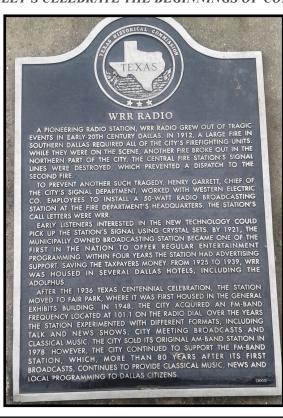


The Grid Leak

January, February, March — 2021

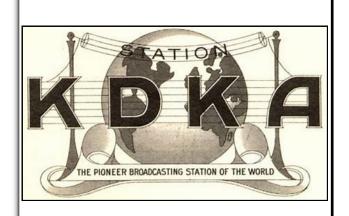
LET'S CELEBRATE THE BEGINNINGS OF COMMERCIAL RADIO BROADCASTING, IN TEXAS AND NATIONALLY





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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 very 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 its membership across several media 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 Meeting or on HVRA.org

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FROM THE PRESIDENT

By Bill Werzner

Here it is post Christmas time once again and I, along with many of you, wonder "what happened to 2020?" I'm sure that I am not alone asking how another year seemed to pass by so quickly; seems the older we get, the faster those years slip away! So I will begin by wishing y'all, in calendar order, a belated Happy Hanukah, Winter Solstice, Merry Christmas, Kwanzaa, and any celebrations or holidays I may have missed. With that said, "Happy New Year" to all of you and let 2021 bring you happiness and good fortune! As we look into the 1st quarter of the 2021, I hope that with the new vaccines this dreaded COVID – 19 pandemic can be put behind us in the coming months. To say this pandemic had a negative impact on our club activities is putting it mildly. It severely impacted operations at the Bayland Community Center where we held very few regular monthly meetings and had to resort to Board of Directors' meetings at home via ZOOM. We did manage to squeeze in a Tuesday evening general meeting at Bayland on Dec. 8. In addition, the traditional Mike Payne - Alvin, Texas May Swap Meet was moved to late October, and the July Texas City Ham Fest was cancelled entirely. With the pandemic still raging; our 2021 convention has been moved to October 1st through October 3rd.

Despite the cancellations (not all of which could be blamed on the pandemic), we did manage to hold swap meets that were successful and fun. Working together with Electronic Parts Outlet and Mike's Ice House in southwest Houston, we held three Saturday events The first was on August 22, but an unpredicted rain storm came up and curtailed activities. The Ice House owners were delayed in Missouri City due to the flooded streets – yes, this was what my mother used to call a "toad strangler". Electronics Parts Outlet invited us to shelter inside their store until the rain finally abated enough so we could make it to the Ice House across the street for a tortilla breakfast. The second and more successful swap meet was a follow up, held October 17, along with a noon barbecue. Two weeks later we gathered at Mike Payne's Electrojunk Inc. in Alvin for his swap meet that had been postponed from May (and I want to add, if you missed it, you missed a great one!). The third event on November 14 at the Ice House was a swap meet followed by an estate auction inside. The layout for the auction suited us well due to an unused isolated secure area on the north side of the building that provided us a good staging area "sans rain", bidders were able to sit at the tables inside, enjoy a meal, drinks, and bid on the many items that were auctioned. This event was so successful that we decided to hold another swap meet – lunch – plus auction there again in February and March. Stay tuned as we will be planning more events in the Spring based on the success of this last one as estate items continue arriving that will fill our storage unit to capacity.

Another item I should report is the status of the Battleship USS Texas. For the last couple of decades HVRA has been involved in raising funds to restore the Marconi antennas and shipboard electronics. I was informed that these monies have been folded into the First Texas Volunteers general account and is still earmarked for expenditure for antenna restoration following the dry docking restorations in the future. The last report I received from La Porte is that artifact and deck gun preservations are still underway. The ship is still closed to the public and leaks have been mostly staunched with foam pumped into the leaking voids. As to where she will go for hull repairs, when and where she will return, remain unanswered. As soon as I hear any news I will report it to you all.

In closing I want to extend my sincere thanks to our Board of Directors and all members who volunteered their time and effort in bringing these events to a successful conclusions despite all the hardships. This includes the owners and staff of the Ice House and neighboring Electronic Parts Outlet as well. Without your dedication and hard work y'all, our club could not exist. When the need arose, you all stepped up to help and as the old saying goes, kept the wheels turning! To me, it looks like 2021 will be a fun and exciting time for HVRA.

We had a great auction at the Ice House in November. We cleared nearly as much money as we typically do at the Texas City event. We had a profit of \$1531. This included \$330 as a donation from Jeff Heller by selling some of his radios prior to the auction and donating the proceeds to the club. Kudos Jeff!!

When you read the following schedule now through April, consider the 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 new year so be prepared to alter your plans accordingly on relatively short notice should they occur.

HVRA Event Schedule: January, 2021— April, 2021

by Bill Werzner

We have been coordinating our meetings closely with the Bayland Community Center which is a Harris County entity and must abide by regulations promulgated by county officials. Bayland management has been wonderful in notifying me in advance of schedule changes so that I can alert members of any changes that affect us. As of today, we will continue Monthly Board of Directors Meetings remotely via ZOOM, the second Tuesday evening of each month, and these meetings are open to all HVRA members who wish to participate.

January

12th, Tuesday, Board of Directors' Meeting remotely via ZOOM 6:30 PM.

30th, Saturday, General Meeting, Program and Auction 8:00 AM, Bayland Park

Program: For the January meeting we are asking you to bring in a collection for the meeting, radio or non radio related. Depending on the number of people and time we will allocate a certain amount of time for you to explain what it is about and why you love collecting your items

February

9th, Tuesday, Board of Directors' Meeting remotely via ZOOM 6:30 PM.

20th, Saturday, First 2021 Swap Meet 8:30 – 11 AM. Estate Auction and Lunch begins at 12 Noon. Mike's Ice House. See auction notice for details.

27th, Saturday, General Meeting, Program and Auction 8:00 AM, Bayland Park

Program: For the February meeting, our theme will be the basics of an audio amplifier.

March

9th, Tuesday, Board of Directors' Meeting remotely via ZOOM 6:30 PM.

20th, Saturday, Second 2021 Swap Meet 8:30 – 11 AM. Estate Auction and Lunch begins at 12 Noon. Mike's Ice House. See auction notice for details.

27th, Saturday, General Meeting, Program and Auction 8:00 AM, Bayland Park

Program: For the March meeting Rick Slater and Stephen Truch will present a sequel to the phono graph discussion presented earlier.

Anri

13th, Tuesday, Board of Directors' Meeting remotely via ZOOM 6:30 PM.

24th, Saturday, General Meeting, Program and Auction 8:00 AM, Bayland Park

Program: TBD

Bayland Park Community Center: 6400 Bissonnet Street, Houston, 77074

Located just off Bissonnet, east of Hillcroft.

Mike's Ice House: 8746 Lipan Road, Houston, 77063

Located just off Fondren Rd, a few blocks south of Westheimer, it is on the corner directly opposite EPO (Electronic Parts Outlet) at the intersection of Crossview Dr. and Lipan Rd. Take Lipan Rd, turn into the back parking lot where the swap meet will be held. **See their web site at: mikesicehouse.com.** Indoor and outdoor facilities, picnic tables, beer garden, and plenty of parking are available. I think you will be impressed with Mike's and its convenient location. Bring along a list of any electronic parts or supplies you may need, cross the street and then you're in the EPO rear parking lot!

As a result of the last November event, we decided to change how the lunchtime food will be served. Mike's is a mom and pop operation and Mr. and Mrs. Harris cherish our support and have worked hard to treat us as valued customers. Instead of burdening them with an all you can eat buffet setting, we will have selections from their regular lunchtime menu. Prior to our events, an e mail blast will be sent out with the cost for lunchtime meals, and will include a deadline for orders to allow time for them to prepare for us. Instructions will be included on how and where to send your reservations for the February and March events. Early springtime weather is hard to predict, so we will monitor weather forecasts for those dates and should rainy or stormy weather predictions prevail, we may postpone or cancel. Stay tuned to our web site and news blasts prior to the events should plans change on short notice.

HVRA BOARD EXPANSION

As we welcome in the new year, HVRA will be operating with a larger Board. As a result of long discussions earlier in 2020, the General Membership approved, during the 4th quarter of 2020, to amend the Bylaws and include At Large Positions #3 and #4 Representatives. This will afford the opportunity to delegate Board level responsibilities, for the increasing HVRA activities, to members wishing to become more involved in our varying, yearly agenda.

- Please welcome Stephen Truch to the At Large Position #3, responsible (along with the President) for Meeting Programs both in-person and virtual; and to assist in the execution of electronic record keeping (via auction software) of monthly and convention auctions.
- Please welcome Steve Scheel (previously Webmaster) to the At Large Position #4, responsible for maintaining an HVRA Estate policy and working with the assessment, coordination, and inventorying of estates which HVRA will assist in liquidating.

As a result of the September elections and the above described position #4, we have changes to the At Large Position #1 and the Webmaster position.

- Derek Ross replaces Reid Shipp as At Large Position #1. Derek (previously served as V.P., GL Editor, and Webmaster) now assumes Reid's long tenure and well executed responsibilities of Auction Chairman.
- Abdullah Soliman, a longtime, hard working volunteer at all HVRA activities, including several Conventions, replaces Steve Scheel as Webmaster.

Future Club Meeting and Estate Auctions

As many of you are aware HVRA has accumulated a considerable amount of electronic items from estates this last year. Our 10 by 20 storage unit is reaching maximum capacity and we must begin selling these items in order to make room for future estate, surely to come. During monthly meetings, at Bayland, we try to keep the auction within a 1 to 1-1/2 hr. time frame. (including checkout) and, as auctioneer, I can probably move forty items during that time frame – and that's stretching it. We also ask everyone to avoid bringing "junkola items" (I think you all know what fits into that category), and items that are dirty, trashy, too bulky, and difficult to handle.

By moving the majority of estate items to the Ice House auction site, we will remove the stress of overloading our monthly meetings where we need to limit our time to three hours. This way we have time to conduct club business, welcome new members, answer questions, present programs, and still have an auction. Watch www.HVRA.org web site for auction item photos as they become available. Additionally, please bring your own auction items to these offsite (Ice House) auctions and take advantage of this opportunity along with the scheduled swap meet.

IMPORTANT NOTICE FOR ANY HVRA EVENT INCLUDING AUCTIONS AND SWAP MEETS

Although guests are allowed to observe, these are <u>MEMBER ONLY</u> events (requirement of our insurance carrier and our Bylaws) and each participant <u>MUST</u> 1. Register with the Treasurer to ensure your membership status and auction number; 2. Correctly complete the Auction Control Forms necessary if you are an auction seller; 3. Agree to all activity rules including not removing purchased or no-bid auction items until settlement with the Treasurer is completed at the end of that day's auction. Additionally, HVRA reserves the right to enforce any Covid-19 health restrictions currently in affect at the time of the event. Any member not following HVRA event rules may risk the suspension or termination of their membership.

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).

2021 ANNUAL CONVENTION UPDATE

Vice President Lewis Brittain

- Location: 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.
- Convention Theme: Atwater Kent
- For a complete list of the 2021 Convention Contest Categories and Rules, please refer to page 5 in the 2nd Quarter Grid Leak, 2020. Future updates will appear in upcoming Grid Leaks and on our HVRA Website.

For additional Convention and reservation information or contact Lewis Brittain at 281-493-0737



The Trouble Shooter

by Bill Werzner

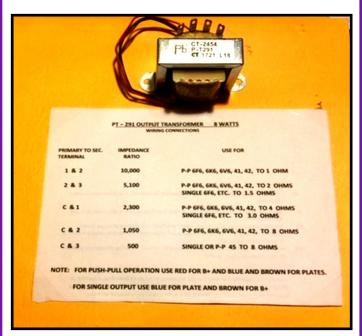
Advice from the old trouble shooter here: keep wearing your masks, washing your hands, avoiding crowds, taking the vaccine, and watching out for those wayward electrons!

Have a safe, healthy, and Happy New Year!

Bill is currently the HVRA President. As one of the original members in 1978 he has served in varying Board capacities and has been President for more than 20 years. Additionally, Bill is the HVRA auctioneer, technical expert and lead repair technician for Vintage Sounds.

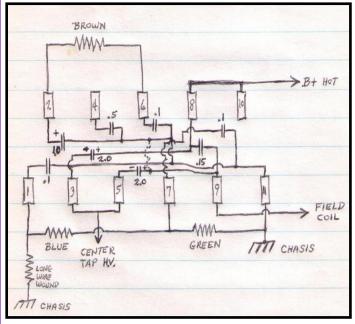
The AES P – T291 Universal Output Transformer

In restoring vintage radios and amplifiers we often find output transformer problems. Wherever high voltages and currents are utilized, there is heat, oxidation, and often corrosion. These vintage transformers are subject to several modes of failure due to internal shorts, open windings, and intermittent connections that result in distorted, weak, or no sound output at all. Aside from high end equipment transformer replacements, there is one universal output transformer that fits the bill for most radio and phonographs. I have used at least a couple dozen of these replacements over the years in both single ended output and push pull replacements. This compact 8 Watt audio transformer is available from Antique Electronic Supply, but the wiring information for connecting to vintage tube arrangements is often in question. About twenty-five years ago a wiring diagram was included in a shipment of these transformers that I received and I included a copy of it in the accompanying photo for reference.



Replacing Philco 95 Capacitors

While on the subject of vintage radios, one time consuming and aggravating thing when doing restorations, is determining how terminals are connected inside large filter capacitor block enclosures. This radio was a restoration I undertook in 1988. The Philco 95 cathedral's capacitor bank was shorted internally. To make the repair, the innards were melted out and new capacitors were mounted inside the metal shell, and then soldered to base terminals thus preserving the esthetics of the 1929 chassis. This diagram will serve as a time saver should you encounter one of these collectable radios. Remember, if a set is plugged in for the first time, it hums, and or the rectifier tube plates glow red – PULL THE PLUG FROM THE OUTLET IMMEDIATELY! There is a short circuit somewhere, and most likely in one or more filter capacitors. This applies not only to a Philco 95, but all vintage radios, amplifiers, or other electronic equipment. Act quickly, or you will smoke a power transformer – that's expensive compared to a few dollars needed to replace a few capacitors.



ATWATER KENT MODEL 55 REPAIRS

By Tom Taylor

Tom Taylor currently serves on the HVRA Board of Directors in the At Large #2 Position and is responsible for the Annual Convention Contest at Contest Chairman. Prior to that position, Tom served on the Board in capacities as Secretary and Treasurer. Using his technical experience, Tom remains a contributor to the Grid Leak and General Meeting Programs.



While recently servicing an Atwater Kent model 55C radio it was noticed that many of the stations particularly the stronger ones had a lesser ghost signal next to the stronger signal. Since this is a Tuned Radio Frequency, TRF, radio that ghost wasn't an image in the familiar While pondering what could be the cause and cure, a recent TRF Crosley was recalled where peaking was accomplished using a trimmer capacitor mounted atop each of the three tuning capacitors. This Crosley was also tuned by one knob just as with this Atwater. Peaking the Crosley was straight forward, one trimmer at The Atwater, however, was void of such trimmers. While staring at the AK metal tuning drive bands and their interface to the three capacitors I realized there was a solution. Each of the three capacitors were served by a metal wheel similar to a pulley that responded to tuning band movements to turn the capacitors as a group and better yet they were mounted on capacitor shafts

with set screws. It didn't take much to conclude that two capacitors where finding a peak while a third capacitor, off-set just a bit, was finding its peak, a lesser peak, just away from the position best suiting for the other two. Assuming the hardest to get to was going to be the one least likely to have been tampered with OR the one I was going to pick for the others to track, I loosened set screws on the easiest wheel to work with. Once the radio was set to its loudest peak I then manually moved the newly freed capacitor rotor while the other two capacitors were held by the main tuning knob. That effort granted the expected reward with one greater peak. After tightening those set screws and tuning the dial from one end to the other it was noticed that the issue existed to a lesser degree now favoring one end of the dial. HMMMM Since the tuning interval between stations was much closer on the higher frequency end of the dial, I theorized this region required the most position accuracy for the three capacitors. That same wheel was then reset slightly for the best peak while listening to the highest frequency station I could use. The final result was so much better with essentially one peak for stations. The picture may help visualize the steps.



There is a grounding practice found in the Atwater Kent model 55C and perhaps others of the period that can make troubleshooting harder than it needs to be. Tube sockets are part of a rectangular phenolic assembly that is held together and then mounted to the chassis using brass brads. Sometimes those brads, looking like small brass donuts, will have a wire in their center which leads to a grid cap on the top side They may also serve as convenient of the chassis. ground points for components on the component side. However, it seems this grounding task is not always taken up seriously by those brads. A recent repair unveiled just such a poor grounding connection for a 100K cathode resistor. Yes, this radio has one of those detector types, the type that biases an otherwise amplifying tube near cutoff such that it only conducts on half the incoming waveform. Although this cir-

cuit worked due to the very low current in this high resistance ground path, a wire was required from the low end of that resistor to a certain ground in an attempt to assure performance would not deteriorate at a later time.

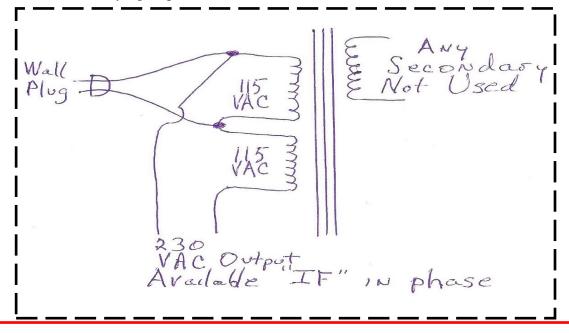
CONVERTING A 110VAC TO 220VAC

By Tom Taylor

As an antique radio enthusiast there will be times your eyes come to rest upon a European 220 VAC mark. Here I am reminded of a joke where one military commander once said to his prisoner, "there are ways of making you talk". Ask me about that one some time.

The obvious approach is to simply convert our 110 VAC to their 220 VAC. Your attentions then should turn to on line surplus transformer sources, your stocking club members or your Houston electronic mega parts house, EPO. While hunting along those paths keep in mind that your prize can simply be a transformer that has two of those 120 VAC inputs regardless of its secondary windings. A transformer such as that can be wired for either 120 VAC or 220 VAC input voltages. Because most of our radios with small tube counts require about 90 watts of power, a transformer of slightly greater rating is needed. While the VA value for your transformer is not quite the same as a rating in watts, you can obtain an approximate VA rating of the transformer by computing the secondary power and adding a factor for primary to secondary conversion losses in the transformer. Multiply secondary Amps X VAC to attain the output power rating and then multiply that by 1.15 to derive an approximate transformer VA rating. Since transformer efficiency is never 100% it might be said that in general the primary power required is about 15% higher than that available at the secondary, hence the 1.15 factor used. You then connect its two line input windings in series and feed one of the 110 input windings with our line power. Doing so requires placement of one incoming line power wire on the connection common to both windings. Your 220 VAC objective will be found between the loose undriven wire and the driven lead that has only an input line power wire on it as shown in the diagram. In case your meter surprises you with no 220 VAC voltage as defined here you have one of the primary windings out of phase so just swap the two wires for either 120 volt input.

A far less attractive way is to feed the existing 220 VAC radio transformer using the lesser 110 VAC with intentions of pulling its full wave tube or solid state rectifier to install a full wave bridge rectifier on its transformer secondary. This in effect doubles your working supply B+ back to where it was despite the lesser 110 volt input. The problem you would then face is that the radio filament voltage is now half of what it was in accordance with half the required line voltage. The penalty of this option is that you must install an outboard filament transformer powered off the switched radio line input voltage to serve those filaments and for a foreign radio they are not necessarily 6.3 or 12.6 VAC rated. If you thought you could series the original radio filament winding with the now unused rectifier winding (changed from tube to solid state rectifier) you generally can't because the current rating serving one rectifier tube is going to be much less than the other winding serving the balance of radio tubes. That is to say your tube rectifier filament winding is probably too weak and won't last carrying its portion of an entire set of tubes.



WOAI RADIO STATION SAN ANTONIO, TEXAS by Derek Ross

Derek Ross has served on the HVRA Board of Directors in several capacities including, Vice President, Grid Leak Editor, and Webmaster. Currently serving as the At Large Position #1 Representative, Derek has continued to support HVRA directly and as a contributor to the Grid Leak. Mike Payne has been an active member of HVRA since the 1980s and, as the owner of Electrojunk, Inc. in Alvin, he has hosted several annual spring Swap Meets. Having acquired the historical files from the WOAI radio station, Mike made a variety of photos and station information available to Derek. In keeping with his personal interest of documenting historical information, Derek has submitted this article to the Grid Leak as a follow-up to an earlier presentation during an HVRA 2020 General Meeting.

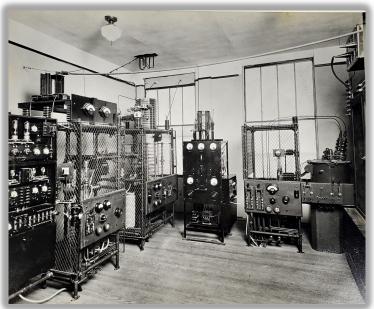




1923 WOAI Building

1922 Original WOAI 500 Watt Transmitter

WOAI, the oldest radio station in San Antonio, signed on the air on September 25, 1922. Broadcasting over frequency 1190 AM using a 500-watt transmitter, the station was touted as one of the "first super powered stations in Texas" and was the brainchild of founder G.A.C. Halff. A popular story tells that Halff wished to carry out a promotional gimmick of giving away hundreds of small radios in connection with his business, and therefore he had to put a radio station on the air so that his customers would have something to receive. Initial programming included a variety of information and also featured daily violin and piano selections.



1926 WOAI 5000 Watt Transmitter

WOAI increased its transmitter to 1,000 watts in July 1925. That year the station aired its first commercially sponsored program that presented an orchestra performing Mexican songs. In 1926 the station increased to 2,000 watts and participated in the first successful chain broadcast with other stations across the United States. It joined the world's first network, the National Broadcasting Company, on February 6, 1928. WOAI continued to increase its broadcasting power with a 5,000-watt transmitter in 1927 and the legal limit of 50,000 watts in 1930, making it the only 50,000-watt station in South Texas.

By the early 1930s WOAI had built its first radio newsroom and became one of the first stations to employ a local news staff. News was a major focus along with broadcast.

1930 WOAI New Studio; Art Johnson



1938 New WOAI Control Room; H.M. Mundine



1930 WOAI Studio Equipment



News Room (Date Unknown)



WOAI constructed a single 425–foot tower near Selma, northeast of San Antonio, in 1937, which provided for extended coverage. The station's dedication to news coverage resulted in the hiring of young news reporter Henry Guerra in 1939. Guerra was the first Mexican American to broadcast the news on a major radio station. His love of local history also led to the development of his own programs—13 Days of the Alamo and Henry Guerra's San Antonio. He would remain with WOAI until his retirement in 1992.

In 1941 WOAI became one of twelve radio stations in the United States to be designated its own unduplicated or "clear channel" frequency as part of an emergency information system. As a result, WOAI was moved to 1200 kHz on March 29, 1941, and in fact remained the only station licensed to that frequency through the 1980s. As one of a select group of clear channel stations, also known as "highways in the sky," the programs of WOAI could be heard across North America and even south into Central America some nights—reinforcing the station's reputation as the "Blowtorch."

During the 1940s WOAI presented Sunday broadcasts of *Musical Interpretations*, a classical music program that featured San Antonio Symphony conductor Max Reiter as the host. Reiter also conducted the orchestra live on WOAI from San Antonio's Municipal Auditorium for NBC's nationwide *Pioneers of Music*.

Longtime staff announcer Bill McReynolds was hired at WOAI in 1947 and served as the host of the station's country music band, the Radio Rodeo Gang. By the early 1950s he also did a farm and ranch program and would serve as the farm and ranch reporter for fifty years.

San Antonio's first television station WOAI-TV went on the air on December 11, 1949. With the advent of television, the radio station underwent a transition during the mid-1950s from a news and mostly soap opera format to a music format. The station dropped the soap operas and hired disc jockeys to present a variety of music—from early rock-and-roll to country to the popular songs of the day.

Aaron Allan, on staff at WOAI from 1954 to 1959, experienced the format change and was kept on staff as the country deejay with his own show. He recalled, "On my show I played country and folk music recordings and played my guitar and sang." Allan's musical guests included a young and nervous Johnny Cash in one of his earliest interviews on the radio in 1955—well before he made his debut on the *Grand Ole Opry*.

WOAI'S four studios could accommodate any kind of musical entertainment from a full-sized orchestra to Bob Wills and His Texas Playboys to Red River Dave McEnery. Allan played a role in a small piece of San Antonio radio history himself by performing live on the radio "The Ballad of Emmett Till," a song Red River Dave had composed about an African-American youth who had been murdered in Mississippi.

(Continued on Next Page)

WOAI (continued

WOAI legend Bob Guthrie was hired in 1956 as a staff announcer. He became the station's midday news anchor and remained on staff until his retirement in 2009. Along the way, he garnered awards in journalism from Associated Press, United Press International, Sigma Delta Chi, and other organizations.

WOAI continued to provide a variety of music through the 1960s. In 1975 the fledgling company of what would be Clear Channel Communications (*see* iHEARTMEDIA,INC.), established by Lowry Mays and Red McCombs, purchased WOAI for \$1.5 million. During the latter half of the 1970s, the station's format of primarily music with news and agriculture was gradually changed to a news/talk radio format. During the 1980s sports telecasts were also added, and in 1985 the station constructed a new 50,000-watt transmitter with a 540-foot antenna.

WOAI is one of the few stations west of the Mississippi River (and the westernmost station in the United States) with a call sign that begins with "W." Its designation was grandfathered in when the United States government required that call signs of stations west of the Mississippi River start with "K."

Source: Texas State Historical Association – Handbook of Texas

Towers hit by B29 April 3, 1956

The 435-foot tower (other sources indicate the tower was approx. 160-foot tall, which appears plausible based on the photos be-



low) was no match for the B-29 that hit it going about 140 miles per hour at 3:12 p.m. on April 3, 1956. The airplane took off from Randolph AFB headed northwest on a routine training mission only a few minutes before the accident, with six men aboard. Eyewitnesses said the plane was flying unusually low when it struck the WOAI tower on the old Austin Highway near Selma and crashed and burned in a cornfield three miles northeast on Nacogdoches Road.

Farmer Rene Calle "was watering potatoes and cussing the dust when it happened," says the San Antonio Express, April 4, 1956. "It was burning like the devil," Calle said, "and I was ready to run, only I didn't know which way to go." He had watched as the plane tried to turn and fell from the sky. "It was burning all the way down," he said, "and when it hit, the flames popped up hundreds of feet. The noise was terrible."

Amazingly, five of the Air Force personnel aboard walked away from the crash, and attempted to aid the airman who was thrown clear and killed on impact. At the controls

was 1st Lt. L.R. Hildebrand, who must have been cussing the dry weather at least as much as the farmer below. "It was somewhat hazy, with a reddish-brown dust in the air," the aircraft commander told the Express, April 5, 1956. His first thought on spotting the obstacle, he said, was "How could that tower be there? Then I saw it was impossible to miss it by going up, turning right or left." As Hildebrand saw it, the tower was "a dirty-orange color, and blended with the background, it had the effect of being camouflaged."

The plane's right inboard engine hit the tower about 50 feet from the top, tearing the engine away and toppling the tower. With three remaining engines and both wings intact, the airplane was controllable, and the crew put on their seat belts and went into crashlanding procedures. 1st Lt. R.E. Skiling, who was giving Hildebrand "specialized instructions" on the short flight, took command, radioed the Randolph Tower and determined that the empty cornfield was the safest place to land, although it was "comparatively small for a B-29."

Named the Superfortress by aircraft manufacturer Boeing, the huge plane was a long-range bomber that saw military service between 1942 and 1960. "As many as 1,000 Superfortresses at a time bombed Tokyo," says the plane's history on www.boeing.com. The most famous B-29s were the Enola Gay and the Bockscar that dropped atomic bombs on Hiroshima and Nagasaki, Japan. The postwar version of the plane weighed 140,000 pounds and was used for weather reconnaissance and rescue duty.

When the one in the WOAI tower crash hit the ground, Skiling "set it down rather smoothly," said Hildebrand, "but (the plane) was burning intensely, and the fuel spread even more."

After skidding around 1,500 feet, the B-29 came to a stop and the crewmen still aboard struggled out. Calle and his brother Joseph ran over to help, but one of the Air Force officers told them to get back in case the plane exploded. The crew members found their fallen comrade, Airman F.B. Gibbons, and moved his body away from the flames before being taken away in ambulances that arrived on the scene along with firefighters.

Meanwhile, about 77 Hereford cattle on an adjacent field stampeded, jumping the fences and heading toward the road until they were rounded up by area farmers. About 25 acres of the corn at the crash site were lost, not only due to the plane and the fire but to the emergency vehicles and the crowd of onlookers "attracted by scores of screaming sirens and a pall of black smoke."

WOAI radio went off the air for only about two minutes, until a downtown auxiliary transmitter went into operation. After discussion with Air Force officials, the station took only three weeks to rebuild its tower at the same height and place, says the San Antonio Light, May 8, 1956.

The series of photographs show the wreckage of a B-29 that collided with WOAI's radio tower on April 3, 1956.

WOAI (continued)



These pictures courtesy of Dan Walthers, WOAI

According to Dan:

The transmitter/studio building later became the Selma City Hall after WOAI moved the studios to downtown San Antonio and the transmitter to Elmendorf, Texas on the southeast side of town.









WELCOME HVRA NEW MEMBERS

MARK CARTER TOMBALL 12/01/2020 NASSAN MIR HOUSTON 11/14/2020

ARE YOU KIDDING ME!

A friend back in Ohio wanted to buy one of my AK 20s. As I was making certain the set worked properly, I needed to refer to the AK service manual in the other room of the house. Being lazy, I looked to my right and brought up, on my smartphone, pictures and information that I needed in order to proceed.

I looked back at this large Big Box 20 sitting to my left and then back to my 6" diameter phone screen. *ARE YOU KIDDING ME!* Certainly we can all agree that a lot of time has passed and many technical achievements have taken place between 1924 and the birth of the smartphone, but here I am holding a 3" by 6" by less than 1/2" thick item that functions as a phone, a computer, a radio, a television and a movie theater....without large power sources, tubes, a roof or table top antenna, or limitations in either audio or in video colors....*ARE YOU KIDDING ME!* Afterwards, needing some nourishment, I said to my phone "Hey Google"...call Pizza Hut (number stored somewhere in my phone....must be crowed in there). Paid online through PayPal tied to my bank and received the pizza in 30 minutes delivered hot to my front door with a promotional liter of cola....without leaving the house or using my wallet......*ARE YOU KIDDING ME!* Sat down in the den, pulled up a movie that I had downloaded the previous night, and ate my pizza watching a system that also allowed me to stop, rewind and fast forward....by voice command.....*ARE YOU KID-DING ME!*

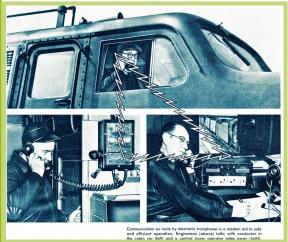
Later, I went to my AK Big Box 20, powered it up, and yelled into the horn speaker...."Big Box...turn off"....no response. "Big Box...call Pizza Hut".....nothing. Must have been a cheap set.

CONTRIBUTED BY STEVEN PENA

Steven Pena has been a member of the HVRA Board of Directors for several years, functioning in the position of Historian. In addition to those responsibilities, Steven maintains an active presence at HVRA yearly functions and participates in the Annual Convention, General Membership Meetings, Texas City Mega Auction, Hobby Airport Vintage Houston Event.

Aboard The City of New Orleans.....

Your correspondent is a train–enthusiast, and this past Spring (March 2020) he took his 21-yr old son on the famous *City of New Orleans* line, that runs from Chicago to New Orleans. This line was made famous by Arlo Guthrie's 1972 hit "The City of New Orleans," (later recorded by Johnny Cash also), with the "Good Morning, America. How are you?" line that has figured in ads and commercials ever since. This cross-country line which the song made so famous still has the same stops, including Memphis. It departs Chicago's magnificent art-deco Union Station, which is, I think, the most beautiful I have ever been in, though New York's Grand Central Terminal is in the running. It skips along on its lovely route at about 80 mph (many modern locomotives have a governor installed that limits them to 79 mph). But in the days of steam locomotives the *City of New Orleans* routinely topped 100 mph! If memory serves me correctly, we made it from Chicago to New Orleans in less than 19 hours.





Chicago's Union Station

In the 1940's the Pennsylvania Railroad introduced the Trainphone system, a means by which railroad employees on moving trains could have voice communication with crews on other trains, with dispatchers and with tower operators. It was eventually adopted by the Kansas City Southern also. What may be of a particular interest is that the Trainphone system used electromagnetic induction. The phenomenon of magnetic induction may be achieved via the motion of the train itself. The Trainphone modulated signal, at a few hundred kilohertz, was passed through the rails or through line-side wires all along the track. Many of the trains of the 40's and 50's had mast antennas on the locomotive. In the 1940's passengers found phone booths aboard certain of their trains that allowed them to call across the continental U.S. In fact, even before the Trainphone System was implemented modulated signals were already being passed through the rails to moving locomotives. These signals indicated track conditions ahead of the train. The current passing through the rails led to an indicator inside the engineer's cabin, which produced a constant signal of the speed allowed on that part of the track at that time. If the continuous wave passing through the rails were modulated downward, thus altering the signal in the cabin, the engineer had a set amount of time within which to react by lowering speed. If this did not happen for any reason a switch was automatically thrown that would bring the train to a halt. (On modern trains the engineer must push a lever in his cabin every 30 seconds in order for the train to continue running, which requirement thus prevents "runaway" trains.)

If one does not have to be somewhere in a hurry the train is a fantastic way to travel. Where else can one have a sirloin steak dinner with a glass of Cabernet and a goat-cheese salad appetizer while watching some of the most beautiful parts of America go by during the meal? We like to get the full sleeper cabin which spans the entire width of a railroad car; these are available on the Superliners, which are double-decker rolling stock. The rooms are small, but they are private rooms with a door. The Observation Deck is a full-length car in which the entire roof is transparent plexiglass, and is lined with theater-style lounge chairs and benches. On the lower floor is a cash-bar and snack lounge. I love going to sleep to the sound of the train, its distant whistle and its gentle motion. Our next ride will be in March on the *Lake Shore Limited*, from NYC's historic Penn Station to Chicago. Penn station is underneath Madison Square Garden, and extends 3 levels down, train boarding being on the lowest level. *ALL ABOARD*!

Time on your hand?

By Jerry Sirkin

Over the last, almost, 12 months we have been challenged in many ways. As collectors, some of this spare time has allowed us to address those projects that never had the priorities necessary to take time during previous months (maybe years). So now that most of those sets are restored, tubes tested, bench and test equipment re-organized, what is left to do?

If you sit down at the computer, tablet or smartphone, there are wonderous websites to keep the curious collector busy with resources which you may not yet have had time to observe.

- First....yes of course, pull up HVRA.org for historical Grid Leaks since 2010. Additionally, purchase the GL CD, available from HVRA ...see below, to look up valuable technical and restoration articles provided d by fellow members since late 1978.
- Go to the Dallas collectors' club at VRPS.org and you will be treated to several Zoom meetings which address detailed technical repairs of battery sets. In addition, you will find an extensive presentation of the history of WRR radio, on-air August 5, 1921...first licensed commercial radio broadcast in Texas and second in the nation (Can you guess the first?)
- What about looking into Zoom sessions held by MAARC (Mid-Atlantic Antique Radio Club) see maarg.org for details.
- For those not afraid to use Facebook (or with a friend not afraid to log on) try searching through the "Groups" and take a leap to join some of the titles such as "Radios from the 20s", "Atwater Kent Radios", Antique Radios" or the many vintage radios for sale sites. The amount of general information, restoration tips and repair techniques being shared from Maine through California is amazing and can easily benefit the collector stuck with a restoration or repair question.

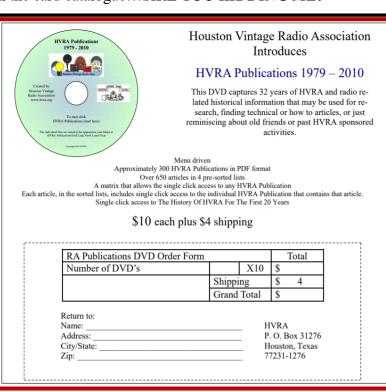
Yes as addressed in my earlier article, the electronic world of 21st century lets you use your cellphone as a library card without needing to laboriously search the card catalogue....*ARE YOU KIDDING ME!*

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)?

Well, fear not Mr. Collector. The HVRA CD - ROM awaits your attention. Indexed for easy use and filled with 31 years of HVRA Grid Leak articles your answers and vast amounts of general vintage radio information is just a small investment away.

Please fill out the attached form or print one out from our website (hvra.org) and you will be rewarded with more information than one man should ever know.

For additional CD information, contact Steven Pena, HVRA Historian.



Buy, Sell, Trade, & Services Offered

Vintage Sounds Named Best Antique Store in Houston June 2020.

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

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

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

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

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



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

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, ipanthes@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

