



# The Oscillator

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



## THE OFFICIAL NEWSLETTER OF THE DVHRC

**Club News** Kutztown 51 was discussed in detail at the June 2025 meeting. Cool and rainy weather did not dampen the enthusiasm of the majority and sales were strong as we entered a new era of a two-day format. The club listened to several complaints in person and on social media and the club addressed concerns in great depth. The overall feeling is, as we are bound to the new schedule by our hosts, we will endeavor to make things as good as possible for future events. We discussed the need for a better PA system delivering the club table messages and that will be done in September. The raffle radio, a nice flawless lime-green Crossley D25 dashboard clock radio was won by Dr. Dan Schwartzman.



The Friday night auction was a success for which we thank auctioneers John and Darren and many willing buyers!



**Above:** Darren Hoffman auctions off nice Admiral Bakelite TV. **Below:** Rick Mills of the Kutztown Radio Store shows a youngster some pointers on vintage electronics. It is DVHRC's hope that more hours on Saturday will draw new members and Renningers shoppers into our world as we move forward!



(Pictures above courtesy of John Hagman).  
**Please see John Hagman's photo essay of KTZ51 at:**

<https://john-h.smugmug.com/Kutztown-Meet-Spring-2025-wholl-stop-the-rain>

**Also, see RadioWild's YT Video:**

<https://www.youtube.com/watch?v=StqrC2YsZn0>

## SUMMER 2025

The quality of the items placed in Buy It Now continue to surprise with better items showing up early and often. Notice in the foreground below, a nice Zenith 755 Deluxe portable purchased by club member Dave Snellman. That's another reason why it is good to volunteer at the club table!



**Below:** It ain't over 'til it's over! Many Kutztown 51 vendors stayed longer well past 2 PM on a sunnier Saturday, especially the second pavilion, where audiophiles traded wares and shoppers milled in from the Renningers market. In the end, a remnant of unsold Buy It Now is loaded under the direction of B.I.N. Master Dave Abramson.



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

Articles on radio and television history or collecting can be submitted by the 25<sup>th</sup> of month prior to quarterly issue dates of April, July, October and January to the editor at [gdottor@yahoo.com](mailto:gdottor@yahoo.com).

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. Meetings held 2<sup>nd</sup> Tuesday of each month at Telford Community Center.

#### DVHRC Board of Directors

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## Links for Upcoming Events

It is our hope that you are able to load links (in blue) on your device directly from this format; also, much richness is provided by links within the stories that follow!

OK, this listing is late but we hope some attended MAARC Radio Activity 2025 Thurs., June 19th 6 PM through Saturday, June 21st 5 PM, Theme was "The Evolution of Cabinet Design" You still may see a sample of presentation by Brian Belanger regarding the History of Arvin at following site for a limited time: Join MAARC to access their Facebook for video recordings, and newsletters.

[https://maarc.org/wp-content/uploads/simple-file-list/Monthly\\_Mtg\\_Presentations/History-of-Arvin.pdf](https://maarc.org/wp-content/uploads/simple-file-list/Monthly_Mtg_Presentations/History-of-Arvin.pdf)

**JD Auctions Summer Radio, Hi Fi and more! Sat., July 19, 2025 8:30AM-1PM**  
Renningers Kutztown PA White Room

<https://jdauctionsllc.com/>

**NJARC Summer Tailgate Swap Meet and Ham Fest Sat., July 26, 2025 8 am to 12 pm. Vendors 7:15am. InfoAge, 2201 Marconi Road, Wall Twp, NJ 07718.**

<https://njarc.org/>

**Regional Hamfests during 2025 local to DVHRC: Valley Forge 8/10/25, RF Hill 10/19/25. Insert zip code on website:**

[https://www.arrl.org/hamfests/search/page:/Location/division\\_id:AT/model:Event](https://www.arrl.org/hamfests/search/page:/Location/division_id:AT/model:Event)

**2025 AWA Annual Conference Tues., October 7th to Sat. October 11th. Henrietta, NY. Theme – "Television"**

<https://www.antiquewireless.org/homepage/annual-conference/>

**Kutztown Antique Radio and Vintage Electronics Show LII (52) Friday, Sept. 19 through Saturday afternoon, Sept. 20, 2025. Sellers do not come on Thursday. Vendor setup starts 8 am Friday. Hours: Friday 10am-5pm, Saturday 7 am-3. Auction is Friday, 9.19.25 @ 5:30 in**

## White room, Preview at 4:30.

Where: Renninger's Farmer's Market, 740 Noble St., Kutztown, PA 19530. Antique radios, parts, and related items. Audio and Ham welcome. Tables, electric available. Dealer spaces 10' x 10' incl. table \$55, extra tables \$10. **Exhibitor reservation advised: Phone M-Th 570.385.0104; F-S 610.683.6848.** See links at: <https://www.dvhrc.com/>

## Kutztown FAQ listing

[https://www.dvhrc.com/Kutztown\\_101.pdf](https://www.dvhrc.com/Kutztown_101.pdf)

## Remaining Club Meetings

Here are the remaining themes for our Telford meetings. Access to these can also be found on our web page- **Events tab**. If you would like to make a presentation, please let us know as images or associated documents from your flash drives can be projected on our big screen! The club would love to hear about your adventures in the vintage radio hobby.

[Jul 8-](#) General Show and Tell.

[Aug TBD- Saturday](#) - Tailgate Swap Meet under the pavilion at Renninger's, Kutztown **10AM**.

[September-](#) No Monthly Meeting.

[Sep 19 & 20-](#) Kutztown LII 52<sup>nd</sup> Antique Radio & Vintage Audio Show!

[Oct 14-](#) Setchell-Carlson Presentation.

[Nov 11-](#) Adding a Bluetooth.

[Dec 9-](#) Christmas Party at the Copperhead Grille in Center Valley just north of Coopersburg, PA. The official address is 5737 Route 378, Bethlehem, PA 18015.

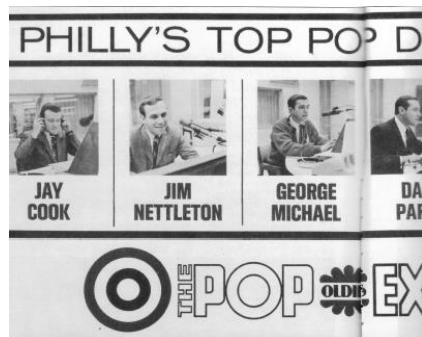


## Addendum to Meeting

**Feb.11, 2025** The theme had been radio station items as (see Spring 2025 Newsletter). Adding to that, here's the contribution back on that Zoomed meeting by Terry Skelton. Terry first discussed his experience with WFIL as an engineer for some of the Boss Jocks at Famous 56 in Philly. Terry worked as a unionized radio engineer but later left as the job was repetitive and unchallenging to pursue jobs in broadcast management. This was the time of the Prize Patrol and big revenue for Top 40 stations as the ultimate promoters of rock and pop hits - they were Boss!

<https://www.famous56.com/patrol/index.htm>

Terry would operate the equipment used to play all scheduled music, ads and content under the direction of the "Boss Jock" who sat in an isolated semi-circular studio and interacted with his audience. At the time of Terry's employment (late 60's), WFIL's original Pop Explosion, begun in 1966, updated with the times, had dethroned WIBG as Philly's top pop station.



Sure the boss jocks were all guys but in the early 70's; WFIL would have a group of cheerleaders known as the boss chicks!



It would be a few years and FM dominance until women got their due as radio personalities. The prize patrol would often pull up behind a car and if you were listening and waved you might win a car or \$1,000 but usually something less spectacular per the prize patrol audio files on website. In Terry's 1 ½ year tenure he and his fellow engineers were presented with WFIL transistor radios by Jay Cook, then PM, as thanks for a

job well done. Terry still has his as shown on our Feb.Zoom session which were also given out by the Prize Patrol!



## Terry's Mike .....

Terry also showed us a great example of an adjustable pattern microphone, a Western Electric 639A, designed by Bell Labs and initially manufactured by W.E. from 1938- 1949.



W.E. then sold rights to Altec and after that, manufacturing was taken over by Altec and the 369 series was produced into the 1960's. This was one of, if not the first mic to use an omni-directional dynamic capsule in conjunction with a bi-directional ribbon element to achieve three different patterns: omni, bidirectional and cardioid by electronically combining them. The later models 369B had three additional pattern modifications to the cardioid pattern. The sound quality of the mic was excellent and it found use in radio, recording

studios, motion pictures and public address applications. It was used everywhere. It is still used today in recording work. Terry said "I was a teenager on the American Forces Network in Frankfurt Germany as shown in the photo. Our Frankfurt American High School had a weekly radio program called Teen Thirty which was heard all over Europe and into England".

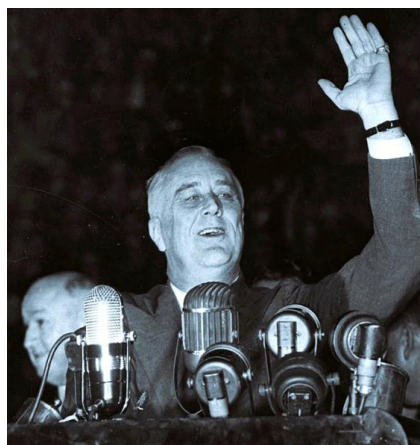
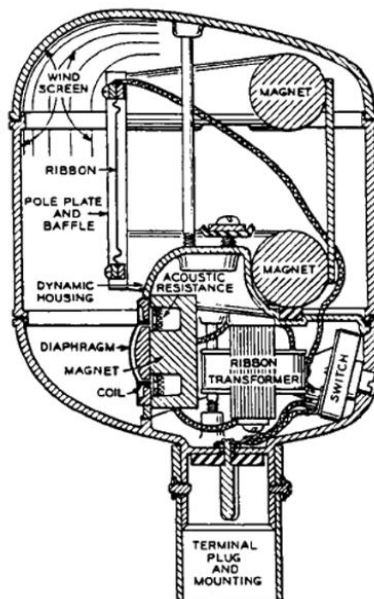


This is a very heavy mic and the bendable metal cage combined with clumsy mounting techniques usually shows signs of being dropped. The iconic shape gave it the nickname "the birdcage." Lots of photos, details and sound samples can be found on the wonderful Coutant Microphone web site.

<https://www.coutant.org/altec639/index.html>

Response was reported to be 40 to 10K hertz but may be higher. It employs a dynamic element and a ribbon element suspended between 2 large horseshoe magnets. It also has a tricky terminal plug (3-pin

Coles British format) along with a tricky mechanism on its base for connection. This method of attachment is not well documented, requiring carefully depressing a metal spring-ring to release the plug assembly.



**Above:** A Western Electric 639 records 1940 reelection and is closest to FDR.

**Below:** Buddy Holly with 639A and Neumann U47 microphones at Norman Petty's studio in Clovis, New Mexico. Broadcasters also liked the "bright" reproduction of lower (bass) tones. The microphones were still in use in the Denver Co. area as late as the 1980s. They are still in high demand today, sometimes selling for thousands of dollars



The 639 competed against the RCA 77 series, initiated in 1932, although the RCA did not have omni-directional capabilities, until later via mechanical metallic vents. History of Western Electric & Altec can be found here:

<https://www.thebdr.net/the-western-birdcage-revolutionizes-audio/>

### Meeting Mar.11, 2025

The theme of this night was *Kit Radios/ Toy Radios*. Most of these units appeared in the colorful catalogs mailed to our homes and would become our focus to acquire. Some were serious kits with educational aspects; others, attractive to the eye and some good performers.



**Above:** Mark Hilliard shows his Heathkit Jr Workshop "35", Model JK-18. This kit enabled students to build 35 projects and learn electronics theory. Mark's brother bought one for him and then Mark passed along to his nephew. Mark reacquired this one and assembled the 4-transistor radio project which



receives local stations. **Below:** Close-up of board components and patch wires.



<https://jaoswald.blogspot.com/2011/12/restoring-heathkit-jr-35.html>

<https://www.nostalgickitscentral.com/heath/heathkit.html>



**Above:** Dave Dean has acquired some memories of his early interest in electronics showing crystal sets. To the left is a crystal radio using surplus car radio components including 2 mica capacitors, diode and instructions. Dave is holding a Philmore set advertised in young boy's magazines and comic books.

**Below:** Dave had a reissue of the original 50's era Rocket Radio which was "brought back". This Rocket Radio, very popular in 50's and 60's was re-released in 1990's by Restoration Hardware for a new generation. No batteries required but a good long wire antenna & ground certainly helps! KYW is our reference.



**Below:** Terry Skelton showed a more robust treatment of the crystal radio, a Heathkit CR-1. Terry's first experience was a Cub Scout crystal radio using a cat whisker on which he fondly remembers listening to Milwaukee Braves games while living in Madison WI.. The CR-1 unit, well designed like most Heathkits, features 2 Hi Q tank circuits using ferrite core coils and air tuned capacitors.



<https://www.rfcafe.com/miscellany/cool-products/heathkit-cr-1-crystal-receiver-kit.htm>

<https://www.amateurradio.com/the-enigmatic-heathkit-cr-1-crystal-radio/>

**Below:** Some build replicas of the CR-1 circuit or other crystal sets can be built via various kits or parts when available.

<https://www.youtube.com/watch?v=ZqPShYoPmcs>

<https://www.youtube.com/watch?v=6Uum0XeOMbs>

<https://www.youtube.com/watch?v=UIsXNbkcHU>



**Below:** Jarret Brown also shared his experience of pulling radio waves out of thin air by assembling this newer crystal set with both of his sons at different times. They were able to make their best ground connection from the plumbing associated with the toilet supply line enabling reception of a local sports station. Without high voltage, this is a great way to introduce youngsters to the wonder of radio. It was noted that all of crystal sets require hi-impedance earpieces or headphones. Military sound powered headphones are the best and another solution is a transformer to lower impedance but with a loss of volume.

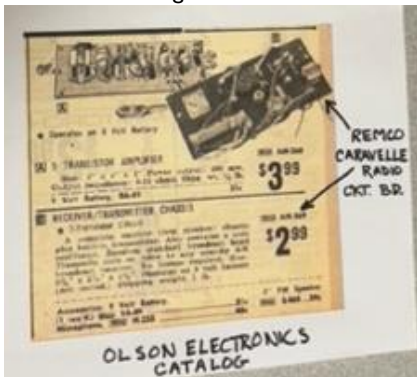




**Below:** Al Simmons also purchased a piece from his childhood adventures with radio- a 60's Remco Caravelle. Al acquired this at an earlier JD auction held at Kutztown and used some elbow grease to clean off the nicotine revealing a complete un-cracked unit including original box. Remco of Newark, NJ came out with a series of science and electro-mechanical toys. Formed by an engineer and his cousin, an accountant, Remco began manufacturing these toys in 1954.



They advertised their units as being radios, transmitters and walkie-talkies when in reality most were just carbon mics connected to speakers by wire. This unit, introduced in 1962 for \$20 (over \$200 in 2025 \$) included a 2 transistor receiver and 1 transistor modulated oscillator for AM "broadcasting". Adherence to FCC part 15 was strongly encouraged via large label on the rear. Most of what is inside is air as the circuit board is only 3 x 5". After discontinued, Olson, in 1969, sold these surplus circuit boards via catalog.



**Below:** Both Al and Dave Snellman brought in the ultimate eye candy, Knight-Kit Star Roamer short wave receiver in its handsome cabinet and aqua-green banded slide rule dial. Circuit was AA5 including selenium rectifier covering 200kc to 30 mc, without RF amp, true BFO and features on better sets. However, the audio preamp tube is a dual triode 12AX7 and you could use the sensitivity control to oscillate enabling a BFO effect for code and SSB reception although with little stability. This 5 band radio competed with the Heathkit GR 64 and other kits.

<https://people.ohio.edu/posr/bapix/HLegacy.htm>



**Above:** These catalogs, mailed to our homes, especially when in color, were studied for hours reinforcing our need to acquire such units. You could add \$10 and get the "Star Roamer Outfit" including headphones, 12" Replogle Globe of the world, long wire antenna kit, along with a 33 RPM recording "Story of the World" narrated by Lowell Thomas!

[https://www.abetterpage.com/SW/sw\\_rcvrs\\_StarRoamer.html](https://www.abetterpage.com/SW/sw_rcvrs_StarRoamer.html)

<https://people.ohio.edu/posr/bapix/StarRmr.htm>

**Below:** Greg Dottor showed a Heathkit XR-1 transistor portable from 1958. This was the first in series which also included, XR-2 (1960) and GR-24 (1965). These sets featured 6 quality transistors and components. The XR-1 had a blue case and the XR-2 could be purchased in plastic or leather cabinets.



**Below:** Chassis of XR-2 featured 6 D cells, a large 4 x 6" speaker, and Texas Instrument plug in transistors. These are good players and could be assembled in less than 10 hours with well- illustrated manuals.

[https://www.radiomuseum.org/r/heath\\_a\\_m\\_portable\\_radio\\_yr\\_2p.html](https://www.radiomuseum.org/r/heath_a_m_portable_radio_yr_2p.html)

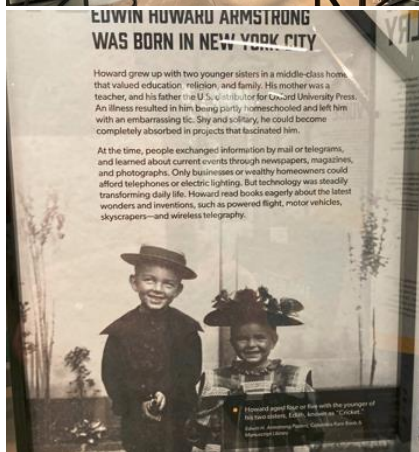




## IEEE Armstrong Exhibit Now at InfoAge!

In case you missed the excellent exhibit of Edwin Howard Armstrong at NMIH Bethlehem, it has now been moved to InfoAge in Wall Township, NJ. During the summer months, they suggest you come Wednesday or Saturday, as returning shore traffic can be a headache Sunday afternoon. As the visionary inventor of radio circuits from regeneration, to wide band FM, it discloses the tenacity and incredible understanding and discovery of radio applications to advance radio science. He teamed up with radio amateurs to build equipment proving his new methods of transmitting and receiving wide band FM.

<https://history.ieee.org/programs/ieee-global-museum/unseen-signals/>



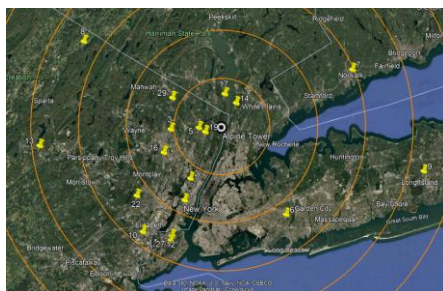
The exhibit will give you a greater perspective of Armstrong including

his early years and influences, his humility and courage and his daring to do his own “tower work”. Although enlisting help of many on the technical front, his weakness was trying to do too much of everything, especially in the legal and financial realms. Long legal proceedings financed by legacy interests lasting many years delayed FM adoption, and tragically, the realization of Armstrong’s due reward.



On June 19, 2025 the Alpine FM signal was transmitted on the original FM band on 42.8 MHz in wide band FM mode as WA2XMN commemorating 90 years of FM broadcasting. This broadcast was held in conjunction with the Society of Broadcast Engineers Chapter 15 summer picnic.

<http://www.wa2xmnr88.net/>



## AWA Shares

Each month there will be a well-researched presentation via Zoom including a question and answer session. It is free and you don’t have to be an AWA member! AWA Webinar Wednesdays will be held the third Wednesday of each month and the next one is “An introduction to the British Vintage Wireless Society” by Steve Beck. When: July 16, 2025, 08:00 PM Eastern. See the following link to register for this & future shares! <https://www.antiquewireless.org/homepage/awa-shares/>

## Baseball will never be as Immediate as on AM Radio!

kHz	station	team
660	WFAN	YANKEES
670	WSCR	CUBS
700	WLW	REDS
830	WEEU	PHILLIES
850	KOA	ROCKIES
880	WCBS	METS
1000	WMVP	WHITE SOX
1020	KDKA	PIRATES
1080	WTIC	RED SOX
1090	WBAL	ORIOLES
1100	WTAM	GUARDIANS
1120	KMOX	CARDINALS
1150	WDEL	PHILLIES
1500	WFED	NATIONALS

See summer 2023 article about the 20 second delay on FM and oft-times miserable streaming experience subjecting the listener to up to 5 minutes of ads. Place the above stations in your digital radio as a favorites group and see how many you can receive on one warm summer night!



This is Gary Owens, saying we’re outa here!!!