

HVRA

Houston Vintage Radio Association

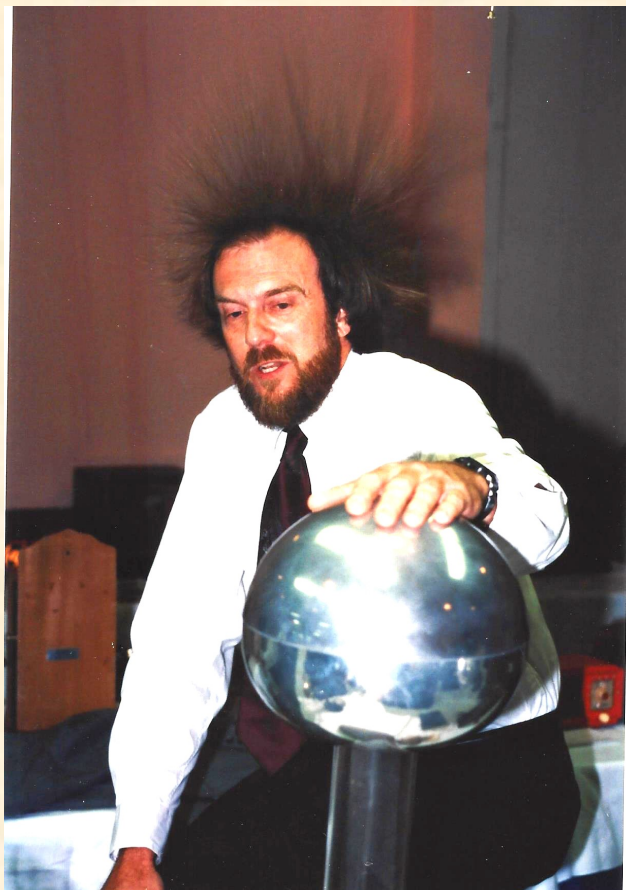
The Grid Leak

As you can see from the list below, this is a Grid Leak packed with a variety of information useful to all members regardless of your electronic or cabinet restoration experience. Thanks to all contributors for their submittals. Our 2021 year is now getting started after a long delay. We are back at Mike Payne's Alvin Swap Meet, be seeing you in Texas City at the July Mega Auction, planning a festive October 1st Annual Convention, and, get ready for it.....HVRA is managing the liquidation of 4 (maybe 5) estates that will offer members an opportunity to add to their collections during special event one day auctions throughout the year (as best possible).

So belly up to the bar cowboy....hold on tight.....this will be one heck of a ride.
Now let's stay safe and healthy and watch out for hurricanes.
Regards, Jerry

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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; however, given restrictions due to the COVID-19 pandemic, we have also used Zoom sessions from home (as necessary) and 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 the collecting of 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

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From The President..... Bill Werzner

Since my last message to you all that was written in December last year, here in Houston we have endured quite allot! If COVID - 19 wasn't enough with all the ramifications of the pandemic that affected us all, then the terrible Polar Vortex descended upon us in February. Utility interruptions, that lasted days and sometimes into weeks with the coldest weather in over 150 years, nullified our activities. Compounding things even more were the thousands of frozen and broken water pipes that flooded businesses and homes, furnaces that quit working, rolling electrical blackouts, fuel rationing, food and water shortages, and no time for radio hobbies. With no electricity there was no computer, cell phones were charged in car providing you had fuel to spare, and hey, ever try to solder via candlelight? Forget it - everything had to be put on hold and some are still trying to get their lives back in order with homes that had ceilings cave-ins from broken water line leaks etc. I hope that by now some have returned to some semblance of normalcy even though we still have to observe distances and wear masks in many locations. As for our monthly meetings, Bayland Community Center reopened with masks and seating distances mandated; then, last week I was told we can again bring donuts and condiments just like we did months ago - things are improving! I hope that most of you have had at least one COVID shot by now or have completed immunizations where two are required. Take it from this old U.S. Army pathology lab medic - **GET IMMUNIZED!** This virus doesn't discriminate by race, creed, color, sex, age, political affiliation, or religion; it will get you one way or another, so don't become another estate for us to have to liquidate, we are sitting on four of them now - get that shot!

Now moving on: with springtime at hand we are planning on moving forward, although a little more slowly than in the past, but things are accelerating. It is kind of like a train that has been stranded for awhile, but now beginning to pick up speed. 2021 started off on a sad note when we learned that our long time member and former officer, Eldon "Al" Kocian, passed away on Jan. 18 at the age of 87. Al was a regular at our meetings, loved by us all, and now sadly missed. Since the first of the year we have held three regular Saturday meetings at Bayland and two Saturday morning swap meets in EPO's rear parking lot. Unfortunately, Mr. and Mrs. Harris closed the Ice House where we held an auction in November and the new owners are planning to reopen in a few months following repairs and renovations. With estate items accumulating in our storage unit, additional swap meets are planned where we will be selling some of those items along with member's items as well; so, watch our web site for manifests that may appear monthly. The EPO parking lot is centrally located and is advantageous from that standpoint, but other optional "locations" are being considered for one or more mega auctions as well. Additional good news items this week include an Alvin, TX Swap Meet at Mike Payne's Electro Junk Inc. coming soon on April 17; later, the Annual Texas City Ham Fest will resume on July 10 in the Doyle Convention Center (following a one year hiatus due to the COVID Pandemic). I want to thank our members who have stepped up to the plate and provided some excellent programs during our last several meetings. Other members are devoting their spare time to helping clear out some of the estates that we have pending and moving material into our storage units for processing and storage. I would be remiss in my duty if I did not say KUDOS to our officers and members who contribute time and labor maintaining our web site and publishing the "Grid Leak". Congratulations for a job well done! It looks like we will have some impressive auctions in the coming months! Stays tuned and watch our web site and news bulletins - in these still uncertain times. We rely on news blasts or bulletins to keep everyone informed especially regarding sudden changes in scheduling of coming events.

When you read the following event schedule now through July, consider some dates tentative and subject to change.

Therefore, it is important for you to monitor our web site and read any e mail / cell phone notices that may be sent to you regarding meeting or activity schedule changes prior to the scheduled dates. We will be living with COVID - 19 restrictions, most likely, well into the year, so be prepared to alter plans accordingly on short notice. This includes inclement weather conditions that may occur as well.

2021 Second Quarter Activities Schedule

April

13th, Tuesday, Board of Directors' Meeting remotely via ZOOM at 7:00 PM.

17th, Saturday 8 AM, **Alvin Texas Swap Meet**, Mike Payne's Electro Junk Inc. Rain Date May 1

Mike will again open the gates to Electro Junk Inc. around 8 AM to his large parking lot for those who will be swapping and selling. Swappers and sellers will have first dibs for parking spots inside the event area as has been the policy in previous events. This is an informal gathering and you can never tell what will show up in the trunks, tailgates, or on the many pallets of fine surplus electronics Mike will have for sale. To get there take Texas Highways 6, or 35 from Houston to Alvin. In Alvin take N. Gordon St. south through downtown, turn right on W. House St., go four streets and turn left on Hill St. Continue two blocks south to 307 W. Dumble St. and you are there (can't miss it)!

24th, Saturday, Bayland Park Community Center, General Meeting & Auction 8:00 AM. Program: "Veneer Repair".

HVRA member Joe Gernand will present a program about veneer repair including tools, types of glue, repairing loose spots, splits, bubbles, and missing pieces. He will also include material sources. We have not had a program like this since the days of Jack James and Billy Richardson - this is one you won't want to miss if you are into restoring those beautiful radios that need cabinet repair. You might want to record his program for future reference.

Donuts Coffee Juice and condiments return again!

May

8th, Saturday, Swap Meet EPO back parking lot 8 AM to 12 Noon. (TENTATIVE). Donuts & Coffee.

11th, Tuesday, Board of Directors' Meeting remotely via ZOOM at 7:00 PM.

22nd, Saturday, Bayland Park Community Center, General Meeting & Auction 8:00 AM, Program pending. Donuts Coffee Juice and condiments.

June

8th, Tuesday, Board of Directors' Meeting remotely via ZOOM at 7:00 PM.

12th, Saturday, Swap Meet EPO back parking lot 8 AM to 12 Noon. (TENTATIVE). Donuts & Coffee.

26th, Saturday, Bayland Park Community Center, General Meeting & Auction 8:00 AM, Program pending. Donuts Coffee Juice and condiments.

July

10th, Saturday, Texas City Tidelands Amateur Radio Society, Doyle Convention Center, Texas City, TX
HVRA mega auction 12 Noon - 4 PM. HVRA Membership required for all participants. **Watch 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 & Auction 8:00 Program pending. Donuts Coffee Juice and condiments.

Future Club Meeting and Estate Auctions

As many of you are aware HVRA have accumulated a considerable amount of electronic items from estates this last year. As I mentioned in our previous "GL", our 10 by 20 storage unit is reaching maximum capacity and we must begin selling this material i.e. parceling some out in meetings and swap meets, in order to make more room. During monthly meetings at Bayland we must keep the auction within a time frame of not more than an hour and a half. As auctioneer, I can sell probably forty items during that time frame - and that's stretching it. We also ask everyone to avoid bringing "junkola items". Watch www.HVRA.org web site for auction item photos as they become available.

Eldon Donald Kocian 1933-2021



Eldon Donald Kocian, 87, of Richmond, Texas passed away on the evening of Monday, January 18, 2021. He was born in Breslau, Texas, Lavaca County, on August 29, 1933 to Ed-ward Kocian and Cecilia Motal Kocian.

Eldon graduated at the early age of 16 from Hallettsville High School in Hallettsville, Texas. He then served in the U.S. Army in the 11th Airborne Division and was honorably dis-charged on February 10, 1956. Eldon went to work for the Texas Employment Commission and attended Southern Methodist University in Dallas, Texas. On May 21, 1967, he graduated from SMU summa cum laude with a Bachelor's degree in Business Admin-istration and is a member of the Beta Gamma Sigma International Business Honor Society. Following his graduation he continued to work for the State of Texas as a tax auditor for the Texas Employment Commission.

Eldon had many hobbies and a particular affinity for collecting and refurbishing radios. He served as secretary and active member for many years of the Houston Vintage Radio Association where he was affectionately referred to as "Al".

Although he appreciated time spent at home, he traveled many places in his life. Of-ten times, he traveled with his family to spend his summers in Florida where he enjoyed fishing and walking along the shore. Eldon was known by all who met him as a man of respect, honesty, and integrity. He had an impartible smile and a laugh full of joy. He leaves behind countless cherished memories and a fond remembrance.

He is survived by his loving wife of 53 years, Theresa Kocian; their two daughters, Laura Cole and her husband Alan and Debra Stovall and her husband Matthew; grandchildren, Kristen Cole, A.J. Cole, Kayleigh Cole, Cameron Stovall, Elise Stovall, Carson Stovall; and godchild, Mericale Case. He was preceded in death by five broth-ers, Lummier Thomas Kocian of Spring, Julius Kocian of Danciger, Bruno Kocian of Dickinson, Edward Kocian of Houston, and Valentine Kocian of Houston; five sisters, Evelyn Fikac of El Campo, Bridget Krupala of Houston, Judith Seidenberger of Se-guin, Irene Babik of Pasadena, and Marjorie Boehm of Shiner.

The Funeral Mass was held at 10:00 a.m. on Friday, February 5, 2021 at St Michael the Archangel Catholic Church, 1801 Sage Rd, Houston, TX 77056 with a Rosary to be recited at 9:30 a.m. The Mass was celebrated by Father Wayne Wilkerson, pastor. Interment is at Earthman Resthaven Cemetery, 13102 North Fwy, Houston, TX 77060.

As we bid a farewell to our friends, HVRA welcomes our new Texas members and thanks them for being part of our family:

Mark Carter	Tomball
Jason Lauckner	Missouri City
Colin Eddington	Houston
Dan Coffman	Houston
Mike Kirkpatrick	Beaumont
Welcome back: James Pyland	Houston

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 throughout the center and parking lots. You will find just about anything electronic among the many tables, trunks, and tail gates. 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 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 of 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. The Mega Auction will begin at 12 Noon. Selling and bidding at the Auction is free to all current HVRA members. Non HVRA members will need to 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.** All items presented for auction must be labeled with an HVRA seller's form and contain the seller's number, lot number and a brief description. **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.

Watch our web site (www.HVRA.org) for photos and details as the manifest grows including members' items as well as items from estates. 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).

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

2021 ANNUAL CONVENTION UPDATE**Vice President Lewis Brittain**

Looks like this year's convention will be a doozy with all the estates and pent up desire to get (and get rid of) all kinds of electronic goodies, not to mention showing off all those projects and restorations finished during Covid lockdown in the Contest.

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

OLD EQUIPMENT CONTEST**Contest Chairman Tom Taylor**

NOW is actually the time to start selecting and planning for your convention contest entries. 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. Your board members have voted to adopt Atwater Kent and all its related products as our focus. 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

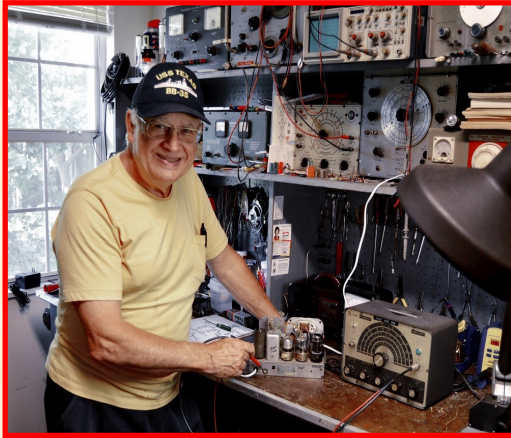
What is unique about your exhibit? Is it the materials used, perhaps something about the chosen wood, its construction or the electronic design which was preceded and then followed by what circuit features? Where was it built, for how many years? Was there a famous owner in its past or was it known by 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.



The Trouble Shooter by Bill Werzner

Quite a few years have passed since I wrote an article about a serious hazard that I want to address once again. Somewhere buried in the archives of our publications I wrote about “death trap radios” and those that some refer to as “widow makers”, although I do not recall the exact title the message still endures. If you assume I am referring to the “all American Five”, you have assumed correctly! Secondly, being a little more specific, let’s talk about hot chassis and metal case enclosed radios. Back around 1976, I began repairing vintage radios on a bench in my garage that I had constructed from scrap plywood crates salvaged from a recycle bin that my employer said we could have for the asking. There was plenty of wood to be had and some of us hauled that wood away by the pickup load. Well, it was 1975 and

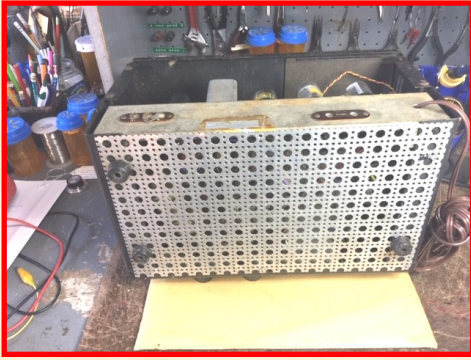
Shell Research transferred our entire laboratory from Wood River, IL to Houston. Laboratory equipment required a lot of careful packing, and top quality wooden crates were necessary. Many hours were devoted to unpacking and salvaging the very nice plywood that we all put to good use. One of my friends from Shell Marketing who was a WW II U.S. Navy veteran learned of my plans to build a work bench and repair vintage radios. One day he stopped by the laboratory and gave me his early 1950’s Hallicrafters S-38 as a gift. Long story short, I finished assembling my bench (which I still use to this day) and made the S-38 my bench radio. That was how I got acquainted with the “widow maker” late one hot Houston night!

The first S-38 model appeared in 1946 as a six tube receiver and became instantly popular for short wave and CW listening. Priced at \$47.50 it became an entry level receiver and was featured in an advertisement in “Radio News” during 1947. The S-38 appears in Riders Volume XV and two successive models A and B appear in Volume XXI. Through the 1950’s and ending in 1961, a series of S-38s were produced that included models C, D, and E. Now that I have given you some background on the S-38 family of radios, let’s get back to the main topic and deal with the late 40 and early 50’s models. The model my friend from Marketing gave me was an S-38A as I recall and had five tubes: 35Z5, 50L6, 12SQ7, 12SK7, and a 12SA7. Despite being perhaps twenty-five years old, the radio played great and became a fixture on my work bench next to my Knight Kit signal generator, power supply, and oscilloscope. Then one late summer night with sweaty hand I reached up to turn off the radio and got the shock of my life! The knob was plastic or Bakelite, but the shock was severe, nearly knocking me off my metal work stool. I pulled the S-38’s plug from the outlet and wondered how the insulated knob gave me such a jolt. After work the next day I dismantled the radio and determined that I had touched the metal set screw that was slightly recessed inside the on - off volume control knob. The shaft of the volume control was continuous with the chassis and due to the radio having a non polarized line cord, the “hot” side was connected to the chassis ground side, therefore I was like that 60 Watt light bulb. By rotating the AC line plug 180 degrees in the AC outlet, the chassis was now neutral and no longer hot - no longer showing 117 Volts to ground!

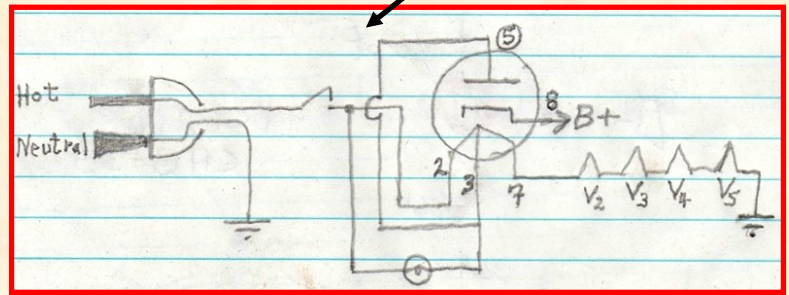


After restoring many metal encased All American Fives and a few sixes, I found most were potential death traps due to chassis to metal case insulation failures, and repairs that resulted in attaching the metal housing to the chassis with non insulated metal screws. Such was the Hallicrafters S 38 that became the subject of this article. You will notice a knob was missing from the band spread tuning shaft “potentially hot”, even with the switch turned off).





Someone had replaced the original thick cardboard bottom cover with a piece of thin perforated metal. This was screwed in to both the metal cover and chassis so it too was potentially (hot)! Note that I used the term "potentially hot" due to the S 38 having a newly replaced polarized line cord, but what if the neutral side from the line plug was connected to the switch instead of chassis ground? See diagram 1.



That question was answered in photo #3 with the volume control switch off and 122.9 AC Volts shown between the chassis and housing to earth ground.



Photo #4 is more dramatic showing the voltmeter replaced with a 60 Watt incandescent light bulb. Can you imagine someone buying this radio and giving it to someone as a gift thinking it was something they could tinker with and maybe restore! The lesson here is never plug in any - especially vintage - electronic item without first examining it for wiring hazards. During my background in medicine, as a U.S. Army pathology laboratory specialist, I was told that 150 milliamps across the heart can induce cardiac arrhythmia.

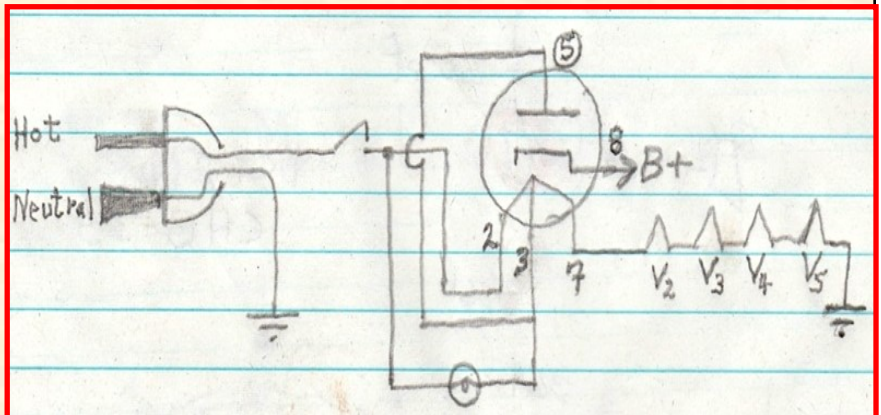


I know this will sound like "old school" to many, but there are others who, like ourselves, want to get involved in the electronics hobby. If you have a youngster who wants to dabble in this field, or know of someone, please share this article with them and any family members. This safety warning could save a life, or prevent someone who got the shock of their life from never wanting to see a vintage radio again. In the meantime, take care and avoid those wayward electrons, and "don't step in anything you hear" as an old customer used to say after paying for a hamburger in our old restaurant so long ago.

Bill W.

Refer to diagram 1, Hallicrafters S 38 Power Supply

This diagram illustrates the wiring of a Hallicrafters S 38 power supply using a polarized AC line cord to avoid having a "hot" chassis - provided the electrical outlet is properly wired for a polarized plug. In the S 38, I found the neutral wire was soldered to the switch and the "Hot" wire was soldered to chassis grounded tube V5 (12SQ7 tube) lug #8. From this diagram you can see how the chassis, metal housing, and volume control knob were all "hot" even with the switch turned off. The rectifier tube is 35Z5, V2, V3, V4, & V5 are 50L6, 12SA7, 12SK7, & 12SQ7 in no particular order. Notice how the #47 dial lamp is connected across pins 2 and 3. **Study Diagram 1 for quiz below.**



QUIZ FOR THE DAY: Answers on last page - don't peek and cheat, just give it a fun try!

[1] Felix Farraday bought a nice All American Five in a garage sale. As soon as he turned it on the dial lamp lit very bright and burned out "flash - poof!" He replaced it with a new one and again "flash - poof". Probable Cause: (A) Intermittent power switch. (B) Tube V2 open filament. (C) Open filament in 35Z5 between pins 2 and 3. (D) Broken connection at line cord between neutral and ground.

[2] Prudence Pimpleton brought her All American Five in for repair complaining that although the radio played, the dial would no longer light up. Probable Cause: (A) Short between plate pin 5 and cathode pin 8. (B) Burned out dial lamp. (C) Bad dial lamp wire connection to pin 2. (D) Hot and neutral switched at outlet receptacle.

[3] Great Uncle Charlie Flatusfaster told Prudence that dial lamps waste electricity, and presents an environmental problem contributing to CO2 emissions and global warming. He is careful to avoid criticizing methane and sulfurous emissions though, but Uncle Charlie does make a scene at global warming protests and is adamant with his bid to ban needless dial lamps in All American Five radios. Will Charlie's argument cause: (A) A shorter filament life in the 35Z5 tube. (B) Increase bass output sound. (C) Lower B+ voltage. (D) Extend 35Z5 filament life many years.

IMPORTANT NOTICE

MEMBERSHIP DUES

As reported in the last Grid Leak, the HVRA Board of Directors voted, unanimously, to extend current memberships up to the beginning of the next Convention. So remember that the yearly membership dues, 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 threat recedes).

Setchell Carlson "The Jet" Model 58A-375

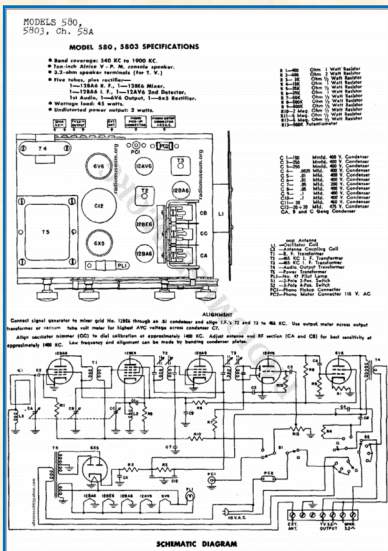
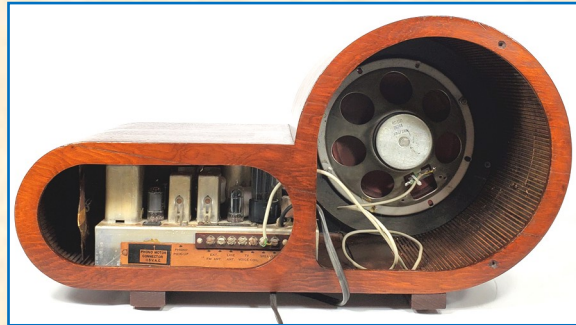
By Derek Ross

A few years back, my wife Susan saw this on Ebay and couldn't hit the "Buy It Now" button fast enough. Beautiful design, rare and fully restored. We were lucky to get it. The Setchell Carlson model 58A-375 "Jet" was originally manufactured in 1949 as an AM version. As production moved into the 1950's, an AM-FM and an "Import" version with AM & 2 SW bands became available.



The dial for that model is only in meters.

My Jet is an AM/FM chassis 511A Serial # 730 with Mahogany cabinet. Unlike most wooden radios, the case is not made of solid wood. Instead, it is made of thin wood that could be bent into the desired shape. Setchell Carlson also made the case in blonde wood to go with some Mid-Century furniture.



Country: [United States of America \(USA\)](#) Manufacturer / Brand: [Setchell Carlson, Inc., St Paul \(MN\)](#)
 Brand: [Doraphone](#)
 Year: 1949 Category: [Broadcast Receiver - or past WW2 Tuner](#)
 Valves / Tubes: [6: 12BA6 12BE6 12BA6 12AV6 6V6 6X3](#)
 Main principle: [Superhet with RF-stage; ZF/IF: 455 kHz; 2 AF stage\(s\)](#)
 Tuned circuits: [7 AM circuit\(s\)](#)
 Wave bands: [Broadcast only \(MW\)](#)
 Details:
 Power type and voltage: [Alternating Current supply \(AC\) / 115 Volt](#)
 Loudspeaker: [Permanent Magnet Dynamic \(PDyn\) Loudspeaker \(moving coil\)](#)
 Power out: [2 W \(unknown quality\)](#)
 from [Radiomuseum.org](#) Model: [5803 "Jet" Ch= 58A - Setchell Carlson, Inc., St. Paul](#)
 Material: [Wooden case](#)
 Shape: [Tablemodel, low profile \(big size\)](#)
 Dimensions (WHD): [21.5 x 11.5 x 9 inch / 546 x 292 x 229 mm](#)
 Notes: [This very special looking model 5803 with chassis 58A is sometimes also called Jet was also sold as 58A-375 in different colors. The model 241T is very similar too.](#)
 External source of data: [Ernst Erb](#)
 Circuit diagram reference: [Rider's Perpetual, Volume 21, Copyright 1950](#)

References:
<https://radiospast.com/2020/03/s3tchell-carlson-jet>
https://www.radiomuseum.org/t/setchell_5803.html

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RECORD MAINTENANCE by Stephen Truch

How do you store records?

All records should be stored vertically contrary to what you have heard. Especially the older records from the 20's and 30's which have a paper core. *If any humidity does get in, it will permanently cause the records to warp and eventually become useless. Heat warps modern plastic records if stored improperly.*

Where do you buy sleeves for records and which type of sleeve should you use?

You can buy them at a record store or online. Online is generally cheaper. Records made of shellac or a combination of shellac and plastic should have a thick cardboard sleeve. The cardboard keeps moisture away from the record. Modern LP's made of plastic have clear plastic sleeves. The thickness of the clear plastic sleeve varies. I prefer the thicker kind as they protect the covers of the LP's better when they are stored. Of course, the thicker the plastic, the more the cost or the same number of sleeves.

How do you clean 78s and LPs?

78's of all ages (unless pure plastic) should be cleaned with a toothbrush, water and a little soap. You can use an old towel to prevent scratches on the other side. Immediately wipe off the record (with a cheese cloth), once you have cleaned it, to prevent warping. *NEVER SUBMERGE A 78 OF ANY KIND. IT WILL CAUSE WARPING, ESPECIALLY THE OLDER KIND WITH A PAPER CORE.*

The LP record cleaner works great for modern LP's on a budget. It has a special soap that draws the dirt away from the surface of the record. The record cleaner cleans 45's as well as the standard 12 inch variety. This kit does not have a motor, you have to turn the record clockwise three times and then counter clock wise three times for the best results. Reclean if the cheese cloth still shows dirt.

Cylinder records and Edison records should be cleaned with 70% rubbing alcohol and a cheese cloth. Apply gentle pressure. Once the cheese cloth becomes visibly dirty switch it with a clean one. Keep cleaning until little to no dirt shows up on the cloth. *DO NOT SUBMERGE THESE TYPES OF RECORDS IN WATER FOR ANY REASON!*

Allow all types of records to dry for a few minutes after they appear dry. I have had no issues with records exposed to water if they are left to dry (half an hour). *There is an argument among collectors that the records need to dry overnight, I have not seen a need to do so.*

If you have a higher budget there is an automatic vacuum cleaner. This does the best job for plastic records. *Do not put 78's, Edison records or cylinder records in the machine.* They are not designed to fit and will damage the records and the machine itself. They start at \$150 up into the thousands of dollars.

What are 78 and LP's made of?

Originally, they were made of shellac, an excrement from a beetle. Over time to save cost, they started to blend plastic in. This made the records lighter and more durable. Plastic is more flexible and stores better. Eventually LP's were only made of plastic.

Some early cylinder records were made from an early type of plastic. Even with the best storage (going on 100 years for some of them), they have become very brittle.

What type of needles do you use for each type of record player/record?

Hand crank record players traditionally use a steel needle. The thicker the needle, the louder the sound due to more vibrations from the needle moving on the record. Old 78's sound comes from the bottom of the groove. *The steel needle should only be used once, twice if you absolutely have too.* Other alternatives included bamboo and soft semi-precious jewels. The other needles last if you are lucky one time.

Modern record players use a diamond needle (for plastic records). They produce little wear on the softer plastic surface. Modern records sound comes more from the side of the groove. *A needle that is too wide will destroy the sound producing movements on the side of the groove.*

NEVER USE A STEEL NEEDLE (old hand crank) ON A PLASTIC RECORD. They literally eat records, I unfortunately found out one time. The steel needle is too wide for the plastic grooves, causing a large amount of wear.

What types of records should you use for different types of record players?

Old hand crank records can play pure shellac records up to shellac records with some plastic mixed in. *Do not play a pure plastic 78 on this type of player.*

Cylinder records should only be played on an Edison cylinder player.

Edison diamond disc records should only be played on an Edison diamond disc. You can play the records on a modern player with a diamond needle but the speed will not be right and it does cause wear faster on the record. This is not recommended.

Pathe records should only be played on a Pathe record player.

Records made in the mid 40's and younger should only be played on a more modern record player with a diamond needle. With the right set up modern record players can play any age of record as long as it is flat.

When buying records (78 or LPs) what should you look for?

For flat records make sure it is flat; any warping will affect the sound coming from the record player (from the sound wa-
vering from a higher to lower pitch to the arm hitting the record itself and making the record useless). Hold the record as
flat as you can and see if there is any warping. You can also set the record carefully on a flat surface to check as well.

Cylinder records should keep their original circle shape. Any change in shape with distort the sound from the record to
making the cylinder unplayable.

Make sure the surface for all types of records are shiny, this generally indicates a surface that is less worn. A dull surface
indicates that he records has not been stored properly or worn by many plays.

Shellac or plastic/shellac combinations can have some deeper scratches as the grooves for the sound are deeper.

Modern LP's should have no scratches or only minor surface scratches for best sound quality (shallow grooves produce the
sound, scratches in the groove are picked up by the diamond needles).

In general, what types of records are considered more valuable?

- Several factors determine the value of a record: artist (popularity, which changes over time),
- Certain labels are more valuable than others,
- Type of music: blues, jazz, early rock and roll,
- How many records were made (lower numbers),
- How many records have survived,
- Condition of the record,
- Condition of the paper sleeve.
- More too numerous to mention.

*I have bought some very desirable records because the sleeve showed wear even though the record was in good shape.
This is because I buy them to play, not just to collect.*

What do I do if the record has scratches that make it noisy?

Not much. Some modern amplifiers have software that reduce the noise.

What can happen if I play a dirty record?

It will cause the needle and record to wear down faster. It is best to use canned air on the needle and record surface each
time you play a record.

What is the proper procedure to handle an LP, 78, Edison cylinder, or Edison diamond disc?

Hold all kinds only on the edge and in the center hole (if available) at the same time. Never pick up a record on the edge
only. The oil on your hand causes dirt to collect on the surface and grooves. Old records can be so brittle that picking them
up on the edge will cause them to break.

What is different with a Pathe record that prohibits me from using any other player (Victrola)?

is cut in a different way. The sound will be off. Playing the records on another type of machine will damage the records.

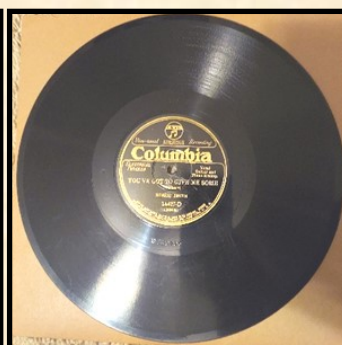
It Example of how I store all my records (vertically best)



Example of how I store all my records (vertically best)



Shellac/Plastic combination record from the 1940's or 1950's



Rare blues record from the 1920's in good shape (made of Shellac)



Early paper cover for 10 inch shellac and shellac/plastic records

Tube Amplifiers versus Modern Solid-State Amplifiers

By Stephen Truch

With the resurgence of vinyl there is a strong debate as to what is better; the warm sound of a tube amp or a modern mid-to-high-end solid-state amp from the 1970's to today. What I am writing about is what I have discovered using the equipment I have; a 1943 MG 30-C tube PA system (with phono option) and a Yamaha Natural Sound CR-400 from the 1970's. I use a C.E.C direct drive turntable from 1979 and a Dual 1019 from the 1960's that plays all types of records. The CEC turntable only plays 12-inch LP's.

I have tested all amplifiers and record players on 90's Bose shelf speakers, a newer (large) Boston Acoustics Center speaker, and Polk and Klipsch shelf speakers purchased a few years ago

My collection of records includes 100-year-old shellac records, the later shellac records that contain some plastic to full plastic (up to the 50's), 45's, LP's from the 40's to late 60's, and modern LP's.

In general, records made up to the late 1960's (shellac, shellac with plastic, LP's) sound better on the tube amp with the Dual record player compared to the Yamaha or even the 1990's amplifier. I believe this is because the types of records mentioned earlier were recorded with similar types of equipment.

The older equipment was unable to record the mid-range sounds (especially the voice). The amplifiers of the day have the same issue. This is why older style music has a greater focus on high and low tones, those tones were easier to record. When I play a record from the 70's using the tube amp and Dual record player I find that the mid-range of sound is lacking even though I know it is recorded on the LP, as tested with the more modern CEC record player. This is simply a recordings limitation based on technology. As technology changed, music became clearer and more complex.

If you love jazz, blues, and classical the tube amp and a high-end record player from the 1960's and 70's (Dual for example) is in my opinion the way to go. It sounds very close to a live performance (like you were sitting next to the instruments).

If you truly love the old records, invest in a tube amp with older high end record player. I have found that old speakers of the era in still working order are very expensive, it is best to buy mid-level new speakers. Speakers do make a difference when you listening to music.

If you prefer to listen to music from the 1970's and on, go with a fully refurbished mid-to-high-level amp and similar style record player from the same time.

Either way you will not be disappointed and enjoy many years of great music.



Yamaha 1970's Solid State Amplifier

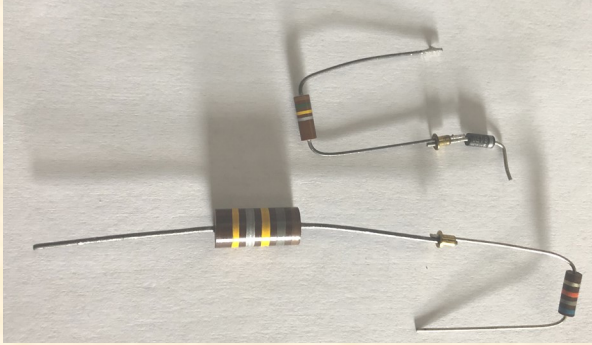


Dual 1015 German made (1960's record player) and 1943 Tube Amplifier

SOLDER BITS

by Tom Taylor

A Top Hat Can Offer Eye Appeal



Many times we need to splice wires when repairing a radio. Many of you can confirm that you just can't take your eyes off of some of those splices when you go to service another person's project. Consider then the use of the small brass eyelets available at hobby shops in the area. If blown up in size and viewed from the side you might think of them as a top hat. The picture tells it all and the example with a two watt resistor was squeezed slightly to permit its smaller mate to join up. Other larger sizes are available. Imagine how much better you will feel about your repair and you may not

even need a terminal post for your junction if leads are stiff enough.

The Lincoln Navigator of Citizens Band Radio

Take a look online at the TRAM 201A Citizen's Band, CB, radio. Look further for its features, the output tube, the plate modulation for AM, the number of tubes and its overall appearance. Chance brought my way the opportunity to check one out and bring it back into use. I trust it remains there at this moment.

The all so familiar tube, resistor and capacitor issues were met and put behind to face the real challenges with this radio. Remember the arcade game Whackemo? This circa 1976 radio with astounding capability took one look at a novice and offered its frontal attack. Upon meeting the preliminaries above, line voltage had been progressively brought up as the set was allowed to (dare I say) cook while its features were investigated. Practically before my eyes the occasional static sound from its speaker turned into a sudden burst of smoke from the green fiberglass PCB between pins of the 6L6 modulator tube. After waste site cleanup involving removal of black board ash grown almost through the board, tooth brush cleanings with alcohol followed by GC Electric's corona dope we were back at the point of powered test and assessment. Turns out that some traces appeared too close together from the factory and they offered a 410 VDC differential. Further, this tube runs hot granting a darkened coloration about the socket mounting which should be considered a red flag. Can you see the story outcome now? Possibly due to its 45 years of existence, its exposure to Houston climate, its high voltage lands run willy nilly adjacent to grounded conductors less than 0.020 inch away and unusual heating about a Class A octal audio tube, this radio provided seven more PCB service opportunities.

In most of these cases the land was heated, lifted and replaced with wire run just off the board. Although random static in the speaker was common with most forewarnings, a couple offered first the odor of something cooking, one offered an arc, and a couple offered slow yet steady shouldering for such board layout opportunities. The others offering no use of human senses were more difficult to find with a scope and a study of those conductor proximity suspects. Once serviced, it stands up tall. Go look on EBay.

A Bit of the Basics

An endeavor to service or bring new life to those old radios brings us head on into the prerequisite skill of soldering. So easily overlooked and assumed trivial, any technician will tell you that a fair portion of the repairs he is confronted with have to do with poor solder joints. Let us first highlight how to make a poor solder connection.

First, approach the task with compromised vision. Seek first problem radios where trouble exists in the bowels that hide wire paths, component values and even the final connections themselves. As a rule, the presence of insufficient room lighting is one of the best ways to apply insufficient heat, insufficient solder (or worse too much solder), or to simply keep our chosen lead away from the molten solder pool. Success of this objective further requires the absence of vision correction including a boom mounted lighted magnifier, absolutely not. Naysayers here will offer contrarian views such as 'leave no joint with a chance connection'. Simply disregard this minority view. Distant light fixtures with a bad bulb and flat off white wall paints are your friend.

Second, locate for use the parts that are old enough to have solderability problems, those where the leads have lost their gloss and have instead a flat somewhat rough to the touch surface. In normal events your best rosin core solder will remain detached yet grant the appearance of a mechanical connection of questionable value.

Third, select for use a soldering iron with a crusty ashen tip that has seen no damp sponge since its subcomponents were married. The ability to cross pollinate seasoned crust from radios of your past assures mysteries in the art of troubleshooting.

Fourth, should it be required select stranded wire devoid of a silver gloss once insulation is removed. Those exposing colored stranded conductors grant the richest return and the patience of a Pope.

Fifth, of foremost importance will be the avoidance of a reasonable power rating for your soldering tool AND anything that even looks or smells like solder flux. One word to the wise. For those that don't yet know the biggest solder tip offender has been found to be in the neighborhood of 27 to 35 watts.

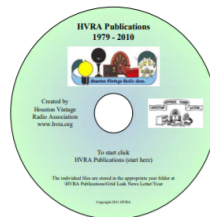
A mastery of these five steps is certain to provide countless hours of learning and the absolute richest reward if it works at all. Unfortunately there appears to be no known affect upon auction sale prices.

Sitting at home with nothing to do? Are all of your restoration projects completed? Do you still have questions about difficult electrical repairs to your prized radio(s)?

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Radio Diagnostics by the Numbers by Tom Taylor

Editors Note: This will be a new series of articles submitted by Tom Taylor with the intent of informing the lesser experienced collectors of some basic principles and techniques they could use to advance their restoration projects. This first installment will address "Power" and will be followed in successive Grid Leak issues as shown below:

#1 Power

#2 Audio

#3 Intermediate Frequency

#4 RF and Mixer

#5 Oscillator

#1 Power

There are several voltages needed in radio circuits. Some circuits like those of the AC DC radio require no line transformer so the Direct Current, DC, B+ and Alternating Current, AC, filament voltages are derived directly from the 115 VAC line voltage. In this case tube filaments are placed in series to require an applied voltage of something around 115 volts. Adding the first numeric digits of the tube identity (their filament voltage) should arrive at a value close to that of the line voltage. The B+ for such radios is nearly always half wave rectified because the operational currents are relatively small, typically 60 to 90 ma which are easily produced by half wave rectification. The resultant DC voltage can't go higher than the peak of that sinusoidal 60 Hz input ie.1.4 times the measured line voltage, and it will rarely be below line voltage levels. Should the power required be more substantial, a transformer providing a higher secondary AC voltage will drive full wave rectification for production of a much higher DC voltage.

There are many reasons why required power is lost in a radio circuit. For instance, the line cord itself may be bad due to a break along its length or at the plug caused by years of use. A close visual inspection will most always lead to the culprit so start here if tubes won't light when you turn the switch on. If not quickly spotted, flexing the cord at high use areas may unveil the suspect area but be careful should you try this when power is applied because you may be met with smoke and sparks near your hands. Although uncommon, some power cords exist with a resistive conductor which can open as aided by heating of the conductor within. Such a cord is then easily replaced with a conventional power cord but then replacement components restoring its function must then be mounted within the radio itself. Note that some two conductor power cords have a wider blade on the plug where it goes in the wall outlet. This polarized plug is safer on AC DC radios if installed correctly and obviously safer than two conductor plugs that can go either way. If there is a wider blade at the plug it is the neutral which finds its way to a ground rod below your house power box. This conductor can be nearly the same potential as the radio chassis ground. Be aware that there can either be a leakage current path of line voltage to chassis ground within a radio or you may even find a radio that has one (the wrong) side of line power connected to chassis and therefore available at the set screw of the knob you turn. That is the reason you use proper line cord wiring and the safer three prong power cords as well as respect all AC DC radios ie. those that have no transformer isolation off the line power.

The power switch is frequently found dysfunctional thereby preventing line voltage from passing to filaments, a rectifier and possibly a transformer. Often the feel of the switch or its sound is a giveaway of its condition. You should feel and hear a snap action from the switch when it is operated. In the absence of these, you can verify its function with a meter. When you find voltage across it regardless of its perceived position, there is a problem. Proper function provides consistent closing resistances below an ohm every time you activate the power switch. Most of the time a poor contact or inconsistent performance is cured simply by rigorously operating the switch until its resistance becomes acceptably low. A questionable operation is often restored with the application of Deoxit directly into any vent the switch enclosure offers. There are switches you can install in the power cord to give you an on/off function after you wire across the defective switch. Sometimes your house has a switched wall plug that might be suited for such a radio. I have even seen an extra switch installed on radios in series with the defective factory switch that has been jumpered.

Given that these operational chain links are in good order your next weakest link for the AC DC radios may be an open filament. Since the most power is handled in the rectifier and the audio output tube, expect them to run the hottest and therefore fail the earliest. Test or swap those first if you don't see any tubes or the (good) dial lamp illuminate. An AC voltage measurement at each tube often requires use of a tube manual or the ability to read the schematic. If you look for filament voltages across each tube, the open filament will have all 115 VAC across its pins because no voltage was dropped elsewhere. Of course a continuity check across the filament pins of a tube removed from its socket can tell you the same thing if you use a tube manual identifying the pins to examine. If instead the filament circuit was intact you would find the same amount of voltage across the filament as is indicated by the first numeric digits of the tube number. When filament concerns are behind you look close to rectifier output which will be on one of its filaments IF there is no cathode and otherwise on the cathodes.

Should the radio have a power transformer then proceed to the rectifier tube and prepare your meter to check AC voltage on pins at its socket. Two pins will have either 5 or 6 volts AC for the filament of this tube and one or two other pins will have the highest AC voltage available in the radio. For the rectifier connected to transformer outputs, a voltage measurement at either of its high voltage (tube's internal plate) pins to ground should show almost exactly half the total AC voltage found across tube socket plate pins. Occasionally a hot transformer, one getting ready to go south, is suffering from an internal winding short where the voltage between ground and one High Voltage, HV, lead is found much lower than that on the other HV lead. In a case like this, you are also likely to have high B+ ripple voltage in the circuit and a corresponding hum in the speaker that is not solved by simple electrolytic replacement.

Given everything is found good prior to the rectifier, a cause for low B+ voltages with or without a telltale hum can be electrolytic capacitors that have dried up resulting in lower capacitance or one that has started leaking having adopted a resistive characteristic. Reduced B+ voltage may also be due to excessive current draw in an area exhibiting unusual heating. A leaking capacitor may be getting warm or even hot so if you feel this in an electrolytic after a moment or a few moments of use, replace it straight away as a delay of seconds may be regretful. Further, do not leave a suspect electrolytic wired in the circuit when replacing it with a new one. If it's a leaker there is still unwanted load current and the frequent audible speaker hum that goes with it. If it had dried out leading to a capacitance reduction, don't expect it to recover so disconnect it. When a check of supply health is required, proper source B+ for a radio is most easily found on the audio output tube screen if there is one and otherwise on its plate or at the supply output electrolytic capacitor wired closest to radio circuitry. A slightly less voltage than full B+ is found on the output tube plate due to a voltage drop across the output transformer.

In order to best operate tubes suited for lower signal levels a designer most often applies reduced voltages on both their plates and screens than is found on audio output tubes. To attain those lower voltages, the designer either takes advantage of normal tube operating currents to progressively drop the source supply voltage across a series of resistors or he may include another resistor from that higher source to ground which thankfully enables the decay of voltage supplies when power is turned off. Lower than required voltages in the front end circuits or no voltage at all is often caused by resistor value increases along these paths. Similarly, a leaking bypass capacitor connected to ground for suppression of AC signals can unduly reduce these supply voltages by shunting unplanned DC current.

What's in a Modulated Signal ?

By your Historian - S. Peña

If you caught the allusion to Shakespeare in the title to this piece ("what's in a name?" from the Bard's "Romeo and Juliette"), and I'm sure all our HVRA members did, then the transition to thinking about what's in a modulated signal, or more to the point, what a modulated signal *is*, will be easy. (*I am an academic philosopher by profession; so this piece will be rather theoretical.*) Any bit of the electromagnetic spectrum could, in theory, carry a modulated signal. That is to say that any portion of the wave-stream we call the EM spectrum could be manipulated by an intelligence---human, alien or otherwise---for the purpose of carrying information. In order for information to exist in the first place, of course, there has to be intelligence; i.e., intelligence is *prior* to information, and there is no such thing as information without intelligence. Nevertheless, there may be some difficulties in determining whether some portion of the EM spectrum has been intelligently modulated. That becomes an acute issue when it comes to attempts to detect evidence of alien intelligence.

The U.S. has had the SETI project (Search for Extraterrestrial Intelligence) on-going for decades, at first as a government-sponsored effort, then privately funded. SETI attempts to detect anomalies in the EM spectrum received from space that may be intelligently modulated. Thus far, there has been no clear evidence of any such modulation (though there have been some interesting anomalies). SETI searches that portion of the spectrum we are pleased to call the Radio spectrum. That designation is of course rather arbitrary; it's the result of a convention that arises from the fact that it is the region of the EM spectrum that is usually used for telecommunications of various sorts. Its upper boundary is 300GHz, that is, at the edge of the infrared spectrum (actually, where the boundary lies depends on the scientific field being used, as the definitions vary from field to field). If an alien civilization has a term for the "radio spectrum" it may refer to an entirely different region, as their telecommunications would presumably differ from ours.

This brings us to the question of just what is a modulated signal. It is not an idle question----we may have received such signals already, perhaps at a time in the past when our ancestors did not even have *language*, let alone telecommunications. In modulation some property or properties of a waveform are varied. What we are interested in, however, is not simply a signal that is modulated (changed or altered in some way), but one that is *intelligently* modulated, i.e., a sign of intelligent alien life. We might, after all, receive a modulated signal that we are not aware of, not because we didn't pick it up with our radio telescopes, but because we are not in a position to *perceive* its modulation. Consider that there are extinct natural languages here on Earth that we still haven't deciphered (Olmec, for example), and even some bits of writing that we are not sure are really writing, that is, really a language at all (Rongorongo). Aliens may have sent us a long history of their civilization, but we could not distinguish it from EM noise. The portion of the spectrum that an alien civilization treats as the "radio" spectrum would almost certainly not correspond exactly to what we consider the radio spectrum, i.e., the portion that serves for telecommunications of any sort. This would be, in part, a result of the fact that their sense-organs would almost certainly differ from ours. The portion of the EM spectrum that is visible light to us is clearly a function of the color-temperature of our Sun (which is about 5800K), as that is the light-source in whose environment our visual organs have evolved. A civilization next a different size sun will see in a different portion of the EM spectrum. They might send us images and we see only snow, like on an old television set. Perhaps, in fact, they will see in the infrared or the ultraviolet (assuming of course they even have ocular organs to start with). Again they might have a visual system with a different refresh rate. The human visual refresh rate perceives motion comfortably at about 50-80 frames per second. (Owing to the frequency of our electrical grid, analog television broadcast was 60 Hz in the U.S., Canada, Japan and S. Korea, while the rest of the world used another rate.) Other creatures with visual organs have various refresh rates. Perhaps you have noticed dogs when before a television; they seem to have no interest in what is on the screen, even if it is a dog being shown. That is because the dog is seeing a dizzying series of very fast still images, a sort of strobe light effect, as its refresh rate is higher (it needs a rate of at least 70 fps to see motion). Perhaps intelligent aliens have a different primary sense organ, maybe a telesmell, or even a sense-organ we cannot imagine or understand. Thus, in order to demodulate a signal and interpret its meaning we must be aware that something has been modulated in the first place. The steps, then, would be first to capture a portion of the EM spectrum (via radio telescopes, radio receivers, etc.), secondly to recognize that what we have captured has been modulated, thirdly, to recognize that it has been *intelligently* modulated, and finally to interpret or translate that modulation. That last step just might be the one we find most puzzling (since, as was pointed out, we still have forgotten earthly languages we can't make out), leaving us just where Shakespeare's Casca was....."It's all Greek to me."

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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)

For Sale: Absolutely Stunning Completely Restored 1937 RCA 810K-1 Deco Console Radio

Magic Eye Tuner Fully Restored. Beautifully Restored Cosmetically, and Technically. Works Beautifully Plug and Play! AC Power 25" X 42" x 14" Approx. 80 Pounds. Super-Heterodyne - 8 Tubes, RCA Victor "Sonic Arc Magic Voice Speaker System", "Magic Brain", Magic Eye Tube, and Sunburst Dial Comes with Schematics.

This floor console included a "Magic Eye" for tuning as well as a "Magic Brain" IF section for providing enhanced frequency discrimination between bands. The "Magic Voice" setup assured that "low tones emerge in phase, and thereby eliminate boominess or reverberation".

\$450.00

For more information: Contact Paul Preuss 713-417-8155 (Houston, TX)

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-riros.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