

# SOUND WAVES

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VRPS Spring 2022



## From the President

The misery caused by the pandemic we have been experiencing the last couple of years may well (fingers crossed) be headed to the background of our memories. Needless to say, I am happy to make that statement. Not only did COVID mess up our personal lives, for some more devastatingly than others, but it surely had an ugly impact on our social (read that as VRPS events) gatherings.

After all, as President, I try to make it my mission to know everyone in the organization (I have a long way to go). Seeing someone's face often triggers my memory for the correct name. Image what that process looks like when all you see is a surgical mask...and most of us are wearing the same kind! Good riddance.

I have been informed that the major Midwest radio event of the summer, Radiofest in Addison, Illinois, is back on after a two-year hiatus. I know August is a few months off, but if you have never been, I can assure you that you will not be disappointed if you make plans to go. Besides a really nice flea market, there are lots of information sessions and, of course, they have a really nice auction to open the event on Friday night. You might see a familiar face calling the auction!

Unfortunately, a scheduling conflict kept me from attending the Houston Vintage Radio Association's annual convention this year. I hope to correct that next year, but I hear the show went well and was well attended.

Closer to home, we just finished our Spring auction. Thanks to all who helped; there's never enough accolades for these folks! We have a wealth of talent in this organization. If you need assistance, or just have questions, call me and I will try to point you in the right direction.

-- Jim

## Notes from the January 15, 2022 Meeting

Randy James opened our meeting and handed it over to our program organizer Larry Lindsay. Larry mentioned that the COVID pandemic caused him to scrap plans until we could get back together. Now that we are back, he could use advice and volunteers for new programs. Of course March is always our spring auction month, and May will be our swap meet. Larry presented the SMITR award, which presented for the answer to the question "Where did the word Naugahyde come from"? The answer is - it was named after the city Naugatuck, Connecticut, where it was first produced. An interesting question that Larry put forth is: "What did Edison consider to be his worst failure"? He revealed the surprising answer - an ore-crushing enterprise. He then introduced our meeting program - Show and Tell - for which several members had brought items.



Patrick Jankowiak showed us some man-pack military radio sets, made for operation in the low-band VHF range. Being of fairly recent vintage (about 30 years old) they have some features not seen in earlier military radios. They have frequency-hopping features that allow programming of the frequencies via a keypad. One has

an encryption feature, the other - used for air-to-ground communication - has both voice and data features, with a baud rate of 75K. They operate in the analog/FM mode, with a range of about 3-1/2 miles. These radios are rarely seen in private collections, so Patrick was fortunate that someone had to downsize their collection so they could move into an apartment.

Kenny Black showed a radio cabinet being restored for member Billy Smith. It was a solid radio but had the all-too-common ring on top from a drink container. He tore the radio down and cured the problem with new veneer on its top. The radio is a Stewart-Warner model 102A. Member Ed Janssen had one like it and sent Kenny a photo of it to go by. Kenny brightened the brass using muriatic acid. He used veneer from Rockler, a woodworkers supplier. There was much group discussion about: sources of



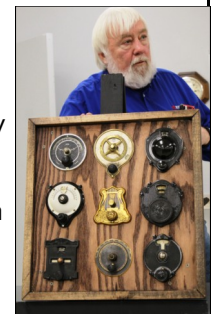
veneer; laser cutting service for grillwork; painting and finishing; cleaning brass bezels, etc.

Billy Smith showed several crystal sets and related items - on screen. He showed a very nice one with its cat-whisker on the side; a modern one from Antique Electronic Supply (ARC); a piece of lead ore (Galena); and a Philmore set. He had found one set in an antique mall that was marked with the maker's name - Glen James - 1928.



Richard Shanks showed a large French kit radio from about 1950 or 1951. It has a tap on the power transformer for 120 V operation and a Euro-style plug with an adapter for U.S. use. He used Mohawk toning lacquers, including a gold tone. He used muriatic-acid type stripper to get rid of the old finish. The tubes are all American types.

Keith McManus brought a collection of vernier dials, mounted on a frame. One of them he had never seen before on a radio. These dials were produced mainly from 1915 - 1920 for DIY projects.



Randy James showed a Crosley (Model 3B?) radio that he obtained at the auction of Dave Davenport's estate. It is a portable radio. It seems to have its original handle, and 01A tubes. There are cutouts for batteries. It is a rare model made around 1922 to 1924.

Will Cutter brought a very high-end 1937 Model 816 K RCA radio console cabinet and told us about its status as a work-in-process and how it got to the point he showed us. He is having experts do the chassis and speaker restoration as well as the final finish application. The cabinet was in extremely poor shape, requiring complete replacement of its top, for one. The complex and curved shapes called



for specialized woodworking assets and skills. To create odd and curved shapes, he built up layers of wood, much as in plywood, pointing out that the back face needs the same veneer as the front, otherwise there will be bad warpage. He made forms to mold the curves - matching the originals precisely. For special solid shapes, Will said he used the tools and assistance available at a community "Maker's Space", which gives access to machinery, tools and workspace otherwise unavailable (or affordable) to the Hobbyist. There is such a place in Carrollton, TX, called Maker's Space. (go to their website <https://dallasmakerspace.org/>).



Walt Zaleski said that he likes radios mostly for collectability and their looks (as do most of us). He discovered an interesting radio featuring the iconic Belmont design, with the lever-action preset selectors. It is a Canadian-made Sromberg Carlson radio

with the 1939 DECO styling, and it looks just like a Belmont. The designation Belmont Model 510 is molded into the surface of the inside of the case. Like many Canadian-made radios, it has a nice back. It has a round dial. It has a more modern tube lineup, from about the 1948 era, including the 50B5/C5. Someone nicely restored it. Many radio companies sold out their assets during or after they closed down for WWII. It's likely this radio is an example of someone putting the original molds back to work, with some modifications.

Author's Notes: I recently restored a 1932 Grebe AC wood table-model radio that had a badly stained top, with curved corners. To my surprise, the cabinet turned out to be solid tiger and Birdseye maple (solid tiger on sides and top; Birdseye veneer on flat front). This allowed me to sand the top down to clean wood and avoid veneer work

Tip: swimming-pool acid is a good cheap source of muriatic acid - same kind that your stomach uses to digest food. A gallon lasts almost forever.

I have a Steinite crystal set that has a flat coil inside, held in place by a round fiber disc with its embossed Checkers-game crown design. I assumed that it was a repair but later saw a picture of the same model - revealing the same feature. The factory made use of this existing product!

--Bill McKeown

## Notes from the February 19, 2022 Meeting

Jim Sargent opened our meeting with his usual call for us to introduce ourselves and residence cities. The turnout was good with a headcount of 28, including two guests. Larry Lindsey discussed the latest SMITR awards, including one from Oct 16, 2021. The new question was "What organization do we acknowledge by being here at our typical meeting place?" Mike McCarty knew the answer to be the Campfire Girls flagpole - donated in 1964.

The topic of our meeting program was QSL's. Jim



Sargent showed us examples and discussed a large number of items from his collection, which began with everybody bringing him "stuff" as a young man. He explained the origin of the code-name QSL during the process of early radio communication. Because early communication was only by telegraphy, codes were developed to speed up the process - eliminating the spelling-out of commonly needed messages. A three-letter code, starting with the letter Q, was developed to

represent a word or phrase. Examples are: QST - calling all stations; QTH - where are you?; QRN - there is natural noise, e.g. static; QRS - slow down; QRT will stop transmitting; QSL? - did you hear me? - and QSL - hello or goodbye. A member brought up that these were also useful in reducing foreign-language communication problems. These codes are all used for CW communication (no voice). QST means "calling all stations" and became the name for the magazine still published today for Amateur radio enthusiasts, since 1915. There was a short period during WWI when the government shut down amateur radio operation to avoid interference with military communications. An amateur in Houston suggested a postcard system to let people acknowledge and confirm receipt of their signals. He sent cards to his contacts with lines to enter a list of facts to report, such as your location, signal strength, your equipment, time-of-day, etc. It was a great success, and





QST magazine published a form, which contained those lines - still used today. Jim showed us a number of examples of QSL cards from his large personal collection. To provide proof of communication, a 2-way exchange of cards is important. A common goal is to collect 100 or more cards, each from a different country or global location.

People have been sending QSL cards for over 100 years, now - both in code and with voice. What present-day people don't realize is that QSL's, or their equivalents in letters and notes, were very popular for listeners to standard broadcast stations, especially in the early days of radio. There were challenges for your listening equipment, depending on station power, direction, and signal propagation factors. There were "bragging rights" about distances (DX) and radio sets, just like today. The information was very useful to the station engineers, and many of them sent letters of acknowledgement to those that reported. Engineers could plot their station signal power and radiation pattern from this data. Jim showed an old QSL from KDKA, Pittsburg PA, the first commercially licensed broadcast station. Growing up, Jim sent out a number of QSL cards to a number of broadcast stations throughout the US and received a number of replies, mostly from the station engineers. He was using a Bakelite AC/DC set at the time. One reply came from a VOM (Voice-of-America) station. Others included QSL's from the Department of Commerce - WWV and WWVH. There were companies that printed and sold stamps bearing the station call letters - and books to paste them into - to be sent out by radio stations as advertising their broadcast service. Jim showed an example of a book with a few stamps in it.

George Potter showed QSL's from his collection. One was from Pitcairn Island. Some were from broadcast

stations, many being from hams, including W5TXC - our late member John Alford, and KN5MLG - Mike Grimes. George discussed the process that was used for assignment of call-letters, starting originally with the Commerce department in 1912, then later by the FCC. About 1932 the FCC began requiring tests, including proficiency tests for transmitting a and receiving Morse code. After WWII, the FCC added W,K and N letters to newly issued and existing call-letters originally to define areas of the country but irregular, later on. George also showed a "radio-party" invitation card, offered for guests to gather and listen to a radio at a time when very few people had one of the miraculous new gadgets. (Much later, we had "TV parties" when they were the new magical gadget.)

Author's Notes: Just as in the early days of radio, early TV reception brought on bragging rights for distance, number of stations and receivers. I witnessed TV DX reception in my home town of Benton Harbor, Michigan (home of Heath Company) from a Houston, Texas station whose test pattern had Sam Houston at its center -about 1000 miles away. During winter, people down near lake Michigan could pick up Chicago stations using only rabbit-ear antennas. I think the relatively warm water, about 50 degrees F, created a waveguide effect over the 85 miles of water. But two miles inland, a 50 foot tall tower would only get you a slightly snowy picture, using a booster amplifier.

--Bill McKeown



Who is this longtime member of VRPS?

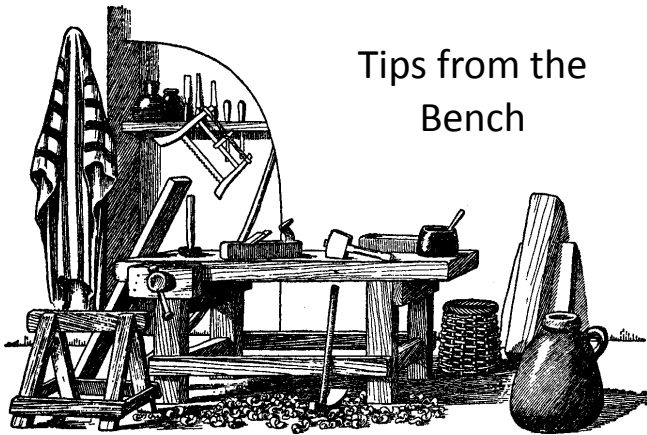


## Pictures from the March 19<sup>th</sup> Auction





## Tips from the Bench



### Drastic Tube Substitution by Tom Burgess

Several years ago while restoring a small four tube round top depression era radio, I began to ponder what would be a way to work around if the supply of 2 1/2 Volt filament tubes were exhausted.



The radio under restoration was manufactured by the Simplex Radio Company and sold under the trade name Universal. It used the 2 1/2 Volt filament tubes, a 57, 58, 2A5, and an 80 rectifier (5 Volt filament).

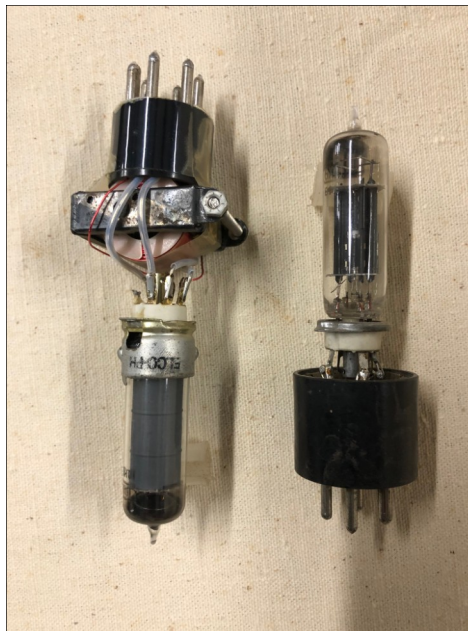
I remembered the tube adapters which

were heavily used during WW2 when many of the newer tubes were not available. It was popular to create or buy an adapter to allow the use of an earlier design tube in place of a more modern version that was in demand for the war. Adapters were commonly made from a socket from a junked earlier model set and a base salvaged from the defective tube.

The socket and base were then cleaned of wires and solder and a short bare single strand wires soldered to the desired pins of the socket. With the aid of a tube manual, the wires were then arranged to match each tube element to the correct location on the tube base utilizing a short length of spaghetti tubing for

insulation if any wires crossed. The wires in the base were then soldered, trimmed and cleaned allowing the installation of an older design tube in a newer set. If the tube to be replaced featured a grid cap on top and the tube replacing it did not, the solution was to bring a wire from G1 on the replacement to a grid cap salvaged from the defective tube.

What would happen if I adapted a 7 pin miniature tube with a three Volt filament to use in my depression era radio? There was a huge supply of Three Volt tubes left from the days when they were popular in TVs with series string filaments. These tubes new in the carton were almost worthless.



My first test was to replace a 57, a sharp cutoff pentode with a sharp cutoff 3AU6 (a three Volt filament tube). The results were better than expected, the radio played better with the more modern tube. One concern was an increase in filament voltage from 2.6 Volts to 2.7 Volts due to the lower filament current required for the modern tube.

This could lead to a slightly shorter life for the remaining tubes, especially if more than one substitution was made as the filament voltage increased about 0.1 Volt for each tube replaced well.

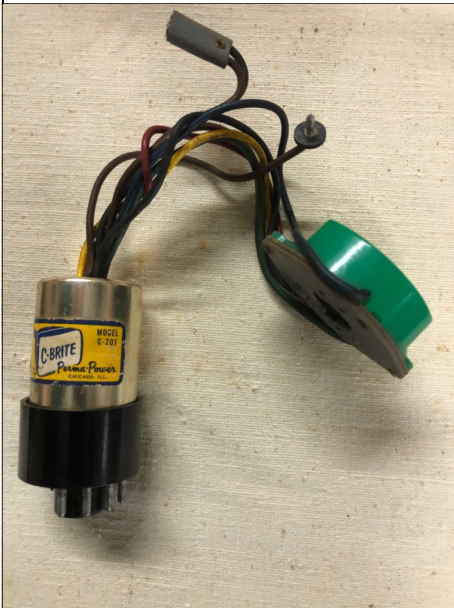
This could be compensated for by connecting a low value resistor in series with the AC line inside the set. A value in the low tens of ohms with an estimated 10 or 20 watt rating should work, resistance value to be determined experimentally. This is unnecessary if all tubes are changed (adapted).

The next tube to be replaced was a 58 remote cutoff pentode: a 3BA6 was chosen and worked very well.

The type 80 rectifier was replaced with a 6X4: the original 5 Volts had risen to 5.5 Volts entirely adequate for the 6X4. The cathode was connected to one of the filament pin (don't

forget this step). This replacement worked well.

I saved the most difficult substitution for last, the 2A5. A search of my tube manuals did not provide a low filament voltage audio amplifier. The lowest was a single listing for a tube with a 5 Volt filament and I was unable to locate the 5 Volt tube in my stock. This tube would probably work but would suffer from slow warm up. A better solution was to use a 6AQ5 beam power tube to replace a 2A5 power pentode adding a transformer to increase the available 2.9 Volts to 5.8 Volts, completely adequate for a 6 Volt tube.



My transformer solution was to use the core from a B&W picture tube brightener transformer, another device with little or no value, usually free. This provides a small core of just the right size. The winding is simple. It is called a bifilar winding, simply take two lengths of No. 20 enameled wire and wind both at the same time to fill the window space available. Reassemble the core and connect the end of one winding to the start of the other winding forming an autotransformer. One end and the center tap are then connected to the 2.9 Volt source and the full winding supplying about 5.8 Volts to the tube filament.

Overall I was very pleased with the improved performance of this little set which was originally designed as a low cost set for local stations.



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# **SOUND WAVES**

## **MONTHLY MEETING PROGRAMS 2022**

NOTE: Programs will be held at various locations in Irving, Texas. Make note of the location as they may change from time to time. Senter East, 228 Chamberlain St.; or Garden and Arts, 906 S Senter Rd. Maps are located on the WEB site, [www.VRPS.org](http://www.VRPS.org) EVENTS page. Programs start at 2pm. unless otherwise noted. Call us if you get lost: 972-898-7251 or 972-742-8085.

Programs are subject to change, contingent on scheduling conflicts. As always, your suggestions for programs/content are welcome. I need volunteers to organize other programs, so consider presenting a program yourself. Call anytime or send an email: **Larry Lindsey email: [pipilindsey@tx.rr.com](mailto:pipilindsey@tx.rr.com) telephone: 817-312-8761..**

- **APRIL 16<sup>TH</sup> - SENTER EAST -2- 5 PM -- THE VICTOGRAND ROLL SPEAKER WITH DAVE SEYMOUR**
- **MAY 21<sup>ST</sup> - SENTER EAST -7AM - NOON -- TAILGATE SWAP MEET**
- **JUNE 21<sup>ST</sup>-- MYSTERY MEETING & FIELD TRIP -- MORE DETAILS LATER**
- **JULY 16<sup>TH</sup> - SENTER EAST -8AM - NOON -- REPAIR SESSION**