



The Oscillator

“ALL THE ELECTRONS THAT ARE FIT TO FLOW . . . “



The Official Newsletter of the DVHRC

Volume 17, No. 9 September 2009

DVHRC Meeting Notes and Minutes

Well it's a month before Kutztown (by the time you read this it will only be a week or two before) and there was a lot of talk about the meet. The dates for the meet are Friday and Saturday, September 18 and 19. I know some intrepid souls will be there on Thursday!

The board met prior to the August meeting to discuss details of the meet and the auction. The auction this time will have some changes. The start time is set for 1:00 PM. This time change will allow vendors more time to sell at their tables. It will be held in the "White Room" inside the Renninger's pavilion.

Only items of quality will be consigned for the auction. The usual lower quality items will be placed in the donation area, also known as "Buy It Now." This change is necessary to cut down on the amount of junk placed in the auction that either doesn't sell or ends up being hauled away because we've run out of buyers before we run out of stuff in the auction. To help defray the cost of the hall, all bidders (buyers and sellers) will be charged \$3.00 for a bid card.

The "buy it now" section will be set up in the food court area starting

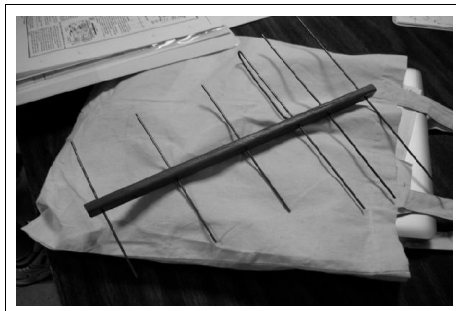
Saturday morning. It will be staffed for those wanting to buy. In addition, items to be consigned to the auction will be checked in at this site.

We have new forms (paperwork) for the auction that must be filled out for those consigning. Items will be screened before auction tickets will be given. There will be a limit to the number of items that have a reserve.

Packets of information will be available at the club table. The auction hall will open at 10:30 on Saturday.

The treasurer's report put the balance in the club's account at \$4900. A number of things will eat into that prior to Kutztown, so we are looking to make a few dollars at the meet. Any member willing to volunteer an hour (or more) to assist at the club table is welcome.

We went on to our "show and tell" section of the meeting.



Ted Sowirka showed a home made HDTV antenna he constructed. He found the plans in a recent issue of "Popular Communications."

Dave Dean showed some Simpson meters and add-on's.



Pete Grave had a Philco-Ford toy truck radio. The truck was highlighting Ford's twin I-beam suspension. In addition,



Stan Saeger showed a stack of new old stock dials for the Philco Mystery Dial he got in a box lot.

Pete had the steering control for Chevy's multi-band radio - along with the radio itself. The radio tuned 31 through 16 meter bands. An option offered by Chevrolet Car Company, Detroit, MI in 1942.



Delaware Valley Historic Radio Club

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

We welcome information relating to radio and television history and collecting. Submissions should be emailed to saegers@ptd.net by the 25th of the prior month. 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.

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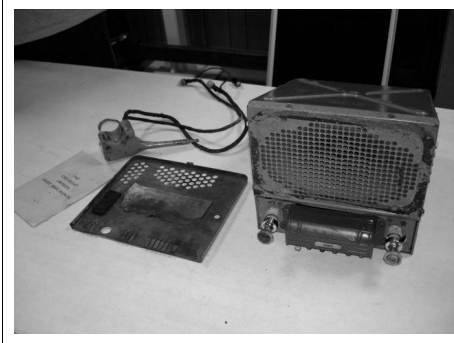
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Charles Adams told of using your cell phone's camera to test remote controls to see if they are operating. Just point the remote at your camera and put a button on it. You should see a white light on the remote itself - showing it to work.

In other news, Lowell Schultz reported there have been a number of burglaries in his neighborhood recently and reminded all of us to make certain your homes are secure when you leave.

We had a short auction followed by the second installment of the "All American Fiver" presented by Lewie Newhard. Last time we left you with a working audio amplifier section of your set. This session dealt with the Intermediate Frequency (IF) amplifier section of the set. The IF section consists of one or more resonant circuits, or tuned circuits that will provide optimum amplification of the signal at only one frequency. In an AAF set, these transformers look like square cans

Edwin Howard Armstrong invented the superheterodyne circuit during WW1. In this type of set the incoming signal (tuned by the antenna) is paired with a signal generated by the local oscillator (pentagrid converter) with a resulting signal (the difference

between the two) being fed to the IF amplifier section of the set.

Prior to this in older TRF (tuned radio frequency) sets the incoming signal had to be amplified through the entire set. With multiple stage sets each amplifier had to be tuned and not all sets could handle the wide range of frequencies involved.

In the superhet, the tuned IF amplifiers only had one frequency to deal with, so they could be made more efficient. Tuned to 455 kHz, the IF amp(s) could build the signal strength up to a level that would be usable by the audio section. Of course, the audio section had the detector to get rid of the RF and only pass audio,

That's it in a nutshell. Now comes the "nuts and volts" behind it. The IF amplifiers employ mutual inductance where the signal from primary to secondary are magnetically coupled. They have high circulating current at resonance. IF amplifiers need to be aligned in order to work effectively and efficiently, so you are going to need an RF signal generator to properly align the set.

The quality of these tuned transformers is key. Beware of KTRAN transformers with the 119 EIA on them.

Early radios may have B+ on the adjustment screw, so make certain you have non-metallic alignment tools. If not, shorting the screw to the case (can) and you lose the coil.

You can adjust (tune) these circuits to improve sensitivity. There is a difference in the quality of the IF "cans." Different bandwidths are possible and a higher "Q" coil can narrow the

bandwidth. Your looking for the optimum passband, determined by the coil.

Bandwidth will be measured at the 'half-power' or .707 point of the signal. Ideally you are looking to pass a 10 kHz signal, centered at 455 kHz through the IF section of the radio. The IF amplifiers will take 1 microvolt signal and amplify it to about 10,000 microvolts before passing it on the audio section.

There is another feature in the AAF - automatic volume control. This makes all the stations across the dial come in at the same volume. More on that next time.

That's it in a nutshell minus math and too much theory. Look forward to the next installment.

The next club meeting will be September 8 at Telford.

– *Dave Snellman*

Coming later this year

The club has decided to order colored golf shirts with the DVHRC logo on the front breast pocket area. These will be first-quality shirts with the logo embroidered, not silk-screened.

Cost will be about \$30 and orders will be taken starting at the October meeting.

The club is also re-stocking on the blue logo t-shirts.

Don't forget . . .

Kutztown Radio Show

September 18 and 19



Looking back – from the August 1996 Oscillator . . .

NOTES FROM AROUND THE DVHRC

Mike Koste

The DVHRC ventured into virgin territory at our June meeting, as our newest member Hugh Tague showed up with a truckload of items for our first-ever Tailgate Auction. Radio-related miscellanea ranged from "restorable" to parts sets, to electronic whatsits, paper, tubes, tube caddies, and empty cabinets yearning for a chassis. Thanks to promotion in your hometown *Oscillator*, over fifty members were in attendance and auctioneer Pete Grave liquidated the contents of Hugh's truck in short order. Since Hugh is relatively new to the hobby, he was surprised to see how merchandise he considered "junk" went for high bids, while seemingly desirable items sold at bargain prices. Needless to say, Tague was impressed, and the bidders in attendance were more than happy with the treasures they took home. (Incidentally, Hugh is looking for some premium console radios to start his collection, so if you're in the market to thin out . . .)

Our discussion and review of the Downingtown event at the June meeting suggested that, as an organization, we'd be wise to schedule our next swapmeet elsewhere. President Bill Overbeck is in the process of investigating a church in the Havertown area, convenient to the Blue Route, which may suit our purposes. Finally, just a friendly reminder: join us again on August 13th!

OVERBECK COLLECTION FEATURED IN ENQUIRER

Bill Overbeck's collection got featured in the *Philadelphia Enquirer* for Sunday, Aug. 4, in a half-page photo layout "Old Radios Are Music to His Ears." A nice plug for radio collecting and DVHRC. The main photo shows Bill smiling boyishly next to a Nipper statuette and an AK horn. And, as with the experience of other collectors, a goodly volume of calls came in from the public, offering radios for sale. Bill reports having been, so far, to Abingdon, Drexel Hill, Norristown, and Springfield to pick stuff up . . . including a couple of nice Philco cathedrals. (Thanks to Bob Thomas, W3QZO, for a copy of the story.)