

# The Grid Leak

May—June  
2012

[www.hvra.org](http://www.hvra.org)  
(Color GL on web site)



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Alvin Swap Meet  
May 19, 2012  
8:30 am  
Mike Payne's Place  
Alvin TX

## From The President.....

As we roll into late spring, and the weather begins to seriously heat up our caches of treasured recyclable resources in garages, barns, and attics; maybe it's time to reshuffle some through our auctions. After all, having some new stuff to pack away takes the boredom out of everyday life and the preemptive cleaning out – no matter how minor – always makes one's spouse happy at least for awhile until we pack the new stuff in. Anyway, ain't life fun for us old radio folks!

Fun is certainly what we had during our Spring Mega Auction on March 31<sup>st</sup>. Lots of items changed ownership in record time, and there are lots more to come as we still have two storage units that need to be emptied. If you miss our monthly meeting auctions, you will be missing out on some great auction items in the coming months. There are still Wood Estate items, and recent donations including some neat military surplus electronics, that need to be sold.

Remember the old Bob Dylan 1960's tune "The Times - They are a-Changin'"? Things in the HVRA are a-changin' too! First up, our long time web master Steve Casciola resigned his position due to time constraints and job related responsibilities. We should credit Steve with part one of the change when he performed above and beyond the call of duty in designing and maintaining the HVRA web site that we are all so familiar with. With his fervor, and dedication, Steve propelled us into cyberspace with the expertise of a true professional. KUDOS Steve for a job well done!

We did not have to wait long for someone to fill Steve's shoes, as HVRA Secretary Derek Ross stepped forward to assume that responsibility. This naturally created the need for someone to fill his vacancy as club secretary, and that is exactly what our long time member, Tom Taylor, volunteered to do during our spring mega auction March 31<sup>st</sup>. When Tom volunteered to accept nomination as HVRA Secretary and thereby become a member of the HVRA Board of Directors, there were no other nominations from the membership



*Bill Werzner , HVRA President*

and Tom was elected by acclamation. Welcome to the Board Tom, I know you will serve that position with pride and dignity. It is this spirit of volunteerism from which clubs like ours derive strength and remain viable.

Now regarding part two, and what these changes will bring! With our ever changing, or should I say evolving, computer age, something this old man finds beyond his comprehension, Derek has proposed some major changes to our web site. These changes were presented to our Board of Directors during the April 10 meeting by Derek and his guest, Ms. Emese "Mesh" Felvegi. Together they explained how the improvements would be made to benefit HVRA in ways that some of us could not have imagined. With I phones, I pads, and this ever evolving technology, their proposals will keep us up to date with these technologies.

With that said, I'll leave that to Derek who can elaborate on what this means for HVRA. After all, this old timer can barely type 8 wpm using both index fingers and views cyberspace as a vast confusing jungle.

Maybe it's because these marvels of technology don't have vacuum tubes and that keeps me confused, anyway I did take shop in high school and learned to weld; but typing – well maybe I should have, but that was long, long, ago. Bill W.

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### ***HVRA Officers***

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Grid Leak Editor — vacant



Alvin Swapmeet & Flea Market  
May 19, 2012 – 8:30 am

# FLEA MARKET

Hosted by Michael & Carol Payne  
307 W. Dumble, Alvin TX

Radios — Ham equipment — Tubes  
Knobs — parts — Test equipment  
Books and paper



Tom Burslem & Reid Shipp look for swap bargains at the Alvin Swap Meet.



## 2012 Future 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 Amateur Radio Station (BTARS) President Joe Peet – N5IDF

Saturday, May 19<sup>th</sup>, “Celebrating the Centennial Launching of the Battleship USS Texas” will be held on board 10 AM to 5 PM. BTARS (Battleship Texas Amateur Radio Station) will be saturating the airwaves that day from their radio room down on the second deck of this historic ship, transmitting from one or more of the ship’s original antennas. If you are a HAM, a HAM wannabe, or just plain curious, you’ll certainly enjoy visiting and seeing the original WW II era radio rooms that are being restocked in preparation for restoration. Stop by and watch us operate radios from the Store Keepers room on the Port side of the ship. Museum Ships Weekend will be held the first weekend of June commemorating the 68<sup>th</sup> anniversary of D Day. Pending approval from Texas Parks and Wildlife, plans call for BTARS activities to begin on Friday evening and operate through Saturday afternoon. Watch our web site for details as more information becomes available.

The ships original Radio call sign was NADV, our current FCC Radio call sign is NA5DV. Visit our website at [www.NA5DV.org](http://www.NA5DV.org)

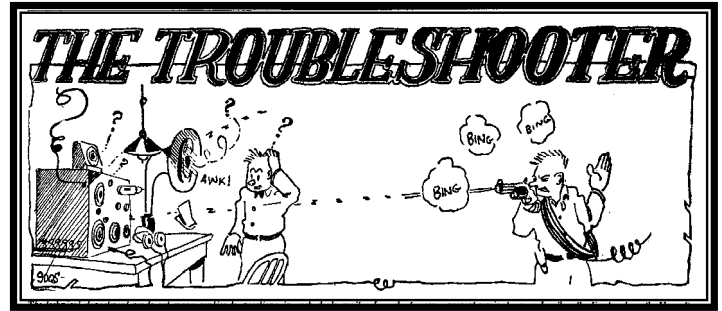
## The Trouble Shooter- times two:

# Lower AM Broadcast Band Reception Problems

By Bill Werzner

If you tinker with enough radios over a period of time, sooner or later you will encounter this problem. Let's say you spent the last several evenings restoring that treasured vintage set, and when you test its operation in preparation for alignment, the lower half or more of the broadcast band is simply DEAD! This is something I have encountered more and more frequently as radios I nicknamed "barn sets" come in for restoration. Here are some of the causes for this problem – and I want to emphasize "problems in plural" as there may well be more than one in dealing with older sets. [1] Tuning Capacitors: It is not uncommon to find one or more tuning capacitor plates bent, warped, or coated with metal "whiskers" or metallic dust. Test the tuning capacitor by isolating each section (unsolder the wires), then connect your ohmmeter across the rotator and stator of each isolated section, rotate the shaft fully and watch the meter for shorts. If shorting is found, carefully bend the plates with a thin blade screw driver, or better, an artist's pallet knife. If the rotor shaft is pot metal, and cracked, that will present a problem you may not be able to correct, short of replacing the entire tuner if you can find one. Cleaning with compressed air, patented aerosol cleaner, or dampened strips of paper towel may also work. I know some have used a high voltage source to burn off shorting whisker or dust, but I have never resorted to using that in my many years of radio work. Another problem could be corrosion or faulty connection of the rotor shaft wiper contacts. Application of a good contact cleaner for electronics to the wipers contact may solve this problem – DO NOT USE WD-40.

[2] Tubes: Sometimes oscillator, mixer, or converter tubes that otherwise test good, may cause problems. Substitute tubes that have been tested in a working radio as a test. [3] Padder capacitor problem: In radios that use a padder capacitor to adjust the lower ( 600 KHz ) signal during alignment, the adjusting screw may be missing, the threads stripped, or one of the plates may be missing. This is reason to save the good padder capacitor from radio chassis you plan to scrap. [4] Mica coupling capacitors: This is something that I have seen as a rash occurrence in recent years. Mica capacitors used to couple a signal from the antenna circuit or rf amplifier to the next stage (converter or oscillator mixer) have partially or completely opened. Check the schematic and, or color code for the capacitor's value and replace if it tests out of tolerance. I highly recommend a capacitor analyzer on anyone's bench who restores radios – this being the primary reason for owning one! Remember the formula,  $Z = 1/6.28 \times F \times C$ ? As F (frequency) decreases, resistance to the incoming signal Z increases as C loses value or opens. It is amazing how signal selective some circuits can become due to a faulty mica capacitor in the tuning circuit. Sometimes they become temperature sensitive and their function will vary with temperature. Make it a habit to test mica capacitors in all circuits, you'll be surprised how many have failed due to age. These four areas of trouble I mentioned, and in combination I might add, are the ones I have dealt with over my last fifty plus years of repairing radios. Some of you may have dealt with other problems that caused low AM reception problems and I would like to hear what your experience has been. So keep those stray electrons in check.



## What Happened to Bound Rider Volumes?

I remember in my early days of repairing radios how I used to dream of owning a set of Rider volumes as a source of schematics. When I was in college at the University of Evansville, there was a wholesale electronics supply house on Division Street called Wesco Supply. I became friends with the manager there and he used to let me borrow pages from his books to photocopy in the campus library. I used to envy anyone with a Rider's collection with access to those treasured schematics. I remember the old photo copiers where the copy came out on a smelly wet sheet of paper that looked like a large photograph negative print. There were wire lines next to the copiers where students could fasten copies to dry. The copies cost 10 cents each and in 1962, that would pay for almost a half tank of gas! My bonanza find came shortly after my transfer to Houston in 1978 when I bought the contents of an old repairman's shop in Dallas for \$300.00. I brought home a pickup truck load of treasure with twenty-two volumes stacked inside the cab that dark rainy night. Yes the tubes and some of the stuff in the bed got wet despite the plastic wrapping, but all survived.

Later that year HVRA came into being. Rider's volumes were selling for a premium in our monthly auctions – some individually selling in the \$100.00 range! The market continued good until several years ago when those valuable books took a real nosedive. What happened? Well, unless you live on Mars or in the paradise of North Korea, the internet changed all. With Nostalgia Air on line at [www.NostalgiaAir.org](http://www.NostalgiaAir.org), one can access the entire Rider's collection and much more. On line, a schematic can be enlarged, highlighted, and printed as needed. Do I still have my Rider's collection? Yes I do, because sometimes those displayed pages have areas that did not scan in so well and back to my trusty bound volumes I go. No, they will not be sold at least by me, so if you cannot clearly distinguish a component or value from the computer; give me a call and maybe my old collection will provide a better copy. Bill W.

*Sometimes it is fun to find out how some of the many things that we take for granted actually came into being! It all started with a woman's suggestion!*

## **CAR TUNES**

Radios are so much a part of the driving experience, it seems like cars have always had them. But they didn't. Here's the story.

*The following story is reprinted, with permission, from "Uncle John's Fast-Acting Long-Lasting Bathroom Reader". Published by Bathroom Readers' Press, Ashland, Oregon. Please visit <http://www.bathroomreader.com>*

### **SUNSET**

One evening, in 1929, two young men named William Lear and Elmer Wavering drove their girlfriends to a lookout point high above the Mississippi River town of Quincy, Illinois, to watch the sunset. It was a romantic night to be sure, but one of the women observed that it would be even nicer if they could listen to music in the car.

Lear and Wavering liked the idea. Both men had tinkered with radios (Lear had served as a radio operator in the U.S. Navy during World War I) and it wasn't long before they were taking apart a home radio and trying to get it to work in a car. But it wasn't as easy as it sounds: automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running.

### **SIGNING ON**

One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago. There they met Paul Galvin, owner of Galvin Manufacturing Corporation. He made a product called a "battery eliminator" a device that allowed battery-powered radios to run on household AC current. But as more homes were wired for electricity, more radio manufacturers made AC-powered radios. Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention, he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.

Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker. Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard. Good idea, but it didn't work -- Half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.) Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention. Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio so that passing conventioners could hear it. That idea worked -- He got enough orders to put the radio into production.

### **WHAT'S IN A NAME**

That first production model was called the 5T71. Galvin decided he needed to come up with something a little catchier. In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names -- Radiola, Columbiola, and Victrola were three of the biggest. Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola.

But even with the name change, the radio still had problems: When Motorola went on sale in 1930, it cost about \$110 uninstalled, at a time when you could buy a brand-new car for \$650, and the country was sliding into the Great Depression. (By that measure, a radio for a new car would cost about \$3,000 today.)

In 1930 it took two men several days to put in a car radio -- The dashboard had to be taken apart so that the receiver and a single speaker could be installed, and the ceiling had to be cut open to install the antenna. These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them. The installation manual had eight complete diagrams and 28 pages of instructions.

### **HIT THE ROAD**

Selling complicated car radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression -- Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorola's pre-installed at the factory. In 1934 they got another boost when Galvin struck a deal with B.F. Goodrich tire company to sell and install them in its chain of tire stores. By then the price of the radio, installation included, had dropped to \$55. The Motorola car radio was off and running. (The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.) In the meantime, Galvin continued to develop new uses for car radios. In 1936, the same year that it introduced push-button tuning, it also introduced the Motorola Police Cruiser, a standard car radio that was factory preset to a single frequency to pick up police broadcasts. In 1940 he developed with the first handheld two-way radio -- The Handie-Talkie -- for the U. S. Army.

A lot of the communications technologies that we take for granted today were born in Motorola labs in the years that followed World War II. In 1947 they came out with the first television to sell under \$200. In 1956 the company introduced the world's first pager; in 1969 it supplied the radio and television equipment that was used to televise Neil Armstrong's first steps on the Moon. In 1973 it invented the world's first handheld cellular phone. Today Motorola is one of the largest cell phone manufacturer in the world -- And it all started with the car radio.

### **WHATEVER HAPPENED TO**

The two men who installed the first radio in Paul Galvin's car, Elmer Wavering and William Lear, ended up taking very different paths in life. Wavering stayed with Motorola. In the 1950's he helped change the automobile experience again when he developed the first automotive alternator, replacing inefficient and unreliable generators. The invention led to such luxuries as power windows, power seats, and, eventually, air-conditioning.

Lear also continued inventing. He holds more than 150 patents. Remember eight-track tape players? Lear invented that. But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system, and in 1963 introduced his most famous invention of all, the Lear Jet, the world's first mass-produced, affordable business jet. (Not bad for a guy who dropped out of school after the eighth grade.)

# DOES ANYONE APPRECIATE US?

By Tom Burslem

I read with interest the other day regarding a story on the Internet about a 93 year old woman who had finally retired her 1965 Mercury Comet. She had over 586,000 miles on it and was the original owner. As I recall from High School days these vehicles were not necessarily known for their longevity nor reliability.

What made the story jump out at me was her discussion about proper maintenance and her frugal approach to automobile maintenance. Seems she saved coupons and had "lifetime" parts replaced by Midas Muffler, JC Penney, Sears and others. Eight mufflers, 10 batteries, 16 brake jobs, and numerous alignments, shocks etc. She saved all her receipts. Said the car was still running good but her eyes were going out and decided she was not a safe driver anymore.

What also amused me was when asked if she would give her car to grandkids or children she said, "Hell no! They'd just ruin it cause they wouldn't appreciate it." She thinks Jay Leno might buy it.

I feel that same sense regarding my radio collection. I gave my little brother a completely restored RCA Tombstone for Christmas about 8 years ago and he assured me it would fit in nicely as a showpiece in his living room. Two years later I visited him and it was sitting downstairs in his basement on his work bench with about an inch of dust on it. All that beautiful mahogany I had hand polished...I never said a word. Why bother?

And then there was that beautiful Majestic console with matching doors I gave to my youngest daughter about 12 years ago. She had said she loved it cause "it didn't really look like a radio." She had me fooled for a few years as she would periodically tell me anyone who visited them was drawn to it as "an interesting antique".

But she slipped about six months ago and off-handedly mentioned she was having a garage sale and "that old radio console I might want back before she sold it." I did my best to not say anything....I'm sure it wasn't proper English nor repeatable...

I think it's especially cool when Konrad joins our leader, Bill Werzner to club functions. To have a son that actually appreciates his Father's passion...Does anyone have any doubt that Bill's collection will have a home upon his demise? I don't have a son but I suppose he might react somewhat like my daughter did. More guilt than true appreciation for what I love so much. Oh well. It is what it is.

But I have reacted somewhat to our harsh reality; most of our offspring aren't into old radios. I have found certain members in my church to give one radio two at a time as I thin my collection. I gave one to my pastor, one to music director, one to drummer etc. I screen them first and at the very least ask "if they owned an antique radio what would they do with it?"

I liked their answers. So they get a piece of the past.

The 93 year old lady was right. Why even give something like that old Comet to someone that I dare say wouldn't even bother to change the oil.

I think we can all relate to that lady. But that 586,000 miles presented as some kind of record? I'll bet about 1/3 of our club either has had or knows someone with more miles than that Comet. Remember John Schmidt's truck? Check out John Givens' Mercedes Benz...And that truck Reid Shipp recently got rid of??? Just off the top of my head...

We believe in taking care of our stuff... And it's really not all about the money. Most of us will spend 5 or more hours restoring a radio that we paid 20 bucks for and then eventually sell it for \$30 five or so more years later. Big profits like that would drive an ordinary man to the Democratic party and eventually to the edge of madness (a natural transition for anyone wanting to re-elect Obama). (Ha! I just had to drag either women or politics into this...can't help it)

...seen anymore Lifetime Ads from Radio Shack on tubes? Last time my 6CA7's went weak they honored their guarantee...Course it's coming from some mail order house now...

And as far as my family is concerned perhaps I should leave them garage sale amounts of my vast estate inheritance. How shall I word it...? "To my youngest daughter \$12.50 I would have received for that junky old console and to my Brother \$7.00 for that dumpy RCA Tombstone"...apply a last minute piece of guilt upon my demise. Ha!

Happy collecting.



## 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](mailto: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 24<sup>th</sup> 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.xtalman.com> Antique Radio Schematic Service included in website. Crystal radio kits for sale. (281) 620 - 6692

**Sargent Auction Service:** [www.sargentauction.com](http://www.sargentauction.com) | [Jim@sargentauction.com](mailto: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](http://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](http://www.epohouston.com)

**Tom Granger Restorations, radio and phono cabinets.** (281) 338 – 8277. [wwwtomgranger@mac.com](mailto:wwwtomgranger@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.

**Saturday, April 28, 2012** Monthly meeting, 9:30 AM, Collections Contest & auction.

**Tuesday, May 8, 2012** Monthly Board of Directors Meeting 6:30

**Saturday, May 19, 2012 Alvin, TX Annual Swap Meet** – Watch Grid Leak for details.

**NO REGULAR MAY MEETING AT BAYLAND - MEMORIAL DAY WEEKEND.**

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

**Saturday, June 23, 2012** Monthly meeting at Bayland Park, 9:30 AM, Retro Electronic Project Contest

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

**Saturday, July 28, 2012** Monthly meeting at Bayland Park, 9:30 AM,

### **Volunteers Needed – This is Urgent !**

As most of you are aware, the **Gulf Coast Electronics Museum** located just south of downtown Houston must liquidate their stock of electronic and other related items in the very near future. With a hot humid summer just a matter of weeks away, this is something we must address as soon as possible.

On Saturday morning, Derek Ross, Mike Slovan, and Bill Werzner, met with the owners and toured the building. There are many items still stored there that need to be sold and this will require some of our loyal members to step forward and volunteer to help.

An on- site auction was being touted earlier, but after inspecting the facility, we decided that was impractical. The building has no electricity, and limited restrooms available – in fact the water may even be cut off. We feel our only option is to box and move the contents to our temporary storage facility on South Gessner not far from the Bayland Center. Both storage units have rent paid through the end of May, and with a few volunteers, we should be able to consolidate what remains of the Bob Wood estate into one of the ten by twenty foot units. This would free a unit for the museum items that could be boxed, labeled, and neatly stored for what could become a “mid-summer mega auction ” or be auctioned at our Sept Mega auction.

Our inspection revealed many nice electronic items including military surplus, test equipment, boxes of tubes, camera equipment, and many boxes of “no telling what’s in there”.

Our plan goes as follows: [1] Consolidate Wood Estate into one storage unit on South Gessner. [2] Meet at the museum to box and label items for temporary storage. [3] Transport boxed items to South Gessner for storage and plan auction.

If you decide to lend a hand, we could certainly use the following: a small portable generator for fan and lights, pasteboard boxes for packing, flashlights, a cooler with cold drinks, and trucks. Our first objective is to clear one of our storage units, and that we must do very soon.

Please contact Bill Werzner (713 721 – 2242 or e mail [werz1943@gmail.com](mailto:werz1943@gmail.com)) if you are able to help and what days you prefer.

Remember, it is your spirit of volunteerism that keeps HVRA alive, so let’s roll up our sleeves and make this another fun event. Bill W.

### **Useful Web Sites for Collectors and Restorers**

**Jim’s Antique Radio Museum -**

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

# *The Grid Leak*

*May—June, 2012*

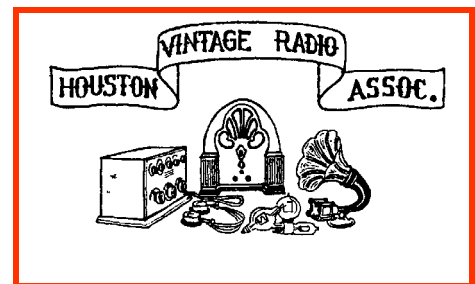
Month Meeting—April 28  
Bayland Park 9:30 AM

Alvin Swap Meet — May 19  
Alvin TX—8:30 AM

**[www.hvra.org](http://www.hvra.org)**

## ***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.



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