SOUNDWAVES

Vintage Radio and Phonograph Society, Inc.

January 2007

From the President........... Jim Sargent

Now that we have entered 2007 and I can look over my shoulder and see clearly the successes of 2006, I do so thanking the folks that make this organization tick. If you were at the annual convention last November, you might recall that I rattled off the directors and the various jobs that they do in front of and behind the scenes. However, we don't pay homage often enough to those folks who are not directors, yet play small, but extremely important roles in our organization. For example, Ray Story picks up the key to our meeting room each month. At our auctions, those folks working as set handlers keep the items flowing onto the auction block and returned to storage. While this is something many can and should do, I continue to see the same faces doing the job at our auctions. My thanks to Jim Collings for sitting at the auction table hour after hour, entering the sales into our computer. Wanda Cherryholmes and my wife, Beverly, manually record each auction sale. This gives us a back up to the computer and has, on more than one occasion, allowed us to correct a billing oversight. Dee Daniel, Lois Janssen, and Fran Miles do an excellent job of keeping our registration desks from becoming a log jam. The risk that is taken when you begin thanking folks is that you inadvertently miss someone. I am sure that is the case here, but rest assured your efforts, though unmentioned, do not go unnoticed.

My thanks to all of you who signed a best wishes card for June Puett at the convention. I took the card to June the following Monday. He was very appreciative and honored that so many took the time to acknowledge him. June passed away two days after that last visit. As one of the founders of the VRPS, June was a visionary, not only recognizing the need for a local organization, but he also saw the need to provide documents and books on antique radio collecting. Today, there are many such books on the market but, in the mid-70's, there were very few. June's publications were among them.

Let me close by summarizing the recent annual convention. Those in attendance will attest to its success. Being able to view the excellent displays in the contest room were worth the price of admission. Take a look at some of the pictures elsewhere in this issue. More are found on our web site, www.vrps.org From the early DeForest equipment and tubes, to the incredible catalin radio display, to the military radio display(s) complete with fully dressed mannequin, the room was filled with some really awesome specimens. Any collector would love to have these in their collection. Five auctions would seem to be enough for anyone. However, I bet if we

had shoe horned in another, it would have been well attended as well. The total dollars were down this year for the first time since I can remember. Blame it on any number of things. Numerous quality items crossed the auction block. Some had high starting prices and did not

make minimum. Others reached prices which even impressed the seller! The banquet and entertainment on Saturday evening was a show stopper...well not literally, because the show went on. Generic Radio Workshop performed an awesome presentation from the Shadow. Larry Groebe and the rest of the cast are professionals from the word go. Sound effects, period microphones, and original scripts all added to the realism of the performance. I wanted to close my eyes and visualize the program, but doing so would have meant I would



have missed Larry's directing skills and queues. That was a show within a show. Your directors are already beginning to formulate plans for the 2007 convention.

Until next time, good hunting.

Photos are from the 2006 Convention

Early phonograph with a very nice morning glory horn.





An exceptional Firestone radio.

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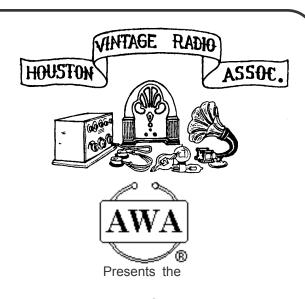
More photos of items that were auctioned at the 2006 Convention. As you can see, there were exceptional radios and televisions at the auction.











28th Annual Convention February 2-4, 2007

Houston Marriott North at Greenspoint Houston, Texas

Convention updates, contest rules are posted on the HVRA website:

www.hvra.org

For more information contact: Jim Calbeck 713-868-2086







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2007 MONTHLY MEETING PROGRAMS

Our monthly meetings in Irving (TX) are located in Senter Park at the Senter East Building. The address is actually 228 Chamberlain St. The park is bounded by S. Shady Grove, Senter Road, S. Delaware, and Chamberlain St. Call us on the cell *tellie* if you get lost. The meetings begin at 2:00 and are preceded by a swap meet at 12:00 unless otherwise noted.

JANUARY 20

Again, we return to the subject of vacuum tubes as we close the centennial of DeForest's patent of the triode. New member, Mike McCarty, will present "How vacuum tubes work and function." Since vacuum tubes are at the "heart" of our vintage radios, a review of your knowledge of vacuum tubes should be of interest. Mike has been employed in the Telecommunication industry, but has had a life-long, special interest in electronics and radio.

FEBRUARY 17

We have all come to rely on the convenience and use of the "Handheld Calculator." It did not just appear in 1965, but took a team of Texas Instruments engineers to design, develop and build the world's first functional unit. Club member, Jerry Merryman, was a member of the team and co-inventor. Jerry worked with the likes of Nobel Prize winner, Jack Kilby during this project. For our program, Jerry will review his experiences in these exciting days leading up to the successful design and testing.

MARCH 17

Spring Auction in Grapevine. 7am- 5pm.

APRIL 21

Perhaps the most inventive scientist/engineer of all times, Thomas Edison will be honored as the subject of this month's program. The man and his inventions: Edison Part I. We will review his life in Part One- Modern Marvels; Edison Tech followed by a "show and tell" of anything Edison. Please bring your "artifacts" of collected items to share.

MAY 19

Spring "tailgate" swap meet.... starts at 7am at the Senter Building, Irving.

JUNE 16

In preparation for our July Repair session workshop, we will have a discussion of electronic restoration projects as well as tips and techniques. Members of our club will present several different approaches. New and old members should find this interesting.

JULY 21

Annual Radio and Phonograph Repair Session. Starts at 9 AM at the **Senter Building**, **Irving**.

There will not be an afternoon program. Again, his year we will offer free appraisals to the public of their vintage radios and phonographs. Please get the word out. 9am to 3pm.

AUGUST 18

Summer "tailgate" swap meet.... starts at 7am at the Senter East Building, Irving.

Programs are subject to change, contingent on scheduling conflicts.

As always, your suggestions for programs/content are welcome. If the programs do not fit your needs and you want something different, let me know. I will need volunteers in organizing other programs, so consider presenting a program yourself. Call me anytime or send me an email.

Mike Grimes

972-384-1133 (home)

972-898-7251 (cell)

eMail: k5mlg@verizon.net



Jim Sargent, Mike Grimes, and Cleo Cherryholmes discussing the items brought by members to the October meeting. Page 4 January 2007

Notes from the October 21, 2006 Meeting

Program director Mike Grimes conducted the meeting of about 25 people. Eric Kirst asked everyone that might be going to the forthcoming Christmas party to bring their "Find of the Year" radio or related item to the party, where they can tell everyone about their experience with that special "find". Past president Chevie Crandell's granddaughter was a guest at the meeting.

Mike introduced the meeting topic, CAPACITORS, and discussed the issues of converting from different numerical designations to others, such as nanofarads to microfarads and picofarads. We have all noticed that we are seeing the nanofarad (nF) designation nowadays on new parts. It seems to have originated outside the US and has shown up on imported parts, primarily. Of course none of our antique radios use this designation on the parts themselves or in any parts list in the service information. We are all going to have to get used to it so we don't install a replacement capacitor of 1000 times too much or too little capacitance.

Here are some humorous conversion factors:

- 1 kilomillimegamicrofarad = 1 farad
- 1 million phones = 1 megaphone
- 1,000,000,000,000 microphones = 1 megaphone

One way to be sure about a capacitor's value is to use a meter designed to measure capacitance directly. (Notably, the readout ranges are shown in nanofarads on some meters). Some of the electronic multi-meters have the capacitance function built in, and they are available from Fluke Instruments and Radio Shack, for example. The old capacitance checkers (Heath Company and others) can also measure the capacitance values.

Cleo Cherryholmes presented an excellent discussion of capacitors and their various applications within a radio. He defined basically four applications:

1. Filtering – these are sometimes in a can, but are also found in cardboard boxes. Before the electrolytic condenser was developed, these were large paper/foil units, usually in steel cans filled with tar. They had capacitance values of 1 to 3 microfarads. Because they had such low capacitance, the radios they were in needed large, heavy inductors (chokes) to provide adequate filtering. This is why early AC sets are so heavy! When electrolytic capacitors came out, they were usually 8 microfarads, and

- a small choke or speaker field were all that was needed for the remaining filtering. Later, 40 microfarad capacitors eliminated the need for any choke.
- Coupling- these are almost always paper/foil, in old radios or (rarely) mica. These are used to block DC voltages from being passed on to another circuit element. The most prevalent one prevents a bias voltage on the audio output tube, e.g. 43, 6F6, 50L6, from the first-audio stage plate voltage.
- 3. Bypass- these are paper/foil in the old radios and ceramic disc or sometimes mica in later ones. They eliminate unwanted RF or audio frequency signals from radio circuits. The automatic volume control circuit (AVC) uses them to prevent oscillations and control the speed of reaction to changes in received signal strength. Others make sure that feedback does not cause trouble in the screen-grid circuits of intermediate frequency (IF) and radio frequency (RF) amplifying stages.
- Tuning these are the intermeshing plate capacitors of many different physical configurations. The plates move when you tune to different stations. Others affecting tuning can be fixed-mica or adjustable mica trimmer capacitors.

There are basically four problems with capacitors – shorts, opens, changed values and leakage. Shorts and opens almost always cause a serious performance problem. Changed values and leakage may leave the radio playing poorly or prone to fail entirely if played for awhile.

Leakage and shorts in the power supply filtering circuits can cause hum, or cause poor performance due to lowered supply voltages. There is also the risk of burning out or shortening the life of tubes or power transformers if leaky filter capacitors are not replaced.

The coupling capacitor to the audio output tube is probably the most important paper/foil capacitor in a radio. If it leaks, the voltage on the grid of the output tube will be raised, causing the tube to draw more current, reduce its life, or even to distort the sound of the radio because of too much current through the output transformer. Mica capacitors rarely leak, but one thing to be aware of is that there is a misleading trade name "Mica-Mold" that physically looks like the usual mica capacitor, but it's really paper/foil (and they leak). Modern metalized film capacitors have unlimited life and essentially zero leakage.

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A little leakage of the screen voltage supply paper bypass capacitors can be allowed without hurting performance. But because the circuits for AVC have very high resistance values, leakage can upset the performance of the radio and cause overloading for large received signal strengths. Open screen bypass caps can result in spurious oscillations that manifest themselves as squealing sounds coming from the speaker.

The best philosophy is to replace all of the electrolytic and paper capacitors as a routine measure. Whether or not you do may depend on your plans for the radio – to pass it on to another collector or keep it in your personal collection.

Chevie Crandell discussed a very unusual capacitor checker which uses a 20 MHz signal and the transmission-line properties of the test leads to find out if a capacitor is open or closed – even while it's installed in a circuit with both leads still connected.

Jon Butz-Fiscina suggested methods for saving tubes that have lost their top cap connection. Sometimes, with luck, by chipping away a little glass around the wire, enough can be exposed to allow re-soldering the cap (or one from a dud tube). Then the cap can be glued on with General Cement product GC-10-302. This can be obtained from Radio Daze, Unicorn Electronics or www.greenbrookelectronics.com (It seems their website is under construction right now). You may want to wrap the tube in a rag so that if it breaks, you won't get cut by the implosion. Stuffing the rag and tube in an empty food can may also work.

(The author is working on replicating the same material used by the tube and lamp manufactures for attaching the caps and bases – will advise)

Bill McKeown

Pictures from the 2006 Convention











This is a display of miniature tubes that Cleo Cherryholmes brought for his Tech Session. Cleo was part of the original team that was responsible for the development of these tiny tubes.





This unusual contest entry is a military SCR511 complete with fully equipped mannequin. It is the property of Tom Burgess. Page 6 SoundWaves

Radio/Phonograph Era in Grapevine, Texas

by George Potter

In 1921, Andrew Wiley Willhoite and a friend Bart H. Starr, partnered together and started **Willhoite's Garage**, located at 432 Main Street in Grapevine, Texas (see photo #1 & 2).

Andrew envisioned a one-stop service for the community. He also was a major oil distributor and as such was able to sell gasoline, oil, kerosene and had a Goodyear Tire dealership to boot.

Henry Q. Willingham joined the Garage partnership with Andrew and Bart in 1928, When Texas Highway 121 construction commenced; it was Willhoite's Garage that was contracted to furnish all the fuel and oil for construction and road machinery. Several years later, when Highway 114 construction started, it was again Willhoite's Garage who would step up to supply oil and fuel for the massive project. The construction stretched from the Dallas County line to Rhome, Texas. In Roanoke, a gas service station was set up for this project, with fueling having to be completed for all machinery by 4 am

The garage did just about anything, from auto repairs, welding, battery re-building, tires, automobile parts and accessories. Now with Grapevine being a farm community and very rural at the time, saw farm families with no electricity. So Andrew Willhoite became an Atwater Kent Radio dealer and was convinced to sell the Vulcan wind-driven "Wind Charger" (see photo #3), to families in order for them to enjoy and utilize either a 6 volt or 32 volt lighting system for their homes. The Garage stated that "they could install the system in an afternoon". If the farm had a windmill and most did, they could strap the Vulcan Wind charger to the windmill tower, barn or garage. The latter, required you to buy a 6 ft. tower to mount the wind charger upon. When rural Electrification came to Texas, the wind charger business went flat, but then Atwater Kent electric radios were available.

You could also purchase radio horn speakers, A-B & C batteries and most any part or tubes for repair. Andrew sold a lot of Atwater Kent metal radios to farmers and a goodly amount of ornate wood console radios to local townsfolk. His son Ted played out back of the garage in the



Photo #4 – Willhoite's today on Main Street August 2005 Photo by George Potter

wooden crates that consoles were shipped in.

The general partnership was dissolved and bought by Andrew in the mid-thirties and Ted Willhoite his son, joined his Father in the business in 1936. About that time electric gas pumps and a hydraulic lift were installed. Shortly after in 1939, the building was totally remodeled and it then became a full service modern gas station. The Goodyear tire dealership must have been profitable, as it continued on for 55 years.

Andrew died in 1958 and Ted continued the business there until December 24th of 1975. The building and gas pumps stayed in place for several years when the present owner, remodeled the building into what is today Willhoite's Restaurant on Main Street (see photo #4).

Today, Willhoite's is no longer a Garage for auto repairs, but a gathering place for Harley-Davison fans, who now make it a regular stop for get together and dinner with both indoor and outdoor dining.

Main Street in Grapevine is busy now like it was back in 1921. If you happen to be in the area in October attend their Wine festival.

Additional notes of interest: Prior to 1921, Mr. A.F. Woods, a local Jeweler/Optician, whose business was just down the street from Willhoite's Garage, sold the US Everlasting non-breakable wax cylinders and US Combination phonographs as a side business. His 1913 Grapevine newspaper ad read: 2&4 minute reproducers, 2- minute cylinders- 35 cents and 4- minute cylinders- 50 cents (see photo #5). You could purchase phonographs anywhere from \$25-\$200, with or without a horn! Grapevine was becoming a regular cultural Metropolis!



Photos #1 & 2 – Willhoite's Garage on Main Street in 1921



Photo #3 – Vulcan wind-driven battery charger advertisement approx. 1932



Photo #5 – A.F. Woods, Jeweler/ Optician advertisement for phonographs, horns & cylinders, clocks & watches

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Pictures from the 2006 Banquet











Baymont Inn

301 Capitol St Grapevine, TX 76051 (817) 329-9300 baymontinns.com

Super 8

250 E Hwy 114, Grapevine, TX (817) 329-7222

VRPS SPRING AUCTION 2007 MARCH 17, 2007 GRAPEVINE CONVENTION CENTER 1209 S. MAIN STREET GRAPEVINE, TEXAS 7AM --5 PM

Don't forget the spring auction. Make your hotel reservations now. The phone numbers for reservations are listed to the left, so don't delay, call today.

CHRISTMAS PARTY 2006

By Eric Kirst

About 40 VRPS members and their guests attended the annual Christmas Party on Saturday, December 2. The customary holiday feast featured a variety of specialty dishes (including Roast Beast!) and desserts spread out on three long tables. It was also an exceedingly lucky night for all attendees, as everyone won a door prize. The Find of the Year presentation invited members to bring their most memorable find of the year and share the story of its acquisition and restoration with the group. More than a dozen members participated and included Cleo Cherryholmes, who rescued a Philco Butterfly radio from a dumpster and restored it to like



new condition; George Potter, who found two unusual children's picture records for a song; Randy James, who introduced Bandy-a 1930's RCA Radiotron advertising doll and Mike Grimes, who brought photos of his 400 square-foot radio work shop that includes comfortable chairs. Rick Wilkins brought a pristine Victor V phonograph with an oak music master horn which provided Christmas music by Crooner Wayne King.

A great evening was enjoyed by all who attended!!





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