

HVRA

Houston Vintage Radio Association



The Grid Leak ATWATER KENT RADIO

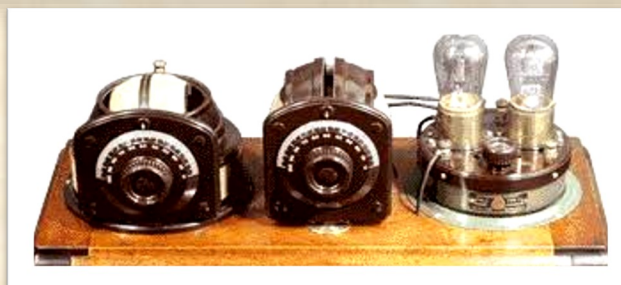
UPCOMING EVENTS

- JULY TEXAS CITY MEGA AUCTION
- SEPTEMBER BOARD ELECTIONS
- OCTOBER 2021 CONVENTION
- GENERAL MEETINGS AND AUCTIONS
- SWAP MEETS
- JANUARY POST HOLIDAY PARTY



WHATS INSIDE

- OFFICER CONTACT LIST
- PRESIDENT'S MESSAGE
- MONTHLY EVENT SCHEDULE
- MEGA AUCTION DETAILS
- CONVENTION DETAILS
- REPAIR AND RESTORATION ARTICLES



HOUSTON VINTAGE RADIO ASSOCIATION

Since its founding on November 16, 1978, the Houston Vintage Radio Association has been dedicated to the preservation of vintage radios, electronics, and phonograph equipment.

Our members across the USA vary in backgrounds and experiences but are brought together by a common interest in electronics. Many interests represented in our organization include: preservation and restoration of vintage electronics including tube and transistor radios and TVs, phonographs, telephones and cellular communication equipment, telegraph equipment, HAM radios, amplifiers, PCs, relevant literature, recordings, etc.

HVRA COMMUNICATES WITH MEMBERS ACROSS SEVERAL PORTALS:

- The Grid Leak is the official Newsletter, currently published quarterly, distributed primarily by email (and by USPS as necessary).
- HVRA maintains a website, HVRA.org, used for information regarding future events, current activities, contact and operations information, and historical data including photo libraries and past newsletters. Additionally, HVRA information and activity descriptions can be found on Facebook.
- Our normal means of face to face communication is through monthly Board of Directors' meetings and monthly General Membership meetings located at the Bayland Park Community Center; we have also used Zoom sessions for Board Meeting from home (as necessary) as well as offsite swap meets at alternative locations.

DISCLAIMER

The sharing of information pertaining to restoration and repairs, of any items, appearing in any form, contained in any of the HVRA communication methods, is contributed by members hoping to help and/or assist others in efforts to advance the education of collecting vintage electronics. Therefore, the reader or listener is advised to contact the contributor for a full understanding of the electronic, mechanical, and chemical risks involved in the information of interest. HVRA is not responsible for the accuracy and safety of any repair or restoration topics presented in any format.

MEMBERSHIP

Annual Dues: \$20.00 Payable prior to the HVRA Annual Convention

Membership Applications available at General Membership Meetings or on HVRA.org

HVRA OFFICERS

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From The President..... Bill Werzner

Here we are now in those "Lazy, Hazy, Crazy Days of Summer". How many of you remember that song from the early 1960s that the late Nat King Cole sang? In 1963, it made its way to the top hits of the year. Occasionally, I hear it on the radio as I'm driving and it takes me back to those halcyon days when I was nineteen and on summer break from my freshman year in college. Yes, those were the days my friend we hoped would never end, but they did; now almost sixty years ago – gads, that makes me feel old! It was the previous summer that I was working as a theater projectionist and really getting interested in electronics and sound system troubleshooting. In the summer 1962, I saved enough money to buy a Knight 600 B tube tester kit from Allied Radio; it is the one I still use today! That was the spark that really got me going and started the fire that still burns today. So, now on with the summer quarter "Grid Leak"; fasten your seat belts, things will be going full speed ahead!

Looking back over these last three months as COVID restrictions began to lift we continued with our monthly meetings at Bayland, and the annual swap meet at Mike Payne's Electro Junk Inc. in Alvin on April 17. Then there were parking lot swap meets at EPO (Electronic Parts Outlet, ZAMACHA LLC) on Feb. 20, March 20, May 8, and June 12. The last two meets at EPO concluded with auctions.

A Big Thank You from HVRA to EPO and staff!



Not only have they offered us the use of their parking lot, but provided us with portable tents, chairs, tables, opened their business for us to cool off, a restroom, coffee, and wonderful hospitality. I want to take this opportunity to thank those members who donated time, sweat, transportation, and brought estate items to our EPO parking lot events. If you missed the swap meets, you missed some fun events, don't despair there will be more swap meets to come after the weather cools.

If you have never visited EPO and toured the long aisles, I encourage you to do so. They stock a plethora of parts, hardware, surplus electronics old and new, tools, test equipment, tubes, transistors, integrated circuits, electronic kits, books, records, on and on! If you know of a youngster who needs glassware or items for a science fair project, EPO is the place in Houston to start. When it comes to eclectic merchandise, I cannot think of another business in this city that could, even remotely, compare with EPO! Whenever you are in the area, stop by and patronize them, tell managers Chris and Rick – as an HVRA member, how much you appreciate their support and gracious hospitality. EPO is open Monday – Saturday, 9 AM to 5PM on Fondren Rd., between Richmond & Westpark, phone (713) 784 – 0140, [www. operations@epohouston.com](http://www.operations@epohouston.com)

HVRA Election of Officers September 25

Once again we are looking for volunteers willing to serve a two year term as club officers. During our regular meeting on September 25, we will be seeking nominations from our general membership for the following positions: [1] Vice President, [2] Secretary, and [3] At Large Position II. To qualify, you must be a member in good standing with annual dues paid, willing and able to attend both monthly Board of Directors and General Membership meetings, and fulfill requirements of the office that you may be elected to serve. We are always looking forward to having new officers elected from our general membership to bring new ideas and share their expertise as club leaders.

Our trusty volunteers pitched in to clean out a couple of estates and finished moving the last load to storage a few weeks ago. We acquired so much that we had to rent an additional 10 by 25 unit on South Gessner.

Looking ahead, due to the summertime heat we have no parking lot swap meets planned for July or August, but the Annual Texas City Ham Fest will certainly keep us busy in July. In the meantime, we will continue to work with estates to acquire material for late summer and fall activities. **AND**, after the Texas City event, our concentration turns to the 2021 HVRA Annual Convention and Auction. Our VP, Lewis Brittain, has prepared details related to this October 1st event at the Marriot North. Those details of overnight room reservations, pre-registration, on-site registration, programs, auction times and much more can be found within this GL as well as at HVRA.org. Additional information will be added once the final agenda is completed. Keep up with our website as we add manifest photos from the several estates which Bill Werzner, Steve Scheel and Joe Gernand plan to bring to the Convention auctions.

2021 Third Quarter Activities Schedule (incl. October)

July

- 10th,** Saturday, HVRA Mega Auction, Doyle Convention Center, Texas City (in conjunction with the Texas City Tideland Amateur Radio Society). HVRA Mega Auction 12 Noon - 4 PM. HVRA Membership required for all participants . See additional information within this GL and on our web site at www.hvra.org for manifest prior to auction.
- 13th,** Tuesday, Board of Directors' Meeting remotely via ZOOM at 7:00 PM.
- 24th,** Saturday, Bayland Park Community Center, General Meeting, Program, & Auction 8:00 – 11 AM
Program: by Reid Shipp
Donuts Coffee Juice and condiments.

August

- 10th,** Tuesday, Board of Directors' Meeting remotely via ZOOM at 7:00 PM.
- 28th,** Saturday, Bayland Park Community Center, General Meeting, Program, & Auction 8:00 – 11 AM
Program: Veneer Refinishing, Part Two, by Joe Gernand
Donuts Coffee Juice and condiments

September

- 14th,** Tuesday, Board of Directors' Meeting remotely via ZOOM at 7:00 PM
- 25th,** Saturday, Bayland Park Community Center, General Meeting, **Officers Elections**, Program, & Auction 8:00 – 11 AM
Program: "Collections" Bring your own collection to show to members (can be other than radio/tv)
Donuts Coffee Juice and condiments

October

1st – 3rd Friday thru Sunday morning, HVRA Annual Convention, Marriott North; see additional details within this GL and at HVRA.org

Note: No Swap meet is currently scheduled for October, schedule to be revised in 4th Qtr GL

NOTE BOARD CHANGES:

During the June General Meeting, two changes were made to the Board.

- Derek Ross has had to immediately resign from the Board for personal reasons and Joe Gernand was nominated and unanimously voted to replace Derek as At Large Position#1 Rep.
- Ric Slater has chosen to step down, on July 31st, from the Board and Brett Martin was nominated and unanimously voted to replace Ric in the Treasurer position beginning August 1st.

Lets give Derek and Ric a big round of applause and thank them for their dedicated service to HVRA.

Please welcome Joe and Brett to their new positions and give them your undivided support as we enter

HVRA welcomes our new Texas members and thanks them for being part of our family:

Malcolm Brown Houston

Will Herr III Houston

Barry Lackey Beaumont

Welcome Back: Charles Davis Tomball



TEXAS CITY HAMFEST and HVRA 2021 MEGA AUCTION
DOYLE CONVENTION CENTER in TEXAS CITY
JULY 10, 2021



The Texas City "HAMFEST" will be held in the Doyle Convention Center, 2010 5th Ave. North, Texas City. HAMS, DX'ers, collectors, tinkerers, and curious individuals will be on hand, swapping and selling. You will find just about anything electronic among the many tables. HVRA will have a table inside the air conditioned auditorium distributing newsletters and club brochures to all who stop for a visit. Plan to arrive around 7 AM, or possibly earlier, to get a good place to park as the lot fills up fast. Food and drinks will be available inside. There is an admission charge of \$5.00 to enter the Hamfest area.

The **HVRA Summer Mega Auction** will start at 12 Noon in the adjoining Exhibit Room. All HVRA Mega Auction attendees not paying \$5.00 for the Hamfest must enter the Mega Auction room

through the side hallway door, not through the Hamfest area. Set up for the Mega Auction will begin near 8AM; sellers may begin staging their items at 9AM. Please bring your items through the side hallway door, not through the Hamfest area.

Selling and bidding at the Auction is free to all current HVRA members. Non HVRA members will must pay \$20.00 for an annual membership in order to sell and bid. **Everyone anticipating selling or bidding must register and receive a bid card with a bidder (seller's) number at the registration table.** All items presented for auction must be labeled with an HVRA seller's **Auction Control Form (available on the HVRA.Org website and at the Mega Auction)** and contain the seller's number, lot number, minimum acceptable bid, and a brief description. **NOTE: Anything less than the Auction Minimum Bid of \$5.00 will be considered a donation to HVRA, so make certain you declare your acceptable minimum bid on the form attached to your auction item. No items (bought, sold or passed) can be picked up until the conclusion of the auction, approximately at 4PM, when the check-out process begins.** At check-out, all sellers will pay HVRA a 15% commission on each successful sale. Payments can be made by cash, check or credit card.

In order to maintain security of all auction items, no one will be allowed in the pre-auction review or post auction pick up areas once the Auction begins (or during any breaks). Additionally, no auction items will be accepted after 2pm and those items can only be placed on the pre-auction tables by an auction handler.

Now is the time to round up those items that may be languishing in your attic or garage, take some photos, list them, and forward them (NO JUNK, PLEASE) to Bill Werzner at werz1943@gmail.com or if you have any questions, please contact Bill at 713-820-1778). We also need volunteers for pre-auction estate loading, auction day unloading and as handlers to move items across the auction area. Contact Steve Scheel (text: 281-687-5771; email targeteye1@gmail.com) or Joe Gernand (281-723-1984; email joegernand@gmail.com).

See the next page and watch our web site (www.HVRA.org) for manifest photos

ATTENDEES MUST FOLLOW COVID-19 RESTRICTIONS ENFORCED BY TEXAS CITY AND THE CONVENTION CENTER.

HVRA 2021 MEGA AUCTION JULY 10, 2021

MANIFEST AND PHOTOS by STEVE SCHEEL and DEREK ROSS

IN STORAGE



READY TO GO TO AUCTION

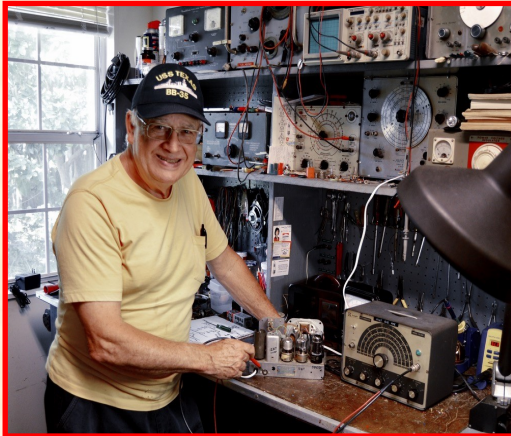


SOME INDIVIDUAL ESTATE ITEMS



The Trouble Shooter

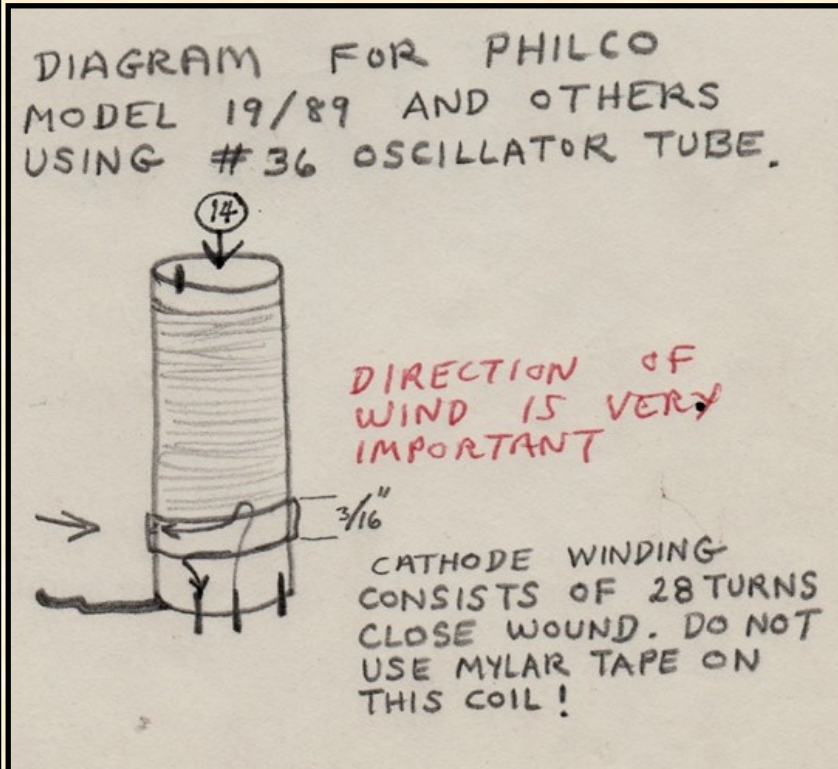
by Bill Werzner



1930's Philco Oscillator Coil Problems

Quite a few years have passed since I presented an article about a problem that troubles many vintage Philco cathedral radios; that is the oscillator coil. Most of these problems originate in the cathode winding of the oscillator coil and can be overcome with a little time, patience, and a steady hand. The problem involves the exceptionally fine magnet wire that is wound around the base of the coil that is often corroded and/or broken. Windings will vary in number of turns among different models; it is advisable to carefully count the number of turns as you remove the cathode coil.

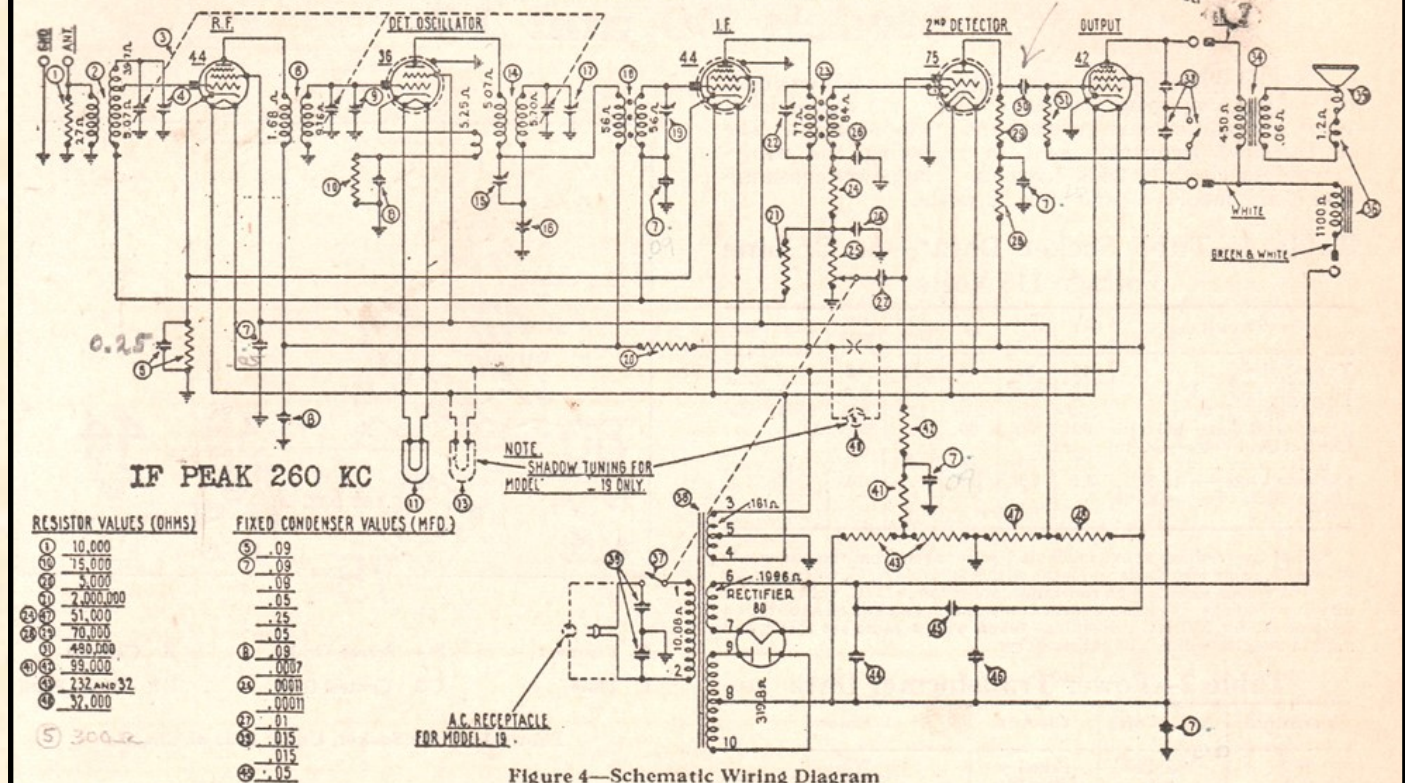
This illustration is of a Philco 19 oscillator coil cathode winding being replaced with new wire.



In this example there was severe corrosion that caused several breaks in the very fine wire that made up the cathode winding. To repair a coil like this, if possible, use a magnifying glass and count the number of turns. Also note the direction of the turns by making a sketch for reference. Things you will need for replacing the coil are: [1] fine magnet wire like you would find in an old TV horizontal oscillator coil, [2] some wide double sided Scotch tape, [3] bottle of coil dope, [4] a mounted magnifier with good lighting. Using your thumb nail or small plastic scraper, carefully scrape away the old coil and the (bees wax) insulation under it. Don't use any solvents to clean the secondary winding (larger diameter wire).

When the coil appears clear and even, paint on a thin layer of coil dope. Wait several minutes for the dope to dry, then wrap two layers of double sided tape over the spot where the cathode coil used to be. Begin carefully winding the new wire from the bottom by pressing the wire onto the tape adhesive. Add windings slowly pressing the turns close together in a single layer until the correct number has been achieved. Paint two coats of coil dope over the winding, and when dry, solder the other end draped over the winding and place another brushing of dope to hold it in place (see diagram). I have used this technique to repair similar coils in other Philco radios of that era including the 460 KHz I.F. Philco 60 where 19 windings were present. When completed and the coil installed, align the Philco 89 or 19 radio at 260 KHz I.F. for best gain with a calibrated AM signal generator.

Models 89 and 19



Quiz from the Philco schematic above
answers on last page
don't peek - give it a try

- Multiple choice: The oscillator type is? {A} Tuned tuned-grid, {B} Hartley, {C} Colpitts, {D} Crystal
- T. or F. The two capacitors in the #42 Output tube plate supply along with a switch are there to boost volume.
- T. or F. Touching the alignment nut on the I.F. primary with a metal socket could give you a shock when radio is being aligned.
- T. or F. The 10 K Ohm resistor across the 27 Ohm antenna coil primary winding serves no purpose.
- T. or F. The oscillator cathode windings for the 19 and 60 models have different number of turns to boost short wave reception

The \$24 Challenge By Tom Taylor

Captains Log:

Stardate May 8th 9:50 AM

We have arrived at the EPO parking lot of Houston's West side.

Multiple small and neglected items appear for auction from the estate of Whappler.

My eyes and those of a traveling friend fall upon a three tube regenerative radio that looks promising.

Consumed by other electronic pleasures I recommend he do the purchase.

Recalling the satisfied and hopeful look of my friend I assure him I will provide a set of spare tubes.

Following a brief period of days this new patient shows up at my place for a healing.

Excessive audio hum was traceable to the caned electrolytic mounted on an insulating washer. Ground wire provided.

First stage of audio amplification found with only 15 volts on the plate was traceable to a 1 meg potentiometer serving as the plate load where its value should have been a lower 500 K ohm value. Pot shunted with a fixed resistor (see diagram).

Poor to no regeneration traceable to coil windings swapped across ground as found by measuring resistances to tap knowing the cathode path must be the smaller of the two (coincides with schematic depiction)

Numbered leads were swapped.

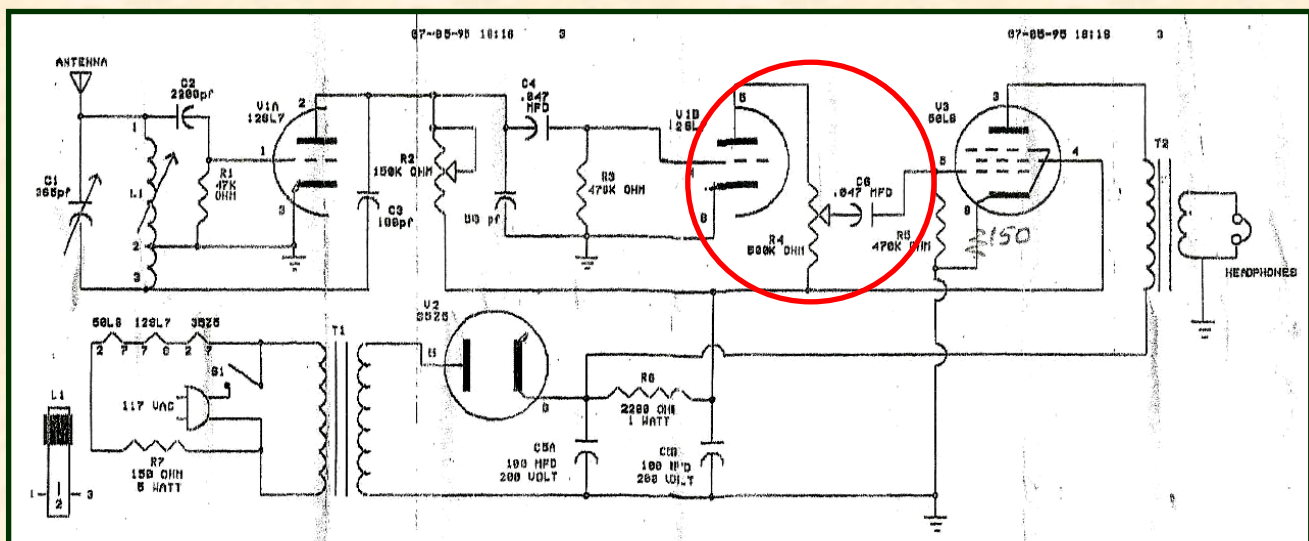
Extreme 50L6 output heating traceable to NO cathode resistor resulting in a bias far too high (virtually zero volts). Recommended value from the tube manual was installed rendering a gain increase and significant heat reduction.

Suspect solder joints treated.

Patient sent home.

Addendum:

Subsequently determined that weaker stations force the assistance of a computer amplified speaker.



Radio Diagnostics by the Numbers by Tom Taylor Part 2: Audio

For the purposes of this text we will define the audio section as everything from the volume control to the speaker. Actually, there exists audio before the volume control and right after the detector which performs its rectification like task and the filter components that follow task with removing carrier portion of the intermediate frequency. The paragraphs that follow would apply to either Amplitude Modulation, AM, or Frequency Modulation, FM, which indicates only that a different detector type is required.

In almost all cases the full volume audio is placed across the resistance of a volume control such that its slider position can select a lesser portion of the audio. You may soon find that these volume controls are generally above 500 K ohm in value so as to not load down (diminish) the signal from the detector. This suggests there is little affect to use a larger than factory volume control value should the proper value be unavailable and an insignificant to tolerable change to use one a little less in value. Most radios produce far more audio than we use and the primary objective is to put life back into our set and not let it wait indefinitely for an ideal volume control replacement. Note, you can shunt a fixed resistor across the full volume control to obtain an original pot value. Wire shielding, from the potentiometer, is often used because a subsequent stage may otherwise amplify both the noise coupled from nearby wires as well as the signal of interest. This audio lead will also benefit if it is separated from AC filament leads that carry 60 Hz and an audio output transformer lead where a field could be strong enough to cause feedback.

As a technician you want to first listen to the speaker for any sound at all because even radios with low ripple power supplies produce a little noise at the speaker when a stage or two of audio amplification is working. The surest way to produce noise for the test is by band switching or rapidly twisting the old tone and volume controls. If nothing is heard and you have the chassis bottom in view you can touch the volume control high side (the one that isn't grounded) to await a hum that quickly validates audio stages from there to the speaker. If nothing is heard, turn the volume full up and perform those steps to confirm a working speaker and output stage. If you still have nothing to hear, turn the radio off and start taking continuity checks of the speaker followed by both windings of the audio output transformer. The highest likelihood of a failure is with the audio transformer primary where high voltage is found and idle currents near 30 to 50 % of single ended tube maximums can heat up its windings. This generality is offered here because most of our radios do not use push pull output tube pairs. They instead use one tube referred to as a single ended output circuit called for 'class A' operation where that one tube is biased ON somewhat to draw current continuously allowing variances of signal to drive the idle current both up and down from its no signal reference point. You might think of its rest position as an isometric exercise condition for the tube.

If our transformer is found good we could check the tube in a checker or you can power up the radio and use the circuit to do the checking. The circuit should provide a voltage on the tube plate and if the tube has one, a similar voltage on the screen, AKA grid two. If it doesn't, stop here and fix that issue now. With power applied and those two voltages present you better be seeing a voltage drop across the cathode resistor. Excessive voltage on the cathode, a tube that is hot enough to smell or possibly very low voltage on the plate are signs of higher than needed voltage on the control grid, grid one (generally over one volt positive), so replace that incoming coupling capacitor from the plate of a prior amplifier and listen again for the spoken word. A leaking capacitor takes on a resistive trait and DC current will pass through driving the grid of a subsequent tube more positive than needed which, in turn, causes it to draw more current leading to distortion and heating. If there is no cathode voltage, stop here and investigate with a meter that resistor and all its connections including tube socket pins. A fair number of tube sockets have been found bad with pins that have abandoned their assigned task of connection. While you have the tube out looking close at the socket, be very sure the tube pins have no corrosion or insulating schmuetz. Paraffin, tar and corrosion are not your friends so apply a brass brush or 1200 wet or dry paper as needed.

Continued on next page

Audio by Tom Taylor (Continued)

Steel brushes may penetrate plating which can eventually become a site for corrosion. BTW corrosion is common on loctal tube pins due to the chosen metals so remove the tube and brush those pins as a rule when you are working a suspect area followed by a precautionary application of the spray DeOxit.

At any time you can apply an audio signal to the control grid of this or other audio stage tubes to listen for a response. For this task you can either use a signal generator or in the event of Fund Deficit Syndrome, FDS, your finger as the signal source. Choosing your finger requires placement of your other hand where you can keep an eye on it such that it finds nothing but an insulator to touch. An audible signal is produced in the radio when you place a screw driver shaft touched by that finger to the control grid. Acting as an antenna you will be injecting a small amount of radiated 60 Hz noise signal into the circuit. Note that we have taken all the key diagnostic steps on this stage of amplification without using a signal generator. Only your understanding, the meter and a screw driver was used. Now take those same steps to the prior audio stage if one exists and if all around it is found functional you should be able to place that fingered screw driver on the volume control and hear the desired hum at the speaker.

One last thing. There is a task in the superheterodyne that has a composite waveform one component of which is the audio portion we desire. That function is the detector often part of a tube performing the first stage of amplification. The incoming signal to this dual purpose tube will be centered around the Intermediate Frequency, IF, which is modulated by the audio envelope. Before amplification as an audio only signal the two must be separated. The detector portion is in effect a rectifier which strips one half of the incoming IF waveform off leaving one polarity of the incoming composite. Subsequent circuit components using preferred combinations of resistors, inductor or capacitors as well as stray effects in the surrounding parts will attenuate the higher IF frequency portion which wasn't within our ability to hear anyway. What is left will be the audio which is most often sent to the volume control while it is still in high impedance circuitry. Tubes used before this task enjoy low internal capacitance best suited for performance at higher frequencies, should have higher internal plate resistances minimizing signal losses and may be termed 'remote cutoff' or possibly "sharp cutoff". Their construction allows gain adjustments by a negative voltage influence from the Automatic Volume Control, AVC. Audio tubes that follow need not have any of these traits.

NEWSFLASH!! IMPORTANT NOTICE.....MEMBERSHIP DUES

As reported in the past Grid Leaks, the HVRA Board of Directors voted, unanimously, to extend current memberships up to the beginning of the next Convention. So remember that the \$20 yearly membership fees, typically due at the convention in February are not due until our next convention currently scheduled for October 1-3, 2021. It is just easier if you have to remember to pay them at a convention time. If you have already sent in your money, you will be covered until the next convention in 2022 (exact date to be determined after Covid-19 threats recedes). For your convenience, renewals may be included with your 2021 Convention preregistration payments; the preregistration form is included within this Grid Leak, available on HVRA.org, and at all General Membership Meetings.

Wood Cased Radio Veneer Repair, and Refinishing

Joe Gernand

"The Lazy Man's Guide to Radio Refinishing" (see HVRA website) covers the cleaning and rejuvenating finishes that are in good shape and gives good guidelines on when more involved methods of restoration should be considered. However, many wood cased radios are damaged beyond what can be accomplished the "Lazy Man's" techniques. These radios can often become real show pieces with more extensive repair and refinishing.

Wood cased radio restoration, repair, and refinishing, as a topic, covers a number of conditions. Everything from small chips and dings to replacing missing veneer and complete refinishing. In this article I'll cover some of the materials, tools and techniques for veneer repair and finish restoration that I find useful. I encourage everyone to find what works for them and feel free to comment on your experiences.

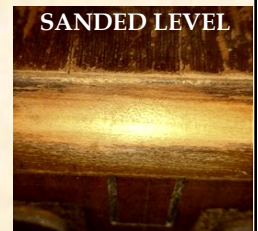
Most materials and products for repair and finishing can be obtained locally, though, sometimes online sources may be the only suppliers available. One of the best sources for veneer materials are wood cases that aren't worth the effort to salvage as radios. As parts donors, they can provide period correct veneers, sanding dust, or decorative parts. A short list of the other types of materials, tools and suppliers is provided at the end of this article as well as some YouTube channels and videos.

The techniques used to repair damaged veneer depend on the type and level of damage. Simple dings and dents allow simpler techniques than patching in missing veneer. Some examples of repair and restoration techniques follow below.

Dents, Gouges, and Deep Scratches:

Dent Removal: Use a soldering iron (or clothing iron) and damp cloth to steam the damaged area. The steam will swell the compressed wood fibers back to their original state. Allow to dry and lightly sand to level. If heat and moisture haven't raised the grain enough filling to level will be necessary.

Filling and Leveling: There are several methods for filling. One method is to fill the blemish with a mix glue and sanding dust. Or, where the defect is small and the finish is in good shape, melt in sticks (wax or shellac) can also be a good solution



Gouge and Scratch Removal: Fill the gouge with a mix of sanding dust and glue. Titebond glue works well for this. When making filler using Titebond glue, thin the glue with water to a about 60/40 glue to water ratio then mix in enough sanding dust to make a thick paste. This is a more forgiving recipe than using CA glue but takes longer to dry. By adding water to the glue, the putty will absorb stain better than using glue alone. CA glue and sanding dust can also be used as a filler. Layer CA glue and sanding dust in the blemish; when cured, scrape or sand level. Using CA glue is fast but it won't take stain and the CA glue can damage adjacent finished surfaces.



Blistering/bubbling, loose spots, splits and delamination

In this example, the finish is in relatively good shape and can be saved with careful restoration. Use a thin bladed tool to clean out under the veneer. Work Aliphatic Resin (original Titebond) under lose edges. Clean up squeeze-out with a damp cloth and clamp with caul. Make sure the caul is covered with packing tape that has been with waxed. A layer of candle wax with a layer of furniture paste wax on the tape will prevent the caul from sticking to any glue squeeze-out. Remove the cauls after about 2 hours and clean up any squeeze out with a damp cloth. Allow to cure overnight.

Continued on next page



LOOSE AND CHIPPED



TOOLS



WORKING IN GLUE



CLAMPED WITH CAUL

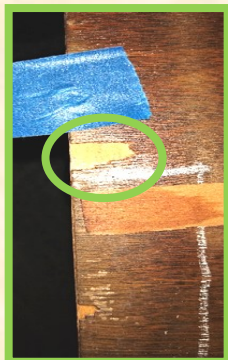
For splits, bubbles and loose spots, cut into the veneer along the grain and work or inject glue into the slit. Wipe up the excess glue with a damp cloth. Clamp with cauls or use heavy weights on the cauls until the glue sets. After 2 hours remove clamps or weights and clean up any squeeze out with a damp cloth. Allow to cure overnight. Note: If the finish isn't to be saved then a clothes iron can be used to flatten the veneer and the glue in just a few minutes.

Patching missing veneer

Select a piece of veneer that is a close match. Test veneer color match by wetting with mineral spirits or naphtha (lighter is good, darker will need to be bleached or find a different sample). Make sure substrate is solid and clean of old glue residue. Trim edges of the chipped veneer to a practical shape (straight lines are harder to hide; curved lines are harder to accomplish but easier to hide; reality is usually somewhere in between).

With masking tape, make a pattern for the veneer patch by overlaying the new edges of the existing chipped veneer and shade the chipped edges with a soft pencil. Place the tape pattern over the veneer patch material and trim to a close approximation of the chipped veneer. Then adjust the patch to fit the chipped area (take your time doing this step). Then glue patch in place with a clamp and caul. Allow to dry for a couple of hours. Remove clamps and lightly sand.

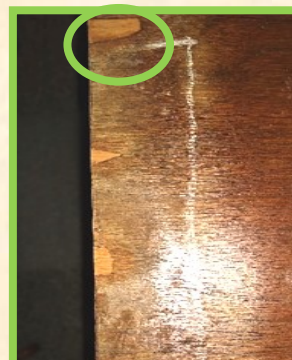
Small chips are more easily filled with sanding dust and glue as above with filling a gouge. Allow to dry then sand flush. For sealing and color matching see "Touch Up" below,



MATCHING VENEER



SHADOW TEMPLET



CHIPS PATCHED or FILLED



SANDED & COLOR MATCHED

Finish restoration

The first step in finish restoration is to start with a gentle cleaning. Start with a damp cloth and a commercial product for cleaning finished wood surfaces to remove the loose dirt. Allow to dry completely, then wipe down with either naphtha or mineral spirits and allow to dry. These two cleanings will remove soils, oils and waxes that may interfere with obtaining a quality finish. Finishing projects generally fall into three categories: Touch up, Re-topcoat, and Refinishing

Touch up

For very minor blemishes, apply shellac or other compatible topcoat with a fine artists brush to fill shallow scratches. Allow to dry, then sand lightly to level, and buff.

Often though, the damage to be repaired will be like the examples above where veneer has been patched or defects have been filled. Test the stain and finish absorption of your veneer patch material before committing to using it as a patch. If it absorbs too much stain or finish, seal with clear finish before color matching. Blend color by layering gel stains, oil stains or tinted shellac. Allow to cure, sand lightly between coats and repeat until until color matches the top coat. Keep in mind that the top coats add some color (usually amber) to the final finish, so it's best to layer finishes until final color is achieved.

Note: it may take several layers of color to get the desired result. Depending on the finish and the weather it can take days to color match a small patch so be patient.

Re-topcoat

If the finish only needs small repairs and / or has roughened over time but has good color re-top coating is indicated rather than complete refinishing.

After all of the minor repairs have been completed, lightly sand the existing topcoat with 400 grit (or coarser sand paper if necessary). Wipe down with naphtha or mineral spirits and allow to dry. Once cleaned if the existing finish is known, apply topcoats of the appropriate type of finish, lightly sanding between coats and applying enough coats to build the desired finish.

On older radios the finish is usually either a varnish or nitrocellulose lacquer. A quick test for lacquer is to wipe on a small amount of lacquer thinner in an inconspicuous spot. If the existing finish is softened and becomes tacky it is probably lacquer. If the finish blisters or bubbles then lacquer should be avoided as a topcoat. If you're not sure of your existing finish, apply a seal coat of shellac (either brushed or sprayed). Shellac is compatible with both varnish and lacquer and can be used to separate dissimilar finishes. Then apply your preferred top-coat by brushing, wiping, or spraying. Use an application method that's comfortable for you. With care and patience, excellent results can be achieved with all of these methods, even on large projects.

Note: In humid climates, touching up finish and refinishing takes patience. Things dry slowly and the humidity can cause blushing in some finishes if applied heavily or that have been overly thinned. Moving projects into a lower humidity environment for final curing can speed up the process.

Refinishing

Refinishing is indicated when the existing finish is in bad shape: cracked, peeling, flaking, stained, water spotted, sun faded, clear coat turning opaque, or has been painted over the original finish.

Simple Refinishing example:

Sand or strip existing finish (if using stripper follow the directions on the can). Repair any minor blemishes as above and sand, ending with 220 grit paper. Tack off the whole case with mineral spirits or naphtha and allow to dry. While the wood is still wet, with the mineral spirits decide if staining is needed or desired.

If no staining is desired. Seal wood with a wipe on varnish, allow to dry, apply second coat of wipe on varnish and while varnish is still wet, sand with three 320 grit sand paper creating a slurry. Wipe off slurry across the grain trying to leave some of the slurry in the pores and allow to dry. This will fill the major pores in open grained woods. Skip the pore filling with tight grained woods or if you want an open grained look.

Lightly sand and reapply wipe-on varnish. Apply several coats lightly sanding between coats to build to the final desired finish. If a really smooth, pore-less, final finish is desired then repeat the slurry step a second time before building the final coats. Another option for filling pores is to use commercially available pore fillers. Staining can be combined with pore filling by adding stain or dyes to the fillers.

Final sheen can be obtained either by using gloss varnish and buffing down with steel wool or other abrasives or by using a wipe on varnish with flatteners added for final coats.

Continued on next page



BEFORE REFINISHING



AFTER REFINISHING



If staining is needed or desired. The final sanding of a wood surface will affect stain absorption. For example, wood sanded up to 150 grit paper will absorb more stain than one sanded up to 220 grit. Also, a wood surface dampened with mineral spirits will take less oil stain than one that is dry. So, keeping these two characteristics in mind, apply an oil-based wiping stain and allow to dry completely. Skip the slurry step above for pore filling and apply wiping varnish as above for an open pore look. Or fill the pores using a commercially available pore filler (such as AquaCoat) for the closed pore look.

Oil stains work well for base color, gel stains for blending and shading, and shellac or lacquer with dyes for toning. Also, you should feel free to thin and blend different colors of stain to get the color you want. Just make sure to stay "in family" with stain types (i.e., oil stain with oil stain, water-based stain with water-based stain, etc.)

The example above is a simple case using varnish topcoats; however, this same process can be used with spray cans of any type of finish you desire, or you can wipe-on or brush-on a favorite finish. Just test for compatibility between differing finish types before committing to using them on a project.

Some Sources

I try to use local sources for products most of the time. That way if I run out of something I usually can get back on track within the same day. That said, some products I use I've only found on line. Here is a list of the materials I use most often. To learn more about wood finishing, I recommend reading Understanding Wood Finishing by Rob Flexner.

•Local and Online:

Old veneer from damaged cases

Wood Craft www.woodcraft.com

Veneer, tools, dyes, Original Tightbond and Tightbond hide glues, Quick Wood AquaCoat wood filler, SealCoat, clear and orange shellac, varnishes and polyurethane

Rockler <https://www.rockler.com> Veneer, tools, dyes, Original Tightbond and Tightbond hide glues, Quick Wood, AquaCoat wood filler, SealCoat, clear and orange shellac, varnishes and polyurethane

Big Box stores for Original TightBond and CA glue, shellac, lacquer, varnish, etc.

Minwax and Varithane: oil stains, stain pens, wax filler pencils, wipe on poly

Zinsser: dewaxed shellac/SealCoat, clear and orange shellac

•Online:

veneersupplies.com Veneer, veneer tools, dyes, glue. They will sell the exact veneer slice shown on line. This is really helpful when trying to grain match

Mowhawk: burn in sticks, stain and dye pens, oil-based wood filler

Old Masters: burn in sticks, stain and dye pens, oil-based wood filler.

YouTube worth watching on this subject

•Channels

Thomas Johnson antique furniture restoration in Gorham Maine: lots of videos and tips on glues, color matching veneer repair, etc.

Twoofrd: Canadian Luthier, great tips on fine wood and finish repair and restoration

David Tipton Radio: great channel for all aspects of radio repair and restoration

Glasslinger: great channel on radio repair and restoration and vacuum tube building

•Individual videos

[David Termini demonstrates how to patch missing veneer quick- shop cam no frills - YouTube](#)

[Repairing Buckled Veneer - Thomas Johnson Antique Furniture Restoration - YouTube](#)

[How to Patch Veneer with Quickwood - YouTube](#)

[DIY Furniture Repair | Veneer Bubble Repair - YouTube](#)

HVRA 43rd ANNUAL CONVENTION OCTOBER 1-3, 2021

Vice President Lewis Brittain

Volunteers are needed to assist in the success of this event: pre-convention sorters, taggers and loaders for estate items in our storage unit; unloaders and sorters in the auction drop-off and reviewing room, auction handlers and pick up room supervisors for Friday and Saturday, Contest Room helpers, Auctioneer helpers and Treasurer’s assistants. Please contact Lewis Brittain, Joe Gernand, Tom Taylor, Brett Martin, Steve Sheel, or Bill Werzner....see contact numbers on page 2, this GL.

- Location: Newly renovated Marriott North (Greenspoint Area)
- Dates: Friday thru Sunday AM, October 1st – 3rd (Check-in Thursday, Sept. 30th if necessary).
- Overnight Guestroom Rate: \$85.00 (does not include taxes and fees). For guestroom reservation weblink, please refer to the 2021 Convention site at HVRA.org.
- Pre-registration forms will be available in the 3rd quarter Grid Leak, or sooner at HVRA.org.
- Please remember...to participate in any convention activity, you must be an active member and pay your 2022 dues with your pre-registration or on-site.
- Convention Theme: Atwater Kent
- Friday Technical Presentation(s): (1) “Marketing Atwater Kent Battery Radios in the 1920s” by Jerry Sirkin, in collaboration with Jimmy Edington; (2) Safely Working With Hot Chasis Sets by Bill Werzner
- Guest Speaker, Saturday Evening Awards Banquet: Ted Oberg

For additional Convention information, contact me at 713-517-8722 or britfam1@juno.com

Old Equipment Contest Instructions

- Register your entry(s) on the list presented at the table just as you enter the Contest room. Please leave a contact phone number with your registration information. It is on this form that you are requested to state if you are interested in the Special Awards Category (**see example form below**).
- Completely fill out a contest entry form, one per each exhibit. Judges are not encouraged to do it for you.
- Be absolutely sure you indicate the numbered or exhibit category you wish to compete in. Failure to do this may or may not lead to judges placing your exhibit in a category of their choosing. Your chances of a win may or may not be better in one category vs. another.
- Be sure to provide a thorough, but concise, description of your exhibit in the title; this description may be used during the Saturday evening Awards Banquet to describe winning exhibits.
- Give your documentation a best effort. Substantive descriptions of your objectives here have been given in the Grid Leak. Our judges give a critical look to this effort.
- Drop by periodically to see if there are any needs with regard to your exhibit. There may well be a need to deal with omissions or move your exhibit physically to an area with more space. We prefer you assume such a task for best presentation and minimal risk.

2021 HVRA Convention Contest Entry Registration Card

Contestant: Please fill out a card for *each entry* that you wish to display and place it near your contest entry. Contact Tom Taylor, Contest Chairman, for help. We will display the cards, except while judging is on-going, to help insure confidentiality and neutrality.

Contest Category No. _____ Contest Category: _____

Your Name: _____

Brief description of your entry: _____

>> *What Top Award Category Do You Want to Compete for?* Circle One <<

{Choice required for participation

Best Restoration

Vintage Equipment

Artifacts

Collections

2021 ANNUAL CONVENTION

OLD EQUIPMENT CONTEST

Contest Chairman Tom Taylor

NOW is actually the time for the (final) selecting and planning of your convention contest entries. Your board members have voted to adopt Atwater Kent and all its related products as our focus. With memories of 2020 soon to be behind us there may come a time when you consider what have you to show for that segment of your life. One thing is for certain, the realities of normal life including an HVRA Annual Convention will return with the chance for such an assessment as you sit in the convention auction. Knowing that, I need to clear my conscience and help you put your radio exhibiting contest goal in perspective.

2021 OLD EQUIPMENT CONTEST CATEGORIES

1. Wireless/Spark Equipment
2. Crystal Receivers and Related Crystal Equipment
3. 1920s Battery Receivers
4. Cathedrals, Tombstones and Consoles (wood)
5. Table Receivers, Tube (wood)
6. Table Receivers, Tube (non-wood)
7. Transistor or other Portable Radios
8. "Modern" Electronics, 1980's to the present Electronic Equipment and Electronica {Examples include vintage computers, "modern" radio equipment and recent unique electronic and computing items}
9. Phonographs, Speakers, Reproducers, Microphones
10. Miscellaneous Vintage Electrical Equipment (Examples include Telephones, Telegraph, Scientific Test Equipment, Electrical Devices and Television)
11. Kit Radios and Equipment (At Least 10 Yrs. Old)
12. Hi-Fidelity Equipment
13. Amateur Radio Equipment (At Least 10 Yrs. Old)
14. Military Electrical and Electronic Equipment
15. Replicas and Vintage Style Creations
16. Foreign Radios
17. **Special Convention Theme:** Atwater Kent and all items carrying the manufacturer's name
18. Components, including Vacuum Tubes
19. Open Display

Your judges will look for these items and I believe its in the order shown

Is it Rare

- Is it rare for this contest category?
- Was the Manufacturer short lived?
- Is it rare for this manufacturer?
- Is it a rare example of this model number?

Documentation

What is unique about your exhibit? Is it the materials used, perhaps something about the chosen wood, its construction or the electronic design which was preceded and then followed by what circuit features? Where was it built, for how many years? Was there a famous owner in its past or was it known by a "nick name"?perhaps.....the "Nick Knack" radio. At minimum, you should include information that identifies the radio manufacturer and model, the year built, and what is special about this radio or set of radios. Most award winning displays and exhibited items use a card or some other display device that shows the key information about the radio or item on display. Generally speaking, more documentation is better than no documentation.

Cosmetics

Is it clean and unblemished with all the correct 'as built' knobs and trinkets? BTW, missing trinkets will cost you every time. Have you stooped to use of Polyurethane or excesses of sand paper?

Functionality

Only in the event of a tie will this become of interest so put your efforts elsewhere if a ribbon and one of the remaining, highly coveted, budget straining, walnut plaques is your goal.

Buy, Sell, Trade, & Services Offered**Vintage Sounds Named Best Antique Store in Houston June 2020.**

Vintage Sounds celebrated their thirty-fifth year in business in February. Now located in the Market Place Antique Center, 10910 Katy Freeway, Houston, they service and repair vintage phonographs, radios, telephones, in addition to selling phonograph records, radios, phonographs, telephones, vacuum tubes, books, light bulbs, parts, and so much more. Open Friday, Saturday, and Sunday 10 AM - 6 PM. HVRA members 10% discount on radio items. (713) 468-4911 www.vintagesoundshouston.com

Borden Radio Company website: <http://www.xtalman.com> Antique Radio Schematic Service included in web-site. Crystal radio kits for sale. (281) 620 - 6692

Sargent Auction Service: www.sargentauction.com, Jims@sargentauction.com Jim Sargent, WA5QBR, Auctioneer, TX license 16135 Location: 200 Thomas Road, Granbury TX 76049

Allen Speaker Service: Speaker re-coning and repair, 919 W.19th St. Houston, (713) 862-2747.

Tom Granger Restorations, radio and phono cabinets. (281) 338 - 8277 (www.tomgranger@mac.com)

Ace Electronics: 3210 Antoine Drive Houston, TX 77092 713-688-8114 (www.ace4parts.com)

Electronic Parts Outlet (EPO): 3753 B Fondren Rd Houston, TX 77063 713-784-0140 (www.epohouston.com)

Wanted:

Wanted: Atwater Kent Model 36 radio with matching type "Y" power supply in working condition. Will purchase either early or late versions (or both if available).

Wanted: Atwater Kent Model K speaker in working condition

Contact: Jerry Sirkin 281-844-4124; gsirkin@aol.com.

Wanted: Hickok Tube Tester, prefer model 600, 605, or 6000, but any good Hickok will do. Perfect condition is unnecessary as long as it is a working model 600, as I do have a good case, meter and other similar parts. Contact: Jeff Heller (AG5WF) 281-702-6920 hellerj1@comcast.net

Other Radio Related Activities

Texas Broadcast Museum: 416 E. Main Street in Kilgore, TX. Phone:903-984-8115.

There are hundreds of pieces of vintage paraphernalia related to radio and TV broadcasting. Admission is \$6.00 (\$5.00 for seniors and military vets).

Edington Family Museum of Atwater-Kent Radios: 550 Roosevelt in Silsbee, TX. Please contact Jimmy Edington for appointment at 337-476-4328 (atwaterkentsrus@gmail.com). Jimmy, a long-time collector and original HVRA member, has re-purposed a beautifully restored hotel to display his outstanding collection of Atwater-Kent radios and related products. See his website, www.atwaterkentsrus.com.

More Radio Clubs

Delaware Valley Historic Radio Club www.dvhrc.com

Oklahoma Vintage Radio Collectors President: Jim Collings, PO Box 50625, Midwest City, OK jcradio@cox.net; \$15 annual dues. Monthly meetings, annual show.

Antique Radio Club of Illinois, www.clubinfo@vintage-radio.org www.clubinfo@vintage-rios.org

Collins Radio Association (CRA). David Knepper, PO Box 34, Sidman, PA 15955. No dues. www.collinsra.com

Louisiana & Gulf Coast Antique Radio Club. Phil Boydston, 750 Moore St., Baton Rouge, LA 70806.

Michigan Antique Radio Club (MARC). Don Colbert, MARC, Pub: The Michigan Antique Radio Chronicle, quarterly. Dues: \$20. membership@michiganantiqueradio.org. Annual Extravaganza and other quarterly meets. www.michiganantiqueradio.org

New Mexico Radio Collectors Club (NMRCC). Monthly newsletter and members meeting (with flea market, auction and theme program). Dues: \$20. For more information contact John Anthes, jpanthes@comcast.net Club website: <http://newmexicoradiocollectorsclub.com>

Texas Antique Radio Club, Doug Wright, Canyon Lake, TX. wrightdouglas70@yahoo.com

Vintage Radio and Phonograph Society (VRPS), Dallas / Ft. Worth, TX. George Potter vrps@sbcglobal.net, website: www.vrps.org

Texas Panhandle Vintage Radio Society (TPVRS). Contact: Elroy A. Heras, 4086 Business Park Dr., Amarillo, TX 79110

Canadian Vintage Radios Society (CVRS) Contact Gerry O'Hara 226 Dallas Road Victoria V8V1A5 Canada (gerrycohaha@gmail.com) 604-671-6062; CVRS Website: canadianvintageradios.com

ANSWERS TO TROUBLE SHOOTER QUIZ ON PAGE 9: [1] A [2] F, bass/treble adjust [3] T, see plate source [4] F, increases band spread [5] F, different I F frequencies

HVRA 2021 ANNUAL CONVENTION REGISTRATION and MEMBERSHIP FORM

(For Questions Please Contact Lewis Brittain at 713-517-8722 or britfam1@juno.com)

Last Name: _____ First Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (____) _____ Ham Call: _____

E-mail: _____

All Bidders and Sellers Must Register and Be Active HVRA Members

Oct.. 1 – 2, 2021 Houston Marriott North	NUMBER	AMOUNT
Advance Registration: ** \$15 (Postmarked by 9/15/2021)		\$
On-Site Registration: ** \$20		\$
**Annual Membership \$20: (10/1/2021 – 9/30/2022) NEW		\$
**Annual Membership \$20: (10/1/2021 – 9/30/2022) RENEWAL		\$
Awards Banquet Dinner: Sat. Oct. 2 @ 6:30pm
Chicken Dinner: \$30 per Adult		\$
Child Plate (12 and under): \$15.00		\$
Vegetarian Dinner – \$30.00 per Adult		\$
Vegetarian Dinner - \$15.00 per Child		\$
Swap Meet: 1st Table Free ; Additional Tables - \$10 each; Any member needing a table(s) must contact Lewis prior to Sep. 20		\$
Grand Totals	\$

- ****Only One Registration Required Per Family (One Bidder Number)**
- **HVRA Commissions: Individual Sellers at 15%**
- **Estates Sales Commissions Pending Pre-Convention Agreements**
- **Buyers and Sellers Settlements at Conclusion of Each Day's Auction Activities (Numerical Order)**

Fri. evening & Sat. lunch cash concessions? Yes ___ Number: ___ No: ___ Unsure: ___

ADVANCE REGISTRATION: CHECKS, PAYABLE TO HOUSTON VINTAGE RADIO ASSOCIATION (HVRA), or CASH MUST BE POSTMARKED BY SEPTEMBER 15, 2021 to:

Lewis Brittain 3722 Xenophon Dr. Houston, TX 77082

ON-SITE: AFTER SEP 15, 2021, BRING REGISTRATION FORM AND CHECK/CASH TO CONVENTION

HVRA USE ONLY:

DATE RECEIVED: _____ **CHECK NUMBER:** _____ **CASH:** _____

REGISTRATION (BIDDER) NUMBER: _____