



The Oscillator



"All the Electrons that are Fit to Flow . . . "

The Official Newsletter of the DVHRC

September 2011

Kutztown Radio Show XXV September 16-17, 2011 The DVHRC's 25th Radio Show!

Volunteers needed to man the DVHRC table and help at the auction and Buy-it-Now tables.

Kutztown XXV Raffle Radio Secret

Back in June, Dave Dean brought me a radio that was destined to be the raffle radio for the Kutztown Fall Radio Show. Rather than re-



finish just the cabinet, I was requested to also restore the chassis. I thought, "How 'difficult' could an early 1930's five tube Philco set be?"

When I served in the Army Security

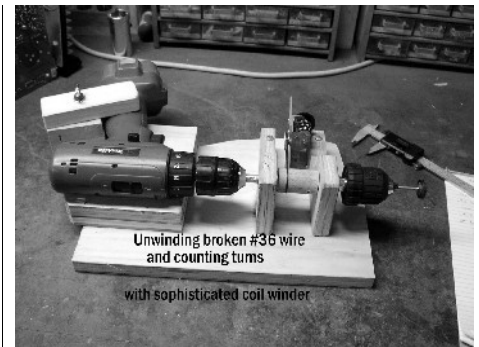
Agency (ASA) in the early 1950's, my MOS was 0648, Radio Repairman, an obvious qualification to refurbish this simple set. Yeah, right!!

After I completed some other tasks, I downloaded a schematic for a Philco Model 52 and discovered that it was one of the first super-heterodyne sets made in 1931.

That should have been a warning sign but I didn't recognize it and proceeded to blow out the dust, oil the tuning mechanism and replace the filter capacitors.

When I slowly powered up the set, there was no response from the antenna terminal but a good response from the mixer grid cap. Bummer!! Some voltage and resistance measurements suggested that the antenna winding of the RF transformer was open. Double Bummer!

It was a small winding on the outside of the transformer secondary winding, and using my "sophisticated" home brew, Makita powered coil winder, I removed the 32 turns of the faulty antenna winding.



Clear tape and cement held the fine number 36 wire in place as the coil was rewound. The set played quite nicely with the repaired transformer in place. Hooray!!

A week or two later I decided to check the performance of the raffle radio. When I turned it on, there was no sound output. It wouldn't even pick up KYW, which resulted in some bad words of output from me!!

Again I removed the knobs and mounting bolts and pulled the chassis out of the cabinet. Resistance checks pointed to an open IF transformer grid winding, which was confirmed after I removed the 175 kHz transformer. Triple Bummer!!



**Delaware Valley Historic
Radio Club
PO Box 5053
New Britain, PA 18901
www.dvhrc.info**

The Oscillator is the monthly newsletter of the Delaware Valley Historic Radio Club.

Articles on radio and television history and collecting can be submitted by the 25th of the prior month to saegers@ptd.net. Personal views, opinions and technical advice do not necessarily reflect those of members, officers or Board of Directors of the DVHRC, nor is the DVHRC responsible for any buying or selling transactions.

Dues are \$20 per year and can be paid at a meeting or mailed to the above address.

DVHRC Board of Directors

President:

Mike Koste
215-646-6488
gokmike@gmail.com

Vice-President:

Dave Dean
610-933-0330
dw.dean@verizon.net

Secretary/Treasurer:

Dave Snellman
267-354-1395
dsnellman@comcast.net

At-Large members:

Dave Abramson
610-827-9757
dabramson@phillies.com
Walt Peters
215-487-3602
wpeters143@msn.com

Trustee (Past President):

Stan Saeger
610-509-7382
saegers@ptd.net

I put out a call for help from our DVHRC club members, stating that I needed an IF can only about 1 and 1/4 inch in diameter that operated at 175 kHz. I feel privileged to have access to the impressive collection of skills and experience of our club members.

However, in this case, my request apparently was quite unique and responses generally came back saying, "Sorry, I don't have that kind of transformer."

After the search of his large collection of "pre-owned" radios, Pete Graves said that he did not find one of that type and it was quite rare. I then realized that if the Raffle Radio were going to be ready for the fall show, I would have to repair it.

I took down my sophisticated coil winder again. The faulty IF coil was fitted onto a mandrel made from a threaded rod with shaped rubber stoppers and gripped in the coil winder chuck. I proceeded to unwind the #36 wire.

At about 120 turns the wire was broken, prompting me to think that was the failure condition. At 747 turns there was another break in the wire. Hmm. There is probably some significance to this, but what?

I continued the unwinding process as a nest of wire built up in the wastebasket and came to the end at 1010 turns. I fabricated a bobbin from a 1/2 inch dowel and thin plastic end plates. A thin, flexible lead wire was soldered to the beginning of the #36 core wire and the rewinding commenced.

Wind, wind, wind until the counter registered 1010 turns. The two coils were cemented together and lead wires from both of the coils were soldered to the large end cap lugs.

The completed IF assembly was mounted into the chassis and when I powered up the set, I was rewarded with hearing several stations. When I aligned the new coil, I noted that the trim capacitor screw had to be turned almost tight to achieve resonance. I empirically determined that a 27 nanofarad capacitor (called mickey mikes in the old days) provided just enough extra capacity to allow the trim cap to reach resonance at a setting near the center of its adjustment.

The radio now had good sensitivity and good sound, so it was carefully mounted into the cabinet again. It continued to play well during several checks and was taken to the club meeting where a test verified good operation.

The radio and its related IF can story were presented at the August club meeting.

The ever inquisitive Pete had a theory on the cause of the double coil failures. Noting that the faulty coil was situated just under the end plate with the large solder lugs, he suggested that "sloppy" soldering on the end plate may have allowed flux to drip on the winding. After many years, the flux dissolved the fine wire and caused the opens.

We concluded that the coil was probably assembled on a Monday, a manufacturing day known for assembly errors because some of the workers were hung over from a "social" weekend. We called it a "Monday" coil.

The restored Philco 52 is to be offered as the raffle first prize at the Kutztown XXV Antique Radio Show. It is my intention that the "Monday coil" feature of the set not be announced during the show. Let it be a secret known only by the radio.

- Submitted by Lowell Schultz

Industrial Designers with ties to Radio

In July, the U.S. Postal Service introduced a new sheet of stamps honoring 12 of the nation's most important and influential industrial designers.



The designers who are honored on individual stamps include Peter Müller-Munk, Frederick Hurten Rhead, Raymond Loewy, Donald Deskey, Walter Dorwin Teague, Henry Dreyfuss, Norman Bel Geddes, Dave Chapman, Greta von Nessen, Eliot Noyes, Russel Wright and Gilbert Rohde.

Industrial design emerged as a profession in the United States in the 1920s, but really took off during the Great Depression.

Faced with decreasing sales, manufacturers turned to industrial designers to give their products a modern look that would appeal to consumers. Characterized by horizontal lines and rounded shapes, the new, streamlined looks differed completely from the decorative extravagance of the 1920s. The designs evoked a sense of speed and efficiency and projected the image of progress and affluence the public desired.

Each of the 12 stamps includes the

name of the designer and a color picture of an item designed by that person. The item pictured for designer Norman Bel Geddes is the famous Emerson model 400 "Patriot" catalin radio from 1940.

In his career, Bel Geddes also did some work for Philco, designing the Model 112 Lowboy (1931) and the model 370 Chairside. However, Norman Bel Geddes is not the only designer of the 12 honored with ties to radio design.

Walter Dorwin Teague, who did extensive work with Eastman Kodak Cameras (1927-1957) and had a 60+ year relationship with Boeing, was also the designer of the famous mirrored Sparton radios.



The Bluebird (566), Sled Radios (557 & 558), the "Seven Sided" (409GL) and the super rare "Noc-turne" were all examples of Teague work.

Henry Dreyfus who is best known for his telephone designs was commissioned by RCA to design the RCA/Victor 8X-681(1949) table radio.

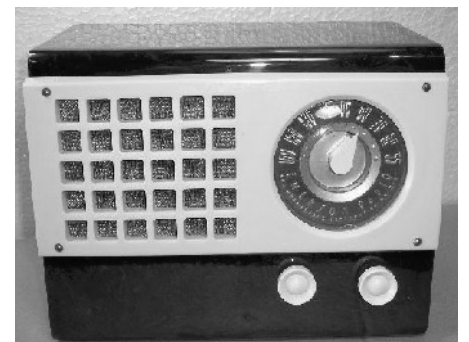
And one of the most influential designers in the series of stamps is Raymond Loewy. Loewy's prolific body of work included the Greyhound bus, the Coca-Cola bottle, the Pennsylvania Railroad GG1 and S-1 locomotives, the Lucky Strike package as well as various radios in a career that spanned 7 decades. Loewy worked with the Emerson Co. and designed numerous radios including the Emerson

561, 511, 517 and the 520.

Other Loewy designs include the highly collectible Colonial Globe Radio and the RCA/Westinghouse "Skyscraper" Grandmother clock radio. The design of the 1946 Halli-crafters SX-42, by Loewy, was the first electronic device to win an international design award from New York's Museum of Modern Art according to an article by Gerald Schneider in the June 1996 Antique Radio Classified. Loewy's most recent radio design was the Spectra Futura for Nordmende (Germany) in 1968.

These designers along with all the individuals who helped design radios during this time period have both figuratively and literally helped to "shape" our collections.

Whether it is speaker & dial placement, escutcheon style, size, shape, color or materials used, someone had to be able to visualize that radio before it was ever produced. So next time you take a look at one of your high end prized pieces, or even just one of your handsome, yet (less expensive) "\$30 Radios", Take a moment to enjoy its appearance, and appreci-



ate the designers that made them look so good.

The stamps are on sale at local Post Offices, online at usps.com and through the toll-free line, 1-800 782-6724.

- Submitted by Jarret Brown

Antique Wireless Association 50th World Conference

I recently returned from the 50th AWA World Conference, held at the RIT Conference Center in West Henrietta, NY. What follows are my observations.

For the 50th AWA Conference, one might have expected fireworks along with a lot of activity. Well, for fireworks, you'll still have to come to Kutztown. For activities, there were plenty: a very good book fair, good presentations offered by presenters from around the country AND around the world, a movie night, a dance, a flea market (more on this later), a banquet, and a large auction.

The conference started on Tuesday, August 16th, with a chance to see a "work day at the AWA museum." After a pleasant drive from the hotel to the museum, you could take a tour of the AWA's current museum, located in Bloomfield, NY. This has been around for quite a while and has a small, but impressive, collection of radios and televisions along with amateur radio gear and early wireless equipment.

Both workers and docents were on hand all day. Next stop was just down the road to see the location of the "new" museum complex.

The club was fortunate enough to obtain this property, containing three buildings. One building will house the contents of former site known as the "Annex." The second building, already finished, houses the library and archives. The third one will be the new museum. This will allow for more items to be displayed. It will also be handicapped accessible, the

old museum is not. It will offer a performance area and space for "revolving" or changeable displays. The AWA is soliciting funds to make this happen. They are on an aggressive timetable as they are hoping to have the ribbon cutting during the conference in 2013.

On Wednesday, the conference opened with a series of presentations. Anders Widell, from Sweden, showed what it's like to be a radio collector in Europe. This was continued later in the afternoon with further presentations by folks for Sweden, Australia, Japan and Canada.

Wednesday evening was the pizza party and dance. Thursday, the "round the clock" flea market opened. You could make the round and see all the vendors in about an hour. (Does that count as round the clock?) Not a big flea market by a long shot. There were some unique finds offered by the vendors. For example, a Marconi receiver with a price tag of \$10,000!. An early RCA tube tester - for testing WD11's and 01A's. Designed by RCA for it's dealers, the serial number on the unit was 001! A nice Spartan television set, mirror in the lid design, working, sold for \$350. Some nice Federal sets and a nice early Silver-Marshall were all up for grabs. Very few "parts" vendors, but Bob, our capacitor dealer, was there as always.

Thursday also provided more presentations. Bart Lee, from San Francisco, did a presentation on early long and short wave activity in the Bay area. Tom Perera moderated a key and telegraph seminar. In the evening, there was an Italian buffet dinner, followed by "Moonlight Restorations, hosted by Marc Ellis. The evening ended with the showing of the movie "Pirate Radio."

Friday started with the old equipment contest check-in, followed by the judging.

The book fair continued throughout the conference. "So you want to write a book" was presented by Ivor Hughes, for folks interested in becoming authors. Eric Wenaas showed a number of tricks you can use with the computer program PhotoShop during his presentation - "Photographing Antique Radios."

After lunch James Oneill gave a presentation on Granville Klink's collection of broadcast memorabilia from his involvement in early television. Viewing of the old equipment contest was on Friday also.

Friday night was the conference banquet followed by the preview of Saturday's auction.

Saturday was the auction. Richard Estes was the auctioneer. He went through 400-plus items. The auction started at 7 AM and was over by 1 PM. The early start was due to a wedding being held later in the day at the hotel. Some highlights of the auction: a Marconi detector - \$10,000, an Atwater Kent clock radio \$500, many lots went unsold or sold at bargain prices. Consoles prices were like the old days at Kutztown, many bring less than \$10.

Well, that 's it for AWA 50th. Was it worth the trip and expense? In my opinion, yes. Not for the flea market, not for the auction, not even for the banquet - but for the comradeship one gets to share with fellow collectors from around the world.

-Submitted by Dave Snellman

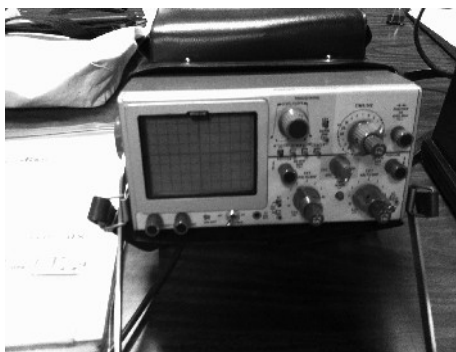
August Meeting Notes

The August meeting of the DVHRC was held on Tuesday, August 9th at the Telford Community Center. Attendance was light, probably due to vacation season and the weather.

For the business part of the meeting, we discussed the September meet in Kutztown. This being our 25th Kutztown event, we wanted to commemorate the event with a special premium for vendors. A mug, suitable for your favorite hot or cold beverage, was chosen for the occasion. In addition, a laminated reference sheet will be available. The sheet will contain resistor color codes, pilot lamp data, as well as a lot more information.

The treasurer's report showed the club with a healthy balance in the checking account with no outstanding obligations.

We also had an opportunity to preview the "raffle radio" offered for September's meet. It will be a 1931 Philco model 52. The set was restored electronically and cosmetically by our own Lowell Schultz. Lowell was on hand to explain the trials and tribulations of the project. In addition, there will be a second prize, a Tektronix model 326 oscilloscope to some lucky winner.



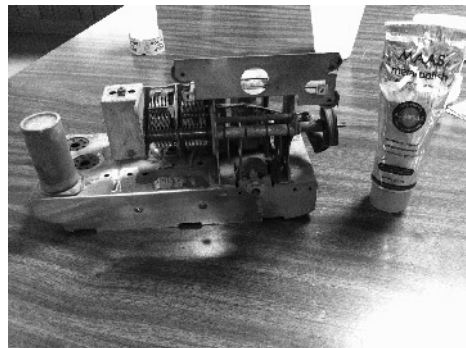
In the "Show and Tell" section ,we

had a couple of items. First, the New Jersey Antique Radio Club will be hosting a large electronics auction at InfoAge on September 10, 2011 in the "A" section of the building housing their museum.

Richard Estes, the notes radio auctioneer will be in charge of the auction. A catalog of the items offered is available online at www.njarc.org.

Mike Koste showed a recent book, entitled Philadelphia Radio 1920-1990.

We had an interesting demonstration of a product called MAAZ, a metal cleaner and polish. It works great on most metal radio chassis.



The theme of August was radio collectibles (other than radios themselves.) Members brought out quite a variety of unique items. Walt Peters started out with photos and books, and program guides from his collection.



Mike Koste brought a wide variety of knick-knacks: coin banks in the shape of radios - wooden and glass, music boxes, refrigerator magnets, pill boxes, and a German pencil

sharpener.

Pete Grave showed off a cookie jar shaped like a radio. (Jan uses it for doggy treats.) He also showed off a German Shepard shaped door stop with the label "World Radio" in the base.

Pete Grave showed a wooden radio that wasn't a radio; rather, it was a music box that could hold several glasses and a bottle of your favorite beverage.



Stan Saeger showed off a Tung-Sol Radio Tubes sign that hangs in his workshop. Dave Dean showed radio repair signs, labels for tubes, and a test probe set. There were many other items to round out the display.

The next meeting will take place on September 13th at 7:30 PM at the Telford Community Center. We will have volunteer sign-up sheets for the meet on the 16th and 17th. Hope to see you there.

- Submitted by Dave Snellman

The Oscillator's Cup Runneth Over

Last issue I lamented the dearth of articles submitted to the Oscillator.

What a difference a month makes. Thanks to this issue's contributors Dave Snellman, Lowell Schultz and Jaret Brown.