

The Grid Leak

July—August
2012

www.hvra.org
(Color GL on web site)



*Freedom
is not
Free*



JUNE, 1922 PRICE 25 CENTS!

RADIO BROADCAST

RADIO FOR EVERY PLACE AND PURPOSE

Keeping the Stars and Stripes in the Ether

Broadcasting
of News

Amateur
Aerials

An illustration of Uncle Sam, wearing his iconic top hat and striped pants, sitting in a wooden chair. He is positioned next to a vintage radio set on a table. The radio has a large horn and a speaker. The name "LEE THAYER" is visible on the table.

DUBLEDAY, PAGE & COMPANY, Garden City, N. Y.



From The President.....

It looks like summer is off and running with HVRA activities going full bore. Just when we thought we could clear one storage unit of items from the Bob Wood Estate, along comes another! The folks out at South Gessner Storage have gotten to know me by name after nearly three years of renting three of their ten by twenty units.

How did we manage to refill unit 402? Well, our loyal volunteers got together to remove the remaining items from the Gulf Coast Electronics Museum located just south of downtown Houston. Along with the owner Jane Keep and realtor Jim Main, now a members of HVRA, we managed to clear the museum and box everything for future auction. When we finished transporting the boxes of tubes and electronic items - too numerous to mention, to storage, we could barely close the door.

Yes, our monthly auctions will have plenty to sell and looks like we will be renting from S. Gessner storage for some months to come. There is no telling what might show up in our auctions so don't stay at home thinking our meeting auctions aren't worth attending.

Several years ago the late Bob Wood and I concluded the nine year running of what came to be known as "The Bob & Bill Show" where a ten part basic electronics course was taught on Saturday mornings. Due to the numerous inquiries from more recent members asking when those classes will resume, they are on schedule for June following the regular monthly meeting and auction at the Bayland Center as you will see in an article in this Grid Leak. These classes will focus on repair and troubleshooting starting with simple five tube AM radios and progress from there.

A few weeks ago long time HVRA Member Mike Payne and his wife



Bill Werzner , HVRA President

Karrol, hosted the annual Alvin, Texas swap meet at their home and warehouse. The weather was perfect and many good trades and purchases were made, as usual most of us left with more than we brought to sell or trade as there were too many good deals to just pass up.

When my son and I returned home, my wife asked, "Did you get rid of that junk you promised me you'd sell?" Yes I replied, showed her some money from the sales, she was happy, the SUV was empty; but what I didn't tell her we sneaked a bigger load out to our personal storage unit and made it back home in time for supper. Ah, the fun was worth it!

Now I have to keep this short according to Editor Dave as we have lots to share in this newsletter. So in closing, many thanks to all who donated time, boxes, packing, and transporting all those items from the museum to storage.

Special thanks also to Jim and Jane for their hospitality, the cold beverages, and a great lunch. Bill W

HVRA Electronics Classes to resume June 23 (next meeting)

Class #1 will convene following the monthly program and auction. For those who wish to stay, the class will last for about forty-five minutes and will deal with the half wave power supply in five tube "All American Fives" using hands on demos.

You will learn how they work, what can go wrong, and how to troubleshoot that particular stage. Class II will be held same time and place in July. That class will deal with the power output stage of the same radio; then in August we will focus on both the voltage and power amplifier output stages as an intro to audio amplifiers in Class III.

You don't need an advanced degree to attend, just basic math, and common sense skills required. Bring writing material for notes and a volt ohmmeter if you wish. We will use the large radio demo board that Bob Wood used in previous classes for the hands on demos of a working radio.

2012 Radio contests

June —Retro Electronic project Contest
August—Crazy Container Contest
October—Golden Ears Amplifier Contest

June—Retro Electronic Project Contest - rules
Project should be constructed from magazine article or book at least 50 years old. Project does not need to be constructed exactly like article describes. Provide copies of circuit diagram and description of project.

August—Crazy Container Contest - rules
The radio should be built in the wildest enclosure possible. Examples: Ham in a can; vacuum cleaner housing; microwave oven cooking chamber; etc.

October—Golden Ears Amplifier Contest - rules
Amplifier may be factory built, kit, homebrew; tube or solid state. Previous winners may enter this contest. Each amp will need a high level phono jack input. Each amp will be played for 30 seconds using CD of organ music, and 30 seconds of drums and vocals—all at the same level.

Common Rules — Applies to all contests
Previous winning collections/ entries are not eligible. (ex Oct.)
Meeting attendees will vote on winning collection.
Winner receives a yearly membership to HVRA.

Battleship Texas – “100 Year celebration with a side of Ham.”



Podium: Lt. Governor David Dewhurst
Back Row: Emma Ward, Bonnie & Barry Ward, Andy Smith, Sam Houston IV (photo TPWD)

On Saturday May 19th the Battleship TEXAS turned 100 years old.

Texas Parks and Wildlife Department threw a celebration Birthday party with more than 500 guests. VIP attendees included Texas Reps.

Ken Legler and Wayne Smith, Lt Gov Dewhurst, 8 crewmen who served aboard the ship with more than 50 of their family members. Michael Strutt, State Parks Cultural Resource Director, spoke on the historical significance of the TEXAS and how volunteerism is crucial to her preservation.

Lt Gov Dewhurst was the keynote speaker, he expanded on the historical value of the TEXAS and inspired the

crowd that we all work together to preserve and restore her.

Also in attendance was Emma Ward who is the great great granddaughter of Madge Houston Williams, who christened the first battleship TEXAS in 1895. Both fine ladies are descendants of Sam Houston.

The crew men in attendance were Maurice Bauer, Rizel Bittle, “Rudy” Cepuran, “Bubber” Duke, Marvin Farmer, “Bunny” Graham, James Lamb, and Herb Markley. More than 50 of their family join them on the ship for a great time of celebration and remembrance.

BTARS operated radio during the celebration and made over 200 contacts all across the US allowing many veterans and radio operators to join the celebration by wireless.

The primary BTARS operators were Peter Farver KD5OCR, Michael Smith N5TGL and Joe Peet N5IDF.

Recent accomplishments and projects are the refinements to our radio room air conditioner system and we are continuing to make progress towards restoration of the ships horizontal antennas with the recent purchase of insulators and connectors.

BTARS is now accepting membership. Please visit www.NA5DV.org to join the club and support radio restoration and operations aboard BB-35. Joe Peet N5IDF



Michael Smith N5TGL assisting a guest radio operator during the centennial celebration (photo—J Peet)



Former TEXAS crewmembers:
Front Row L-R: Harold “Bubber” Duke, Rudy Cepuran, “Bunny” Graham, Jim Lamb Back Row L-R: Rizel Bittle, Marvin Farmer, Herb Markley, Maurice Bauer (photo TPWD)

The All American Five Power Supply

By Bill Werzner

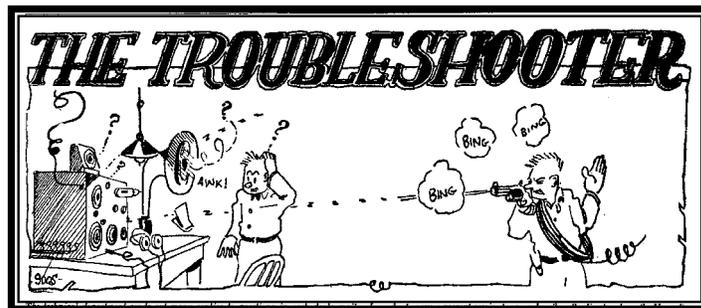
The five tube AC / DC receivers made their debut in the late 1930's. The advantage offered by their design was number one – less expensive in that no power transformer was required. They only required five tubes to operate, they were light weight, easily mass produced in small wood, plastic, or Bakelite cases, easy to operate, and usually less expensive to repair as there were fewer components than most transformer power supply sets.

Yes, there were some that had more than five tubes, but we'll leave that for another time. The typical AC / DC receiver uses a string of five tubes with filaments that use the same amount of current, but with different voltages, so some consume more power (watts) than others as $Watts (W) = Volts (E) \times Current (I)$. The prefix number of the tube indicates filament voltage, for example 50L6 (50 Volts), 12SA7 (12.3 Volts) etc., but all used 0.15 Amps of current.

To rectify AC line current, a common tube is the 35Z5 half wave rectifier that has a tapped filament. In some cities where DC was the norm, until it was phased out maybe a half century ago, the line cord had to be correctly aligned in the outlet in order for the radio to work. With AC outlet orientation this was no longer critical, but many radios had "hot" chasses depending on plug orientation. This will be demonstrated in class I on June 23 as a major safety issue!

During the 1940's a family of lock-in tubes were developed that performed the same function as the tubes mentioned above. Some examples are the 35Y4, 50A5, 14A7, etc. Later the miniature tubes came into being such as the 35W4, 50C5, 12BA6, along with a host of others. Since the filaments are wired in series to approximately equal the outlet source voltage, when one tube filament opens, the entire string goes dark. This is a problem easily diagnosed as most often, a simple tube burnout. Defective line cords, on/off switch problems, broken wires are also causes for the filament string going dark.

Another common problem involves what some call the Achilles Heel of the tapped filament rectifier tubes. Take a look at the diagram below, if a filament break occurs between 4 and 6 of the



35W4, or between 2 & 3 of a 35Z5, some emission type tube testers may show the tube to be good as enough of the filament will light due to contact between the remaining taps to give acceptable electron emission. If you encounter something like this, check the filament connections with your ohmmeter.

What will happen to the pilot lamp if a filament break occurs between 4 & 6 below? This is why one should always check the rectifier tube if you notice the dial lamp is burned out. As a novice repairman many years ago I learned this lesson the hard way after wasting several good bulbs that would flash when the set was turned on. Some sets without pilot lamps will use a one or two watt 30 ohm resistor in its place. If that resistor is burned, check the rectifier tube filaments as there is probably an open in the filament.

Why is it important to have a pilot lamp or resistor there? You see, they are in parallel with a portion of the filament to divide the current across 4 & 6 in the diagram. Without that load, the rectifier tube's filament life will be shortened. I just finished restoring a post WW II GE radio where someone wrapped a wire around pins 2 & 3 of the 35Z5 in order to keep the radio playing – at least for awhile!

I have also serviced AC / DC sets like this where the 0.05 MFD capacitor, was blown apart – like a giant firecracker, but the set still played. That capacitor acts to buffer some incoming line noise / spikes, and limit arcing in the on off switch. When replacing it, use a capacitor rated at 600 volts or higher. Some sets omit this capacitor all together, but its installation serves a purpose. Now that I have described the basic function of the tapped filament rectifier tube, calculate the power in watts that is required to light the filaments in a radio using the following tubes: 35Z5, 50L6, 12SQ7, 12SK7, & 12SA7. Bring your answer to class June 23 and in the meantime, watch out for hot chasses!

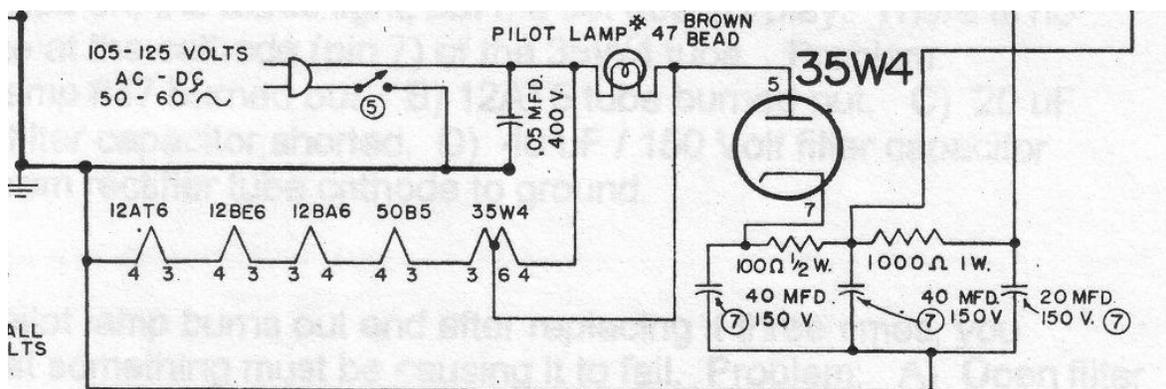


Diagram of half wave rectifier section in a 1950's AM All American Five radio

HVRA – Radio Collectors of all types

By Gene Tognacci

At the recent HVRA Saturday meeting, I had the pleasure of seeing Reid Shipp's presentation of his crystal collection. While learning about the uses and various types of crystals, I was wondering how many sub-specialties of "things" HVRA members collect along with their radio collections.

The breakouts are seemingly endless. Just looking at my own subcollections gives me a good clue. I collect vintage postcards of broadcasting buildings, radio related records, artifacts related to border radio and mp3's of old radio programs. And yes, I've got a few radios, but hardly a collection.

We can even have subcollections of subcollections. While I collect postcards of radio stations, there are also collectors who specialize in Broadcast Band QSL cards, Ham QSL cards, Radio Personality postcards and general market radio cards with a radio theme.

The late 1920's saw a batch of radio related 78's being released. And again, within that category there are sub-groups. Some records were of radio personalities like Amos and Andy, The Happiness Boys and others recreating skits on record similar to their radio programs. Another batch of recordings by early record and vaudeville comedians like Byron G. Harlan and Monroe Silver would mock the hit and miss nature of picking up radio signals in skits such as Cohen buys a Wireless and Uncle Josh on the Radio

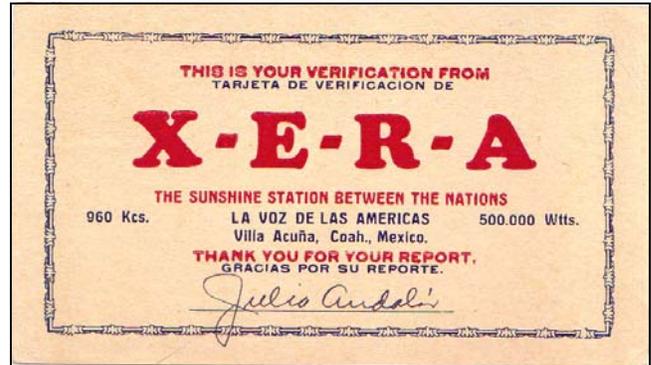
Demonstration records is another category of radio related recordings. These were designed to promote the improved quality of Philco, Victor or Zenith radios. Often they included an announcer introducing various musical instruments to give the listener a sense of the "realism" of the reproduction.



Some early radio records promoted the radio stations themselves, similar to the release by W.K Henderson who broadcast over KWKH. His greeting was Hello World, and he used his record to rant against the "chain stations" that he felt were

infringing upon his frequency

And finally there were musical records that had radio as a theme. Mr Radio Man recorded by Al Jolson and others might be the most famous and well known example. I confine myself to just 78's in my radio record collecting, but this



niche continues to this day with CD's and mp3s in all of the above categories.

Collecting old radio shows on mp3, cd, or tape, is a category of collecting all by itself. There are collectors who specialize in quantity, there are completists who want every show, rehearsals, scripts etc for a given series, there are variety show aficionados and there are detective and crime collectors, to name a few. A search on ebay or archive.org will reveal that there are literally thousands of old radio shows that have been preserved and are available for collectors at a few pennies a piece or free.

All of the above collections are solo endeavors for me. I search auctions, the internet, used record and bookstores and swapmeets to add to my collection. My Border Radio collection is different. It's an activity that I've undertaken with two other HVRA members David Moore and Durell Roth for the past 15 years or so. It is the most rewarding of all my collecting because of that shared relationship.

Not only have Dave, Duie and I shared copies of what ever we have unearthed separately, but we have made several road trips to view Border Radio sites and interview people with first hand knowledge of Border Radio history. Meeting people like Arturo Gonzales, who was an attorney for Dr. John R. Brinkley and Paul Kallinger, the most famous of the XERF announcers has brought the history of Border Radio alive and created memories for a lifetime.

Visiting Dr. Brinkley's house in Del Rio and the XERA transmitter site (now ironically, a junk yard with a goat or two keeping a watchful eye over what was once the location of most powerful radio station in the world), increases that experience manifold.

Sometimes I've felt like I'm not really a bona fide member of HVRA because I've never changed a capacitor and the only time I ever won a contest ribbon was for a radio set that I paid someone else to refinish for me. Yet, after listening to Reid's great presentation and looking at my own collection, I know that we all bring different collecting interests and passions to the club. After 25 years of on and off membership, I now feel a part of the club. I now appreciate that every aspect of radio and technology collecting has it's own joy and makes the club and its membership so fascinating. Thanks Reid

Alvin Swapmeet & Flea Market May 19, 2012



HVRA founder and first president, Frank Cooper, checks for bargains or a missing part.

The Alvin Swap Meet held at Mike and Karrol Payne's was a great success. There were more dealers and sellers this year even though many similar events were being held on the same date. Mike and Karrol provide the perfect location for hold this type event. A BIG thank you to Mike and Karrol.



*Up- Jim Stewart and Jim Calbeck check for hidden deals.
Left—Gary Horneski looks for a bargain in Mike's huge inventory .*



Tim Armstrong was thinning out his inventory and offering bargain prices.



Clearing Out The Gulf Coast Electronics Museum

Once again our members came through for a major moving project. On may 15 & 16 we gathered at the museum for a final cleanout of the remaining items that included tubes, parts, test equipment, amplifiers, and truck loads of items too numerous to mention.

The museum's second story was damaged in a fire last year with a portion of the roof burned away. There was no power in the building, but HVRA Historian, Gilbert Hedge supplied a gas generator to power lights for the two day collecting, boxing, labeling, and final storing of the many items. Many thanks to all who helped in the cleanout with boxes, sorting, inventorying, sweat, and trucking everything to storage on South Gessner.

Inventory will be offered in the September MEGA auction.

Manifest will be posted.



Buy, Sell, Trade, & Services Offered

Huge collection of Sams from Vol I on! Also included are seven or eight file cabinets filled with these collectable volumes from a closed out radio TV repair shop. Call or e mail Andy Lee at www.radiomanL@verizon.net

Radio & Phonograph Sales & Repair including vintage auto radios, battery sets, foreign sets, etc. We also sell and service vintage tele phones and telegraph equipment also parts, new & used tubes, transformers, schematics, books, phonograph parts & needles, records, etc. Vintage Sounds – celebrating our 24th year in business. Open Fri., Sat, & Sunday from 10 until 6 PM. Now located in The Market Place Antiques, 10910 Old Katy Road, in Houston (Located just west of The Room Store on the north side of the Katy Freeway). 10% member discount on radio items.

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

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

Paul Wishnow, Certified Appraisals – for insurance, estates, divorce. “The Antique Man” can be heard Sunday afternoons 1 – 3 PM KNTH Radio 1070. Office at 5615 Richmond Ave., Ste. 145 in Houston. Phone (713) 666-2222 or go to www.theantiqueman.com

EPO Electronic Parts Outlet, New and surplus electronic components, come by and check out this incredible store! 3753 Fondren Road, Houston, TX 77063. Go to www.epohouston.com

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

Blue and Razz Scrap call Jesse Robinson (713) 870-1998 “You call, we haul-free” Old appliances, TV’s, Scrap metal, etc. Houston, TX 77074.

HVRA Event Schedule:

Location for all events: Bayland Park Community Center, 6400 Bissonnet, Houston, TX Coffee & snacks available at regular meetings.

Tuesday, June 12, 2012 Monthly Board of Directors Meeting 6:30

Saturday, June 23, 2012 Monthly meeting 9:30 AM, auction, program, & class #1; Retro contest.

Tuesday, July 10, 2012 Monthly Board of Directors Meeting 6:30

Saturday, July 14, 2012 Annual **Tidelands Amateur Radio Society HAMFEST 2012** Texas City, TX Doyle Convention Center.

Saturday, July 28, 2012 Monthly meeting 9:30 AM, auction, program, & class #2

Tuesday, Aug. 14, 2012 Monthly Board of Directors Meeting 6:30

Saturday, August 25, 2012 Monthly meeting 9:30 AM, auction, program, & class #2 cont.

Tuesday, September 11, 2012 Monthly Board of Directors Meeting 6:30 PM,

Saturday, September 29, 2012 Fall MEGA Auction & Annual Meeting, Election of Officers 9:00 AM, doors open at 8 AM

Tidelands Amateur Radio Society HAMFEST 2012

This annual event also known as the Texas City “HAMFEST” will be held in the Doyle Convention Center, 21st St., Texas City, on Saturday, July 14. HAMS, DX’ers, collectors, tinkerers, and curious individuals by the hundreds will be on hand enjoying swaping and selling going on throughout the center and parking lots. You will find just about anything electronic and then some 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. If you like swap meets, don’t miss this annual event that comes around once a year the second Saturday in July. Plan to arrive around 7 AM or possibly earlier, to get a good place to park.

Vintage Radio & Phonograph Society

Annual Convention
November 16-18, 2012

Hampton Inn & Suites

Useful Web Sites for Collectors and Restorers

Jim’s Antique Radio Museum -

<http://www.antiqueradiomuseum.org/>

Cover — Provided by Bill Kendrick

Photos—by David Moore unless otherwise noted.



The Grid Leak

July—August, 2012

Monthly Meeting—June 23
Bayland Park 9:30 AM

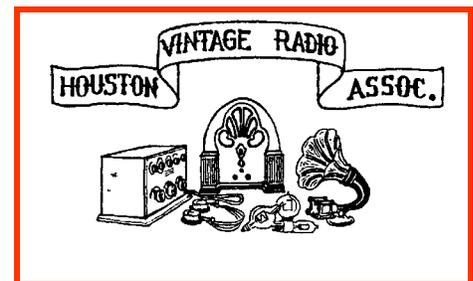
Monthly Meeting—July 28
Bayland Park 9:30 AM

Monthly Meeting—August 25
Bayland Park 9:30 AM

www.hvra.org *(Check out the fresh new look)*

Notice on renewing your membership!

Please check the expiration date by your name in the address of this newsletter. It should show your membership expiration date.



HVRA
Mega Auction
Sept 29