



See the story behind this unique Atwater Kent Model 37 on page 3

The Friendship Edition #1

The Bald Headed News

2020 Virus Edition #1

Table of Contents

Brandes Table Talker (1924 Wireless Age)	2
Our Cover Radio from Cliff Tuttle	
Tech's Tips from Tech Sloat	4
Tech Tip from Sonny Clutter	
How to make your old radio room sound old	
Editorial- Why our history should be in writing	9
Old Radio Crossword fun	10
Inventing the Carbon Button Microphone	12
A Nostalgic Look Back from Pete Petersen	14
Old Radio Show quiz	16
The Majestic Radio from the Grigsby Grunow Company	

This fun reader's edition of our hobby history is published for your enjoyment. Share it and pass it around. Show people what a fun newsletter looks like until "it's over, over there" (and it's over here at home).

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

We're all at-risk and many of us are "over-60" so let's read a little bit, enjoy memories of the last 70 years, and look forward to 20 more. Special thanks to Sonny Clutter, Cliff Tuttle, Pat Kagi of the NWVRS and members of the Puget Sound Antique Radio Association for helping out.

Stay Tuned. If I live through this era, we'll do this again. And if I don't, well, "I know in whom I have believed, and I am persuaded that He is able to keep that which I have committed unto Him against that day." 2 Timothy 1:12(b) [DK]



Print Courtesy of America Radio History dot com



If you haven't visited them, you should.

QUARANTINE SHOW AND TELL*

Cliff Tuttle as told to Dick Karman

A a c a a st n a

(Cliff Tuttle is our first Quarantine contributor) I acquired this piece in 2005 at the Seattle Swap Meet. It came with a model 37 radio and an E speaker.

The brown/gold coloring is almost a perfect match for the standard model 37 (obviously not that of Art Deco model), and the red accents around the edges provide a fun punch. The 37 fits so perfectly into the upper rim and the shelf is just the right size for the base of an E speaker. The ornate swirl at the top keeps the E speaker from tipping out without blocking the view. All of this makes me believe that the stand was specifically made for the Atwater Kent

Model 37. An AK model 40 will fit it also. The model 37 was Atwater Kent's first 'light socket' radio with a built in power supply, so all you needed was a speaker and an antenna to get sound. While the wooden Pooley furniture hid the metal box, this stand displayed it in all its high fashion. The popularity of the metal box radio however, was short lived.

The Model 37 came out in 1927, and the model 40 in 1928. Literature suggests that between the two, AK likely produce about 600,000 units. This is more than enough to interest 3rd parties to make products like this stand that complemented the popular radios. [CT]

*Show and Tell is an unregistered trade mark of the grade school teachers of America and used without permission

TECH'S TIPS

By Tech Sloat W7AHK, Silent Key

Tech is a silent Key now, but while he was here, he told a good story, offered great advice and showed a willing spirit to share it.

This is a great tip for those of us who still have crystal sets in our collections. With our own crystals, we can say "I built it myself!"

The 1991 Antique Radio Classified on page 18 tells us to use a torch to mount crystals in solder. Before you start the project note that Galena is a sensitive material and can easily be destroyed by excessive heat.

The old manufacturers and crystal companies never used solder to mount crystals. The material used was called woods metal or Lipowitz's and similar metals with a low melting point. Woods metal is composed of two parts tin, four parts lead, seven parts bismuth and one part cadmium. The melting point is 158 degrees Fahrenheit (well below the boiling point of water, 212 degrees).

The Popular Science Book of Formulas for 1942 gives the following information; low melting alloys are required for mounting radio crystals to prevent the decomposition of crystals. Low melting point alloys are readily available, one being Cerro Bend and another from Belmont Metals (refer to Thompson register, vol. 1).

Beginning in 1923, I have mounted several crystals. I take a small piece of wood (not plywood), and drill a small hole slightly smaller than the crystal cup. The hole should be about a quarter inch deep. Clean up the wood splinters and "square" the bottom of the hole.

Melt the alloy in a small tin can placed in a kettle of boiling water. Pour the alloy into the hole in the wood, about half full. With

tweezers place the crystal into the center of the hole about 50% exposed. When cooled, split the wood to remove the finished product. Any small imperfection may be shaved off with a knife blade or filed off with a nail file.



Sonny's Tech Tips Don't Plug That Radio In!

By Sonny Clutter

Here's what can happen when you apply power to an old radio that's been setting around for years:

- If you're lucky, nothing will happen....it will simply be dead for a variety of reasons.
- If you are extremely lucky, it may even work, but don't count on it working for long.
- What will likely happen when powered up, you'll hear a loud pop and hum. The reason, the filter condensers are faulty, if you leave it on there's a good chance that the hum will increase and something will start to smoke or burn up.
- If you are very unlucky, it might make a loud pop or immediately go up in smoke with no hum or warning at all.
- If the radio does come on and 'sort of' works and has not been in use recently or has not been restored, there's still a good chance that one of the above scenarios will soon take place.

Here's what you can do to protect that old keepsake or restoration project from going up in smoke:

First make a simple test fixture like described below:

Below is a diagram of a simple device you can make that will enable you to power up your radio without destroying the power transformer or causing damage. You will need to be able to make this simple test jig using a light bulb, lamp socket and AC receptacle. If you are not capable of doing this, I suggest that you find someone who is and have them check out your radio so you do not cause irreparable damage.

If you can determine the power consumption of the radio (this is often on the model or ID plate/sticker). Choose a lamp of a wattage size that is equal or slightly higher than the radio's power consumption. Example, the radio draws 85 - 90 watts, use a 100 watt lamp. If you can't determine the power rating, choose a lamp of the proper size from the chart below:



The lamp will be in series with the radio under test, if the radio has a short circuit or draws more current than it was designed to do, the lamp will work as overload protection and draw the excess power. On the other hand, the radio cannot function properly with the lamp in place as it will be operating below it's normal voltage requirements.

Now for the test; after choosing the lamp size, remove the rectifier tube (usually a #80, 5Y3, 5Y4, 5V4 or some other tube # beginning with "5"). Now plug the set into the test jig's socket and turn it on. The lamp should not glow or glow very dimly. If the lamp glows brightly at this point, either you are using a lamp of too low wattage or the radio has a serious short. Do not proceed any further until you or someone else can resolve the short circuit problem.

If the bulb does not glow or glows very dimly, proceed to the next step by plugging the rectifier tube back in its socket. Observe this tube and the lamp. Should the lamp glow brightly or the tube glow purple or arc inside the glass, this is not normal. Stop the test and seek technical assistance. This could be a faulty tube or internal short in the radio. If the tube glows normally, the lamp should increase a bit in brightness and you may start to hear a slight hum from the radio within a few minutes (give it time to warm up).

If after a few minutes you start to hear a hum that's getting louder and the bulb will start to glow much brighter, it is an indication that all is well with the power transformer but the filter capacitors (condensers) are faulty. It's rare that they would not be faulty.

If you hear no or very little hum and the lamp is dim, chances are that it will now be safe to apply full power to the radio by removing the plug from the test fixture and plugging the radio directly into the wall receptacle. Do so carefully while observing the rectifier tube. Should a loud hum develop or the rectifier tube arc, flash or glow purple inside the glass, immediately remove the power, cease any further test and find a knowledgeable technician.

The above info is meant for the novice radio enthusiast or nontechnical person to help them determine the condition of an old radio's power supply.

I do not suggest or recommend using an old radio for music or entertainment unless it has been properly electronically restored and fused for safe operation. Once a proper restoration has been done and the power circuits have been fused for short circuit protection, these old radios can be a wonderful source for great sound

See more tech tips and great photos and history at Sonny's site <u>http://radiolaguy.com/info/SonnysTechTips.htm</u>

Sonny says "Incandescent light bulbs are available on Amazon."

"Thanks for the Tip . . . "

This particular Technical Tip is one that I've always thought to be very valuable. You may have seen it before, but it bears repeating. These first steps make me feel like I have at least checked out the basics.

Dick, the bald guy



THE OTHER SIDE OF THE MIC

By Dick Karman

Many of us who collect or restore vintage radios don't always find appropriate broadcast material to "tune in." Well, I know a few of you have the where-with-all to build your own broadcast systems. There's a club in Portland who has made quite a project of building their own portable "radio station." I have fed that portable rig on a few occasions and found my vintage feed to be very enjoyable when heard on a 1920s battery set or on a 1930s tombstone or console.

Having the aura of vintage radio playing in the background of your radio display area is quite simple if you can download some MP3 files and play them back on a small MP3 player or laptop.

In GOOGLE, search for archive.org and for a radio show title such as "Dragnet." When the Archive.org screen comes up, you can listen to the listings at the top. To download them move down the screen until you see the download options on the right and click on MP3. Then download the ones you want. Not every show you want is there, and you won't want every show that is there, but there are plenty to make a loop for your den or your basement listening.

When I am called upon in my role of Disc Jockey to bring back old memories at a gathering, I find my listeners fascinated with the station ID spots, Public Service Announcements, and commercials of a bygone era. You can often find these on the internet by searching "You Tube vintage radio commercials." They are nearly always strung together, so you have to use an audio wave editor to cut them apart and place them between your shows or between your songs.

Just what you need to make your old radio room sound old.







From Editor Dick Karman

To those who remember radio, the way radio was, and to those who are just discovering the fun of old radio, this temporary set-back of isolation is only a tiny blip on the radar. I am fascinated when I look back at the last 100 years (maybe more). Seeing what they were building and what they were discovering about electronics and radio. I love examining what they were thinking when new challenges were facing them.

I hear some of you ask, "How do you know what they were thinking?" I know because literate people in times past put their thoughts into succinct writing. And that writing has been preserved in well-edited publications. And those publications have been preserved (although now digitally). I look back at trade journals, literary fiction, esoteric newsletters, and even satirical magazines of decades gone by ("What Me, Worry"). What I read is what people were thinking; what they were arguing about; what they wanted to tell people. When I compare two different documents with two opinions 50 years later, I get to see which one was right! (For instance I agree with folks who believe we're on course to Make America Great Again!)

What's more, history was written with a literary convention that has stood the test of time, such as lead sentences, paragraphs, bulleted lists, reasonable grammar, indents, spacing and standard page layout. That's how this editor thinks a publication should be edited. So that's the way the **Bald Letter** is going to be assembled - kind of old fashioned? Yes, but that's the way I am. Stay Safe, I we Karman

OLD RADIO FUN



Radio in the Home March 1926

Across

- 2. This is what the Brits call a tube
- **3.** The outfit that made the Synchrophase with the beaded chain
- 4. Atwater Kent's first name
- 6. the initial way to send "dots and dashes" wirelessly
- **9.** the manufacture's name on the RA radio unit that when paired with the DA unit made an RC unit
- first name Virginia played the part of Ma Perkins for 3 decades
- 11. The company that made the original Blue Bird Radio
- 14. Italian physicist and radio pioneer – credited with the first (one way) transatlantic radio transmission
- **15.** The man known for developing rotary spark gap and amplitude modulation
- 17. this outfit made refrigerators and appliances along with radios- they still make reproduction vintage radios today

Down

- 1. A German radio manufacturer founded in Berlin in 1903
- 5. A maker of a fashionable table that was built around an Atwater Kent Radio
- 7. the man who developed an alternator that could deliver a transmitting frequency of approximately 50 kHz
- 8. Started out in 1892 as Helios Electric Company
- **12.** Wireless operator in WW I and played the part of Amos on the radio for years
- **13.** An popular radio made by the Grigsby Grunow Radio Manufacturing Co.
- **16.** First name David- said to have been 17 years old when he heard the SOS from the Titanic and repeated it to the listening operators



Radio Age Magazine 1926

THE STORY OF THE CARBON BUTTON MIC

By Dick Karman

Many of Thomas A. Edison's discoveries were not inventions in the sense of being devices that could be put to immediate practical use.

When he recorded an experiment that brought to light properties of nature which were previously unknown, he recorded them as "phenomenon."

One such phenomenon was the behavior of carbon in the form of lamp black or powdered graphite. Edison's famous "carbon button" was made from lamp black which he carefully gathered from the chimneys of a large number of smoking kerosene lamps. Earlier, Edison had found that such finely divided carbon could be used to vary the strength of current flowing through a wire. He learned this in the year 1873, when he was trying to find a way to speed up the transmission of telegraph messages over a long under-ocean cable.

Anything in the wire that slows the movement of the electrons is called resistance. The resistance of a thin wire is greater than that of a thick wire. The resistance of a long wire is greater than that of a short wire. The resistance of a transoceanic cable was tremendous.

To conduct his cable experiments, Edison tried to simulate in his laboratory the conditions of a 3,000-mile-long cable. To produce the resistance that could compare, he pressed finely ground graphite into glass tubes and inserted wires in the ends of the tubes. By putting many of the tubes end to end, he was able to approximate the resistance of the cable. Edison tried, to no avail, to use the graphitefilled tubes in his experiments to test what would happen in the cable under various conditions. It did not work. The tubes did give the resistance he needed. But he found that he could not keep the resistance constant. The slightest pressure on the end of the tube, even a vibration in the wires, varied the resistance. When Edison saw that the arrangement would not do, he laid it aside.



Thomas Alva Edison, Invento 1847 - 1931 Four years later he remembered the "phenomenon" of the behavior of carbon and put it to another kind of use. He was then at work trying to find some way to transmit the vibrations caused in a telephone diaphragm by the human voice. He thought of the curious behavior of the graphite in the glass tubes. He recalled that vibrations of the wire had altered the resistance of the graphite to electric currents. Edison now experimented with graphite in various forms. He used a stick of graphite adjusted so that it would touch lightly on a spring attached to a telephone diaphragm.

When a person spoke into the telephone, the diaphragm would vibrate, causing a change in pressure on the spring and so on the graphite. This caused a variation in the current passing through the graphite. Edison found that he could get a tremendous sensitivity using the different forms of graphite with the telephone. The instrument would pick up the faintest sounds--a whisper, the touch of a finger, the foot-step of a fly, even a softly exhaled breath.

This was the basis precept for the invention of the microphone. Reproduction of speech was not distinct. The instrument would blare but it would not speak clearly. One day Edison happened to be distracted from his work by the annoying smoking of his kerosene lamp. Glancing at the lamp, he noticed the intense black of the smoked-up chimney. Edison was curious about this deposit and as soon as the lamp had cooled a little he wiped off some of the black in the chimney and examined it. It was not long afterward that Edison gathered the black from many chimneys and pressed it into a mold to make the first carbon button.

Soon he set up banks of lamps and put them all to smoking in what

he called his carbon factory. He kept assistants busy gathering the lamp black and pressing it into buttons. The carbon button played an important part of the history of radio. It started in a chimney in Tom Edison's lab.

The carbon button microphone was made possible by Edison discovering the phenomenon of carbon granules



THE METER MEETING

By Pete Petersen, PSARA Silent Key ALLIANCERS

The Pantages Theater stood three stories tall and towered above all the other businesses along the main street that ran through the center of my old neighborhood.

The Pantages was elegantly decorated inside and out, and had a marquee that spelled the name of the current feature in a thousand lights. Uniformed usherettes with flashlights in their white-gloved hands guided patrons to their seats.

Broadcast station KYZ's aerial stretched high above the theater, supported between two steel towers mounted on opposite corners of the roof. A powerful 250 watt transmitter filled most of a small room upstairs near the theater manager's office. The transmitter was operated remotely over four or five telephone lines from an office and studio elsewhere in downtown. The lines each labeled as to its purpose, plugged into a little switchboard connected to the transmitter. One line carried the program being broadcast. Another controlled the emergency shutoff switch, and the rest were connected to meters in the downtown office so engineers there could monitor various voltages on the transmitter. An engineer from the office came regularly to inspect the transmitter and also came at the first indication on a meter that something was amiss.

Early one summer an engineer named Harold, who had just graduated from the state technical college, was given responsibility for the transmitter. During his walks through the theater lobby on his way upstairs for periodic inspections and adjustments he was noticed by several of the usherettes. He especially impressed Helen, a quiet, intelligent young woman who had been an usherette for several years and who was well acquainted with theater operations.

Harold made increasingly frequent visits to the transmitter as the summer went on. Usually the problem he came to fix was minor. Often it was just a loose plug in the switchboard. After finding a loose plug to be the problem several times he reported the occurrences to the chief engineer who shrugged it off as caused by vibration from passing trolley cars.

Bald Letter

Helen seemed to be especially good at guessing when Harold would come to the theater and managed to be where he would notice her. Soon they were dating and as fall turned to winter, Helen and Harold announced their engagement.

Later Harold received a promotion that kept him in the office and another young engineer named Victor was assigned to monitor, inspect and attend to the transmitter. During an afternoon matinee when work was slack, one of Helens' friends, an usherette named Julie, came to her and told her that she had seen Victor several times and was attracted to him. She wondered how she could meet Victor and asked how Helen and Harold had become acquainted. With a secretive smile on her face, Helen led Julie upstairs to the transmitter room. After looking around to be sure she would not be overheard, Helen revealed her secret.

She pointed to the transmitter's makeshift switchboard and whispered "When you want Victor to come around, pull one of these two plugs half way out."

Pete Petersen was an active radio collector, an historian, a story teller, and a member of the Puget Sound Antique Radio Association. During the 1990s and early 2000s his nostalgic writings were contributed quite selflessly to collector's societies. Through inquiries I was informed that Pete became a silent key in May of 2016. We have no details, but we know that we miss him, his warmth and his style.



OLD RADIO SHOW QUIZ

- 1. Who was radio's Town Crier: A) Alexander Woollcott, B) Arthur Godfrey, C) H.V. Kaltenbourn?
- 2. Who was Frank Munn: A) a Sportscaster from the 30's,
 B) featured vocalists on the *American Album of Familiar Music*, C) one of radio's first stand-up comedian.
- 3. Name of the master of ceremony of the popular morning program, *The Breakfast Club*, which began on radio in the early thirties? A) Ernie Haire, B) Don McNeil, C) Jerry Colonna.
- 4) Which Orchestra leader was known as "the idol of the airwaves": A) Guy Lombardo, B) Jan Garber, C) Eddie Duchin.
- 5) A leading child star in the early days of radio was: A) Jane Withers, B) Rose Marie, C) Bonnie Baker.
- 6) Who was radio's "Songbird of the South:" A) Connee Boswell, B) Jessica Dragonette, C) Kate Smith.
- 7) Who was radio's *Fire Chief*: A) Milton Berle, B) George Jessel, C) Ed Wynn?
- 8) Who was the first captain of the Maxwell House Showboat: A) Charles Winninger, B) Frank Morgan, C) Joe E. Brown?
- 9) Who was known on radio as "Ukelele Ike:" A) Cliff Norton, B) Cliff Edwards, C) Cliff Arquette?
- 10) Who was radio's "Street Singer:" A) Arthur Tracy,B) Thomas L. Thomas, C) Burl Ives.

Twenty years ago I'd have to give you the answers, but today, you can fire up Google and find them for yourself.

If you find a tough one, or one that doesn't make sense, let me know dick@karmans.net



From Chicago Tribune, October 28, 1928

The magic of radio is not limited to the programs which cause us to marvel as we sit listening in front of our sets. Chicago has a "stranger than fiction" story dealing with the manufacturing phase of the invention. In a changing world, some 6,200 persons find employment today with the Grigsby-Grunow company who, were it not for the demand made by this marvel of the new age, would be finding it necessary to seek niches in some other field.

Taking for its extended activities the building left vacant by the Yellow Cab company plus two plants on Armitage avenue, the Grigsby-Grunow industry means much to the northwest side. A visitor to the plant comes upon a business conducted on a scale that that amazes and in a fashion that makes one realize the modern world is moving too swiftly for following methods of the past. The factory on Dickens avenue is as new in its spirit and in its workings as radio itself.

For instance, the Grigsby-Grunow company has no warehouse. Thirty carloads of raw materials come into the plant every morning and thirty carloads of completed radios go out every night. That means 3,200 complete radio sets [are] turned out at the plant every day, and even this output is insufficient to supply the worldwide demand.

In order that adequate supplies be available,

- the company has five mills whose sole efforts are devoted to providing lumber for its needs.
- Approximately 84 tons of steel are used each day.
- The company uses enough wire for its super dynamic speaker to circle the globe daily.
- 16,000 pounds of tinfoil are used every day.
- 12,000 pounds of paper are used daily for condensers.

- More than 20 tons of wax are used each day for the impregnating of condensers, chokes, etc.
- More than 5,000 pounds of aluminum are used daily.

Big Growth in Five Years.

These figures become more impressive due to the fact that only five years ago the Grigsby-Grunow company was operating in floor of a little building on Lake street. A year ago it got along with 100,000 square feet of floor space. Five years ago the number of employees totaled only forty.

Radio is new, and the company found itself without any machines in vogue to handle heavy production. Its own engineering staff made the required machines and made them so simple that they could be operated without mistakes. There are fifty experimenting engineers in the employ of the company today and their slogan is "It can be done."

This attitude is a reflection of the spirit of the two men, still comparatively young, who are at the head of the institution and who, by training and temperament, were in a position to grasp opportunity when the electrification of radio was at its dawn.

Recognition Given to Ability.

At the plant on Armitage avenue Mr. Grigsby and Mr. Grunow, with a few hundred employees, head the nucleus for the present expanded institution. The "straw boss," with loyalty and an aptitude for his job, has become an assistant superintendent. There has been a genius for handling men as well as a genius for mechanics. The new plant is a place where ability is recognized and the pay envelope reckoned accordingly.

As recently as late July only a fifth of the floor space at what was the Yellow Cab company quarters was used by the firm. Now, all of the space, 500,000 square feet. is utilized.

In August of this last summer a picnic of the plant employees and their families was held at Cary. Seven thousand attended. The cost of the outing, taken care by the firm, amounted to \$10,000. There were a good many "extras" at the event, but a large proportion of the workers are girls and, incidentally, numerous admirers of them were included in the informal invitations. Ten North Western trains of twenty cars each were required to transport the picnickers.

Mr. Grigsby and Mr. Grunow both attended the picnic and gave proof of the fact that they had not forgotten how to play and that the romantic success of their business had not altered their spirit of camaraderie.

Three Beauty Queens Win.

When the judges had simmered the bathing beauty contestants down to three and were still in a dilemma, Mr. Grunow decided all three were winners and three radio sets were awarded instead of the one that had been intended.

"A good place to work," is the way the army of employees speak of the plant whose history reads like a page from the Arabian Nights.

"Good workmanship" is the slogan of the firm, for to every seven or eight employees there is an inspector. And each set,

from the time it leaves as raw material and comes forth a finished article, goes through 1,000 tests.

And after that—

Well, there is no city, village, or hamlet in America where the sets turned out in the big plant on the northwest side are not in use. Also they find their way to many foreign countries, among them England, Australia, Japan, and China.

The New Majestic



See the rest of the stories at <u>https://chicagology.com/silentmovies/grigsbygrunow/</u>