the owner who knew how to manipulate them, and the Federals could perform superbly. Furthermore, there was little competition for this high-performance part of the market."

The status symbol of high end technical sets only lasted until RCA and others brought out radio sets that were easy to operate and functional without the bells and whistles.

In January of 1925, when president Burt G. Hubbell died, the writing was on the wall. By May the company was put up for sale for $2,000,000, and there were no buyers.

Lawrence C.F. Horle, who had been chief engineer since 1924, put his pet project on the market. It was called the Orthosonic and came in several models. The detector and RF amplifier tubes were shielded with small "tin cans." The power tubes were both housed in a shielded box. In some models the chassis, hardware, and tube sockets were made of nickel plated brass. Like some of the Atwater Kent radios the Orthosonics could be found built into pieces of upscale furniture.

Although not the same company as the one headed by Hubbel, Federal was still on the market and the Orthosonics, was successful in keeping the wolf from the door for several years. On July 3, 1929 however, Federal was acquired by the Acoustic Products Co. AKA the Sonora Phonograph Company, for $250,000. This evidently still proved too much for too little because Sonora filed for bankruptcy only five months later.

Triode Thompson

By Pete Petersen, Past President, PSARA,
WY7Z Silent Key

Triode Thompson was an old man when I knew him. A triode, of course, is a radio vacuum tube, but for him the word was a nickname given with love and understanding. He and radio had been infants together and had grown and matured together. He had known the wonder and pleasure of hearing music from distant cities, and had the pride of hearing it on a radio he had built.

Back in the late teens and early twenties most radios were home-made from carefully selected component parts, often following plans appearing in Wireless Age or other magazines.

On the way home from school, so I've been told, Triode would stop by Woolworth's or J.C. Penney's where he could spend hours inspecting the radio parts displayed for sale; admiring the workmanship of molded bakelite tube sockets and smoothly turning variable condensers. Most of all he admired the triode vacuum tubes. In later years he spoke of the beauty he saw in the simplicity of their operation and of the grace he saw in the smooth rounded shape of their glass envelopes. He saw warmth, like that from a fireplace on a cold night, in the rich orange glow of their filaments.

During the 1920s Triode could be found most evenings in his armchair, earphones comfortably adjusted, listening to his home-made, five triode breadboard receiver, the filaments glowing as if to assure him they were doing their best to bring him a symphony from WSB in Atlanta or a drama from KPO in San Francisco.

Technology quickly provided tetrodes and pentodes to replace triodes, but claims of their improved performance didn't impress Triode. "How can you improve on a sunset or a Mozart concerto?" he would ask. He did build a new receiver though, with a mahogany cabinet. It had two small copper-screened windows in the front panel so the glow of the filaments could be observed and their voltages adjusted for just the right orange color. He set the new radio in place, opened its hinged lid, carefully removed his triodes from the breadboard radio, and placed them gently in their new sockets.

As the years went by, radio broadcasts that had been dedicated to beauty, culture and enlightenment gave way to other less desirable formats. Likewise Triode gradually gave way to the infirmities of his years and finally sought his rest. As the funeral service ended, his grandson carefully polished a Cunningham 301A triode with his handkerchief and placed it in the coffin beside the old gentleman. Somehow that simple act gave us all comfort. Perhaps it let us hope that some Power not measured in watts would cause a warm orange glow to ease the darkness of Triode Thompson.

Pete Petersen was a radio collector, a story teller, a Navy aviation radioman in WWII and a past president of the Puget Sound Antique Radio Association. His writings gave a soft, nostalgic look at the era that we celebrate with old radios. His stories told of a different time. He gave your editor this story and others for publication in the 1990s.They are cherished memories by members of the PSARA and the others who read them. He is missed, although his writings live on. Pete Petersen became a silent key in May of 2016.

Quarantine Show and Tell

From Howard Mariotti as told to Dick Karman

Howard wrote, "One of my favorite sets was manufactured by Continental Electric in a small case with a somewhat deco design. It may have been labeled Admiral, Imperial, Minerva, or some other brand. I'll probably never know how it was originally named. Like me, the set has several flaws and some damage. It is very unique, given that I have yet to see another of this case style in beetle plastic."

Howard Mariotti,
President of the New England Vintage Electronics Club

Your editor caught up with Howard while he was at work. He was nice enough to grant a telephone interview and we got to know each other. His interest, known to most, is "magic eye" tubes. He apologizes for his web site but assures us that it will be updated soon: www.magiceyetubes.com. As is always the case, your editor learned quite a bit from the "old" site. If you have questions about cathode ray indicator tubes, your editor would encourage you to wander around the site. It gives you a new view on the Magic Eye Tube.

Howard is the president of the NEVEC and, like us all, is trying to hold things together through this trying time. Howard unlike many of us has been working constantly through the quarantine period. He is in the food processing industry and has been not only working, but sometimes working more than normal to make up for missing, and at-risk co-workers. Some radios are not getting restored and club business is getting done in the dark of the night. Which is normal since Howard works the swing shift.

Speaking of the club, he tells us that the NEVEC has almost 400 members and with only a few exceptions distributes a quarterly newsletter by electronic means. A few long-time members still receive a print copy by request.

The NEVEC doesn't have monthly meetings, but if one positive thing has come out of the quarantine it is that 25 to 30 active members have started to meet using ZOOM each month to stay in touch. The 'normal meetings' are three main events during the year such as Swap Meets, radio shows, and joint events with other groups. The Spring Meet has been cancelled and the Fall Meet might encounter the same fate.

Although known for more than two decades as the man who collects and enjoys magic eye tubes many of Howard's radios don't have the "tuning eye." Below is a picture of another one of his favorites. It has a placard that says Cosmos but Howard found that that the chassis was manufactured by Halson.

Halson Radio Company (NY) made radios throughout the 1930s, but COSMOS was not among the models made. A pretty table set none-the-less.

Beware of Pot Metal

From Sonny Clutter

Pot metal (AKA pig metal) is an alloy of metals with a fairly low melting point. This metal was widely used in the casting of some parts for many radios of the 1920's & 30's such as tuning condensers, frames, dial drums and other parts. Pot metal was also widely used in the automobile industry during that period.

Pot metal has become a negative word for many of us who restore old radios as much of it is known for its tendency to self-destruct. We refer to this problem as; "Pot Metal Cancer". However, not all castings were prone to the cancer. If the recipe was followed and not corrupted, pot metal was a good product and fine examples made in the 1920s can be found to this day.

Zinc, lead, aluminum, tin & copper are the ingredients often used in the recipe. Some of the formulas used would vary and if a known stable formula was not strictly adhered to, deterioration was soon to start.

A prominent reason for the "cancer" was that the formula was corrupted before the piece was cast. This was often caused by the workers who would shovel up the dross and toss it back in the molten metal. Sometimes they would toss in other materials as well. This unbalanced recipe was the most certain (if not the primary) cause for the self-destruction of the cast piece.

Because of the instability of some of the metals within the faulty alloy, repairs are not always satisfactory due to the

instability. I have repaired pot metal using the steel filled (gray) epoxy (such as JB Weld) with some degree of success. It does a good job but don't be surprised if the piece continues to deteriorate or your repaired piece no longer fits where it should.

Pot metal, when correctly formulated, is very stable and (in my opinion) will likely last indefinitely. I have (in my radio collection) some parts that are over 80 years old that are 100% perfect. However when Pot Metal has become distorted, swollen, cracked or is in the self-destructing process, it will continue. There is no way I know of to prevent further deterioration.

In rare situations, large, deteriorating pot metal housings can be dangerous. I relate here a story as told to me by a friend of mine a few years ago:

“One night while working in his garage workshop he heard a loud pop and then the sound of something zinging past his ear. At first he thought someone had fired a gun outside and the bullet had penetrated his garage. He immediately looked outside only to find all was quiet with no one around. Surely if it were a gunshot, the neighbors would have also been aroused.

“The next morning, with that event of the past evening still fresh in his mind, he went out to his workshop. As he entered his now well lighted garage he noticed something wedged in the wall about 6 feet from where he was standing the night before when he heard the pop and zinging sound. It was a chip of metal about the size of a small arrowhead. As he analyzed its position and trajectory, he found a Radiola 100A speaker sitting on a shelf on the far side of his shop with a chunk missing from its casting.

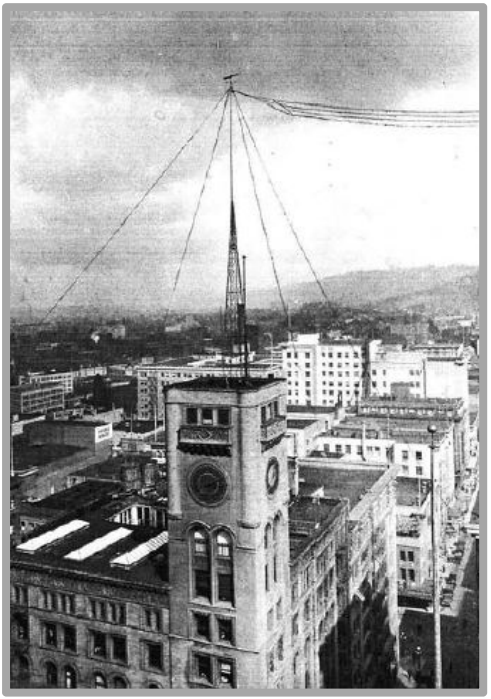
“You guessed it, the piece that was wedged in the wall matched perfectly the size and shape of the missing piece of pot metal: a testament to the serious stress of this sometimes unstable metallic compound.”

Thanks to Sonny for sharing and find more information about restoring vintage radios, beginner’s technical tips, and products that will help you in your hobby at https://www.radiolaguy.com/

KGW: From the Clock Tower

From our Portland Correspondent, Art Redman
A 1922 look at Portland's past.

The Oregonian newspaper completed installation of its 50 watt radio station KGW on March 18, 1922 in a twenty-four square foot room under the big clock in the old Oregonian Building and Tower located at SW Sixth Avenue and SW Alder in Portland, Oregon. Four seventy foot long Aerials were constructed and were terminated at the top of a sixty foot steel mast which was erected on the roof 152 feet above the streets along with counterpoises laying a few feet above the roof which served as a ground.

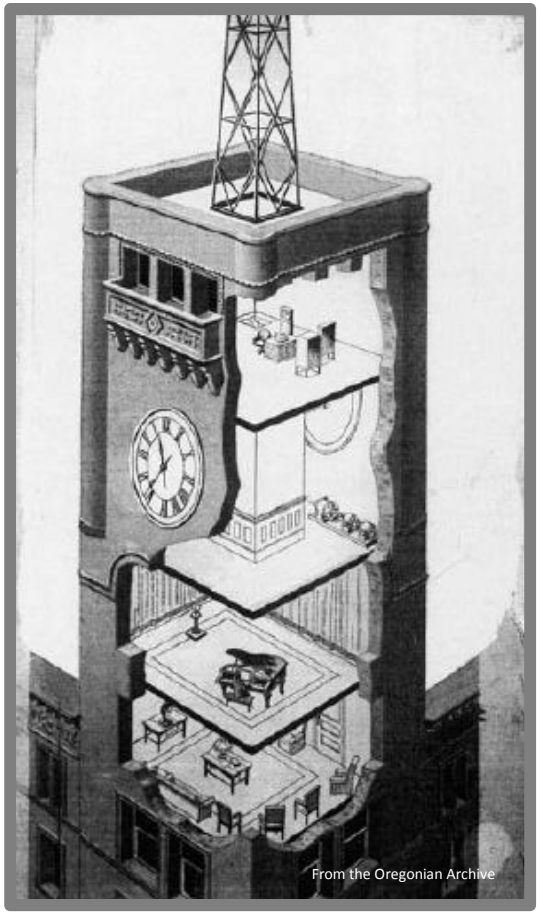


From the Oregonian Archive

The first words transmitted by KGW were allegedly profanities uttered by radio engineers of The Ship Owners Radio Service of New York who constructed the station. They were testing the unit, and did not realize at the time the transmitter actually was working properly.

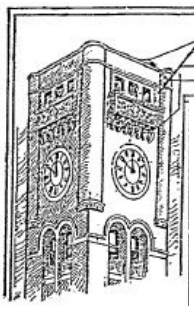
The transmitter was constructed from General Electric parts and had three fifty watt vacuum tubes; one used as a speech amplifier, the second as a Heising modulator, and the third as a Colpetts oscillator. Direct current generators lighted the filaments and another dc generator supplied 1000 volts to the plates. The radio receiver was the Acmefone Loudspeaker Receiver covering 150 to 350 meters and came equipped with a two stage audio amplifier.

The Oregonian was busy blowing its own horn. In its March 19, 1922 issue it totally ignored 5-watt station KGG of the home-town firm of Hallock and Watson. KGG "King George George" was already broadcasting on the air officially by March 15 (and some say a little before that). But the Oregonian stated, "There are two broadcasting stations operating in Portland, and one amateur, that of W.P. Hawley Jr. (7XG later KGY) and one professional that of the Northwest Radio Manufacturing Company (KGN), Mount Tabor of which Charles L. Austin is the president. The Oregonian station's operation is several times as powerful as that of the Mount Tabor plant. The Hawley plant is one of the finest amateur stations in the United States".


From the Oregonian Archive

The Oregonian dismissed other radio stations as rank amateurs stating, "Unlike radiophone broadcasting done so far in Oregon, The Oregonian will not confine its musical service to records. There will be a piano and other music instruments in the broadcasting station and instrumental and vocal selections by visiting artists will be sent together with the work of local musicians. Weather forecasts are to be sent regularly and important news as occasion suggests although the station is not primarily for the dissemination of news."

Hawley's 100-watt station KGY, twice as powerful as KGW, had a Steinway Grand piano and several extra microphones for singers and musical instruments, and KGG broadcasted weather reports. It seems live music and weather reports were not the only distinction KGW could bring to listeners in 1922 and 1923.



Portland Oregonian Radio Waves and Ripples heading from June 18, 1922

The Oregonian took great pride in being the first Oregon newspaper to print a radio column "Waves and Ripples" in its Sunday edition. Historian Percy Maddux in the book ***City on the Willamette: the Story of Portland, Oregon*** (published in 1952) relied on the Oregonian as its source, thereby overlooking Hallock and Watson's role in being the third radio station to broadcast ahead of KGW in the March 1922 month of "Radio Madness" in Portland, Oregon.

Today in urban slang and texting, "KGG" means "Kinky German Girl." "KGN" is "Kiss Good Night" and "KGW" is "Keep Getting Wise". "KGY" is an acronym a radioactivity measure unit "Kilo Gray Yield". Obviously quite different from March, 1922 and "the way radio was." [A.R.]

1928 RADIO magazine

Fade-OMETER

Gleaned from www.magiceyetube.com

Your editor, while talking to Howard Mariotti of the New England Vintage Electronics Club, was introduced to another device that used the "magic eye tube." This was a "new" testing device that was made in Portland, Oregon, in 1939. The Radio-Craft Magazine that introduce it read like this:

A NEW INSTRUMENT FOR SERVICEMEN

Essentially, the device here described is a special type of continuity checker, employing an electronic "eye" tube as the indicator of fading in defective radio parts. Also, this new device may be used as a V.T. voltmeter and output indicator.

Although the Magic Eye Tube was invented by Allen Dumont of Dumont Television fame in 1932, it became a favorite for other inventors who wanted an alternative to the more expensive and more fragile D'Arsonval meter movement.

Photo courtesy of Howard Marriotti

Throughout the 1930s and into the 1940s Magic Eye Tubes could be found in radio recievers, test equipment and side-by-side with many analog meters as a visual representation. If you want to see the various types of Cathode Ray Indicator Tubes stop by the Magic Eye web site www.magiceyetubes.com.

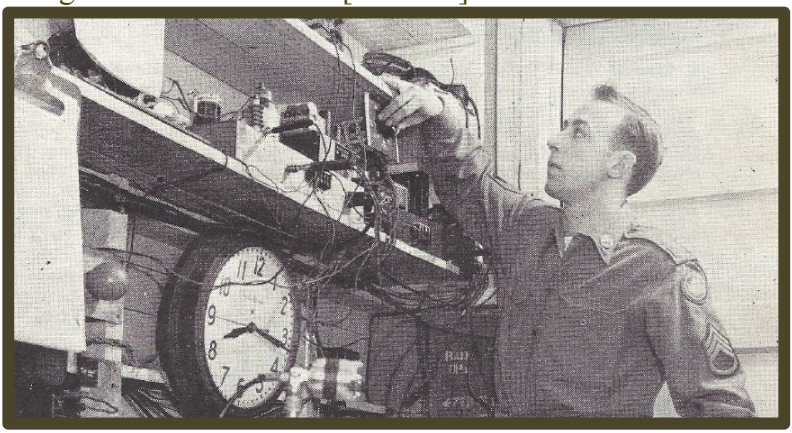
The Fade-OMeter had appeal because its label traced its roots back to the Pacific Northwest where the Bald Letter originates.

The Fade-Ometer sales pitch can be found in the Radio-Craft Magazine issue for November of 1939.

The Readers Write

I enjoy reading the Bald Letter but you really gave FADA the quick rush. The company that produced the Catalin "Bullet" and "Temple" radios had nothing to do with Frank A.D'Andrea . He formed the Andrea Radio Company and was one of the pioneers of television, offering the first consumer pre-war television in 1939, just ahead of RCA. [See page 15]
M.O. Michigan

I saw this in a Popular Science Magazine from 1952 and thought of the Bald Letter [Issue #5]



"**Soldiers Build Radio Station.** GIs of the 47th Infantry Division pooled bits of equipment to build WVIK, a carrier-current radio station for Camp Rucker, Alabama. The camp, located in remote farm country, receives regular broadcasts poorly but WVIK's shows travel over the electric lines to all parts of the post. Sgt. John Christiansen at the controls (above) and disk-jockey Pfc. Jack Schoppe are members of a 20-man operating crew that spends free time keeping the station on the air." From Popular Science (Sept. 1952)
D.H. Portland

Thanks for the help mounting the display in the Gresham Historic Museum "***Radio Captivates the World"*** running now and through Summer 2021.
M.M. Gresham, Oregon

More Readers write . . .

I have so much enjoyed the newsletter and interesting information you share. I have really missed going to our Puget Sound Radio club meetings and now not having our yearly Puget Sound swap meet in August is a real downer. You are very much helping all enthusiasts of antique radio electronics and history. Very best regards,
J.S. Seattle

The Rest of the Story

Compiled by Dick Karman

"In our last episode . . ." the Bald Letter told the brief story of the radios that bore the letters FADA. The radio manufacturing concern was started by Frank Andrea and changed hands before going bankrupt in the 1930s.

In 1934 Frank Andrea decided that retirement was not for him. He incorporated the Andrea Radio Corporation and began again making an All-American Five. By 1939 Andrea was producing a three-inch screen TV, which debuted at the New York World's Fair. When WWII put a hold on TV development and stopped the production of consumer electronics, the Andrea Radio Corp. developed a line of avionics intercom systems sold to Boeing, Lockheed Martin, and other government contractors for the war effort. Andrea Radio was awarded the Army-Navy "E" Award for WWII supplier excellence.

Post-war the company also received a substantial contract to produce radios under the Philips name for the European market because Philips factories were destroyed during the war.

Andrea released its first color Television set in 1957, only 2 years and 8 months after RCA placed a color TV on the market.

In addition to continuing the development of aircraft intercom systems, the company would produce the guidance system for the first guided missile successfully launched by the U.S. Later they would develop the communications system for the Mercury space capsule program.

And now you know some of the rest of the story of Frank Andrea thanks to www.wshu.org (public radio).