

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB



August 2022





Reported by Dave Sica

The Jersey Broadcaster is distributed to members via email as a PDF file. Back issues of many of our newsletters are available on the club's website: http://www.njarc.org/broadcaster/

Our July meeting featured "Show & Tell" presentations by various club members. Prof. Michael Littman showed a payphone by Gray Telephone from the predial phone days. Mike also showed a 1909 motor-generator signed by Thomas Edison's chief engineer Charles Clarke.

Dave Sica showed a set of drink coasters in a phonograph record design and a TV tray table sporting the famous Indian Head TV test pattern.

Leo Assur brought in a nice RCA radio he recently picked up at a local auction, and an ignition coil tester he built. Former NJARC President Phil Vourtsis also showed off some homebrew test equipment he had constructed over the years and a small plastic radio sporting a ten-inch speaker, while John Ruccolo's Show & Tell item was a radio built into a binocular case.

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MEETING NOTICE

Volume 28 Issue 8

The next NJARC meeting will take place on Friday, August 12th at 7:30 PM. The meeting will be held in Bowen Hall at Princeton University. Information may be found at the club's website <u>www.njarc.org</u>. The meeting topic will be "Crystal Radios" by Al Klase. The meeting will also be livestreamed on You-Tube.

Summer Swapmeet Hamfest Review

Reported by Ted Copp

The annual NJARC tailgate swapmeet was a great success with robust attendance and a nice variety of vendors for the buyers to peruse. Both modern and vintage items abounded from the everyday to the very unusual even including a radio in a ship rather than a ship in a bottle. The weather was pleasant and the trees provided pleasant shade to all vending locations. The event was listed by ARRL as an official Hamfest site and representative Bob Buss was at the site for ARRL.

With on site music free water and radio bagels in the air conditioned big room inside the onsite facilities, all had access to a place to rest and recharge before the next tour throughout the site. Many happy customers could be seen carting off new found treasures albeit acquired at a bargain price. The local newspaper the "Coast Star" visited with us and conducted interviews to feature us in the paper complete with photos. At the close of the festivities all went well with putting away the particulars that will lay in wait for our next event. I'm sure next year will be even better as our event continues to grow and be recognized by the ARRL as also in the Hamfest category.

Photos from the Swapmeet can be found on Page 8.

WOR Postcard Review

By Marsha Simkin

Among the postcards in my radio-related ephemera collection, this one of the WOR Broadcasting Station, owned at that time by the L Bamberger Co of Newark NJ, stands out. It is New Jersey connected as it mentions not one but three New Jersey locations, Newark, Kearny and Lakehurst as well as the iconic Bamberger's Department



(Continued on Page 6)

THE JERSEY BROADCASTER is the newsletter of the New Jersey Antique Radio Club (NJARC) which is dedicated preserving the history and enhancing t knowledge of radio and related disciplines. Dues are \$25 per year as meetings are held the second Friday each month at InfoAge or Princeton University. Neither the editor nor NJARC is liable for any other use of the contents of this publication other than for information.

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My First Radio

Marsha Simkin

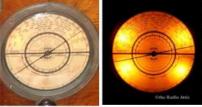
The first radio I can remember was in my parents' house. It was a Pilot, most likely model 193 circa 1936. It was a focal point in our living room when we lived in an apartment in the Bronx and later when we moved to our home in Queens.



(Click to enlarge)

The radio was housed in a sort of bookcase style cabinet. I had always thought that the bookcase cabinet and radio were a set but found out later that they were not. The cabinet was mahogany and in the Chinese Chippendale style that my mother had a preference for. It was probably about 30 inches wide, 56 inches tall and a foot deep.

It had a drawer on top, a shelf used for bric-a-brac, a shelf that housed the radio and the bottom shelf that held a complete set of the Book of Knowledge encyclopedias (de rigueur for this time). The radio had multiple bands with US station call letters on the top half of the dial and foreign city names on the lower half. I remember how different bands lit up when you turned one of the knobs.



(Click on photo to enlarge)

My parents said that they had listened to war news from Europe on it. Actually, I don't really remember listening to any particular shows on a regular basis on this radio. My first recollections of programs seem to have been on TV.

Once we moved to Queens, things changed. Although the radio still remained in the living room, we did not. Our TV, an Admiral console in a wood cabinet, was relegated to the "finished basement" of our home. Everyone now had radio in their room, for their use only. The era of the family radio with everyone gathering around it was over, at least in our house.



The radio in my room was probably this GE C437 pink clock radio or one very similar to it. Pink was the "in color" at that time. (Click to enlarge)



My parents had a very trendy Bendix model 753(?) in their room. They still favored mahogany. <u>(Click to enlarge</u>)

The only thing I remember about my brother's radio was that it was a clock radio, brown and possibly tweedy looking. Clock radios were a must in my family as my mother was a late riser and we were basically on our own for getting up and getting ready for school. The Admiral console TV with its 13" screen (if memory

(Continued on page 7)

From the President's Workbench Richard Lee



The president's workbench (AFTER cleaning!)

(<u>Click to enlarge</u>)

Greetings Fellow Enthusiasts. It has come to my attention that many club members, both new and 'vintage', don't know about or understand the finances of our club. Art Kingsley, one of the founding members of the Hudson Valley Antique Radio & Phonograph Society (HARPS), once told me "Members don't want to hear about money. They just want to hear about the hobby!" Art was also a member of the NJARC, a mentor and good friend, gone now 10 years.

Well... what's the expression, "That Being Said?" I do need to talk about Club Money! That is, club expenditures over a one-year period.

We should all know by now, how important the collection of club dues is in January! Our club **pays** for all the monthly meetings:

• Our club **pays** \$125 per meeting, \$750 per year to our 'mother ship' InfoAge Science and History Museums, for the use of our meeting room 9032A. We traditionally meet there in the months of January, March, April, May, September and November.

- Our club **pays** \$600 to Princeton University in the form of a donation for use of Bowen Hall as our meeting venue in February, June, July, August and October.
- Our club **pays** \$125 to InfoAge for each for four seasonal repair clinics held in room 9032A.
- Our club **pays** InfoAge **half** of the proceeds of our annual Summer SwapMeet HamFest Tailgate Show on the lawn next to building 9032A.
- Our club **pays** \$1,200+ annually for the maintenance and upkeep of our Radio Technology Museum and our Radio Repair Shop at InfoAge.
- Our club **pays** \$1,300+ annually for Liability Insurance for meetings and events.
- Our club **pays** \$1,105 to the Parsippany PAL (2,210 per year) in facility rental fees for each Fall and Spring HamFest SwapMeet.
- Our club **pays** \$300+ in accounting fees for filing our annual 501(c)(3) nonprofit returns with the IRS.
- Our club **pays** \$1,500+ to subsidize our members attending our December Holiday Party at Westlake Golf & Country Club.

There are other, miscellaneous costs to running the club such as brochures, newsletter, mailings etc. but I believe I've covered the majority of expenditures. Sorry to be 'talking money,' but now you know "The Rest of The Story"!

Radio Event Operating Basics Ted Copp

Many radio operators are curious about the various types of on air events and may feel somewhat intimidated by what seems to be a complex ordeal to participate. This is not the case especially with the ones that are not actually a "standard contest format" where many stations are attempting a high QSO rate for a score.

Events have some standard categories such as contests, special events (International Marconi Day and Field Day), teams out on DXpeditions, operators at parks doing the "POTA" (parks on the air), and the Boy Scouts "JOTA" (Jamboree on the Air) are very common and well known.

The easiest way to make a start is to listen in for a time and get the flavor of how each sounds. You don't need a big station or antenna to participate, but at times more is better. In the case of a POTA event, it is likely the operator has a modest set up so you with a standard antenna and your hundred watts is a "Big Gun" compared to that station and you have the clout to make that contact even if you can't hear them all that well.

Don't get discouraged if you can't get through, a variety of factors can affect the result such as propagation that day, the operator's ability to handle a pileup if there is one present. Be patient as you hone your skills and remember the person on the other side may be just as inexperienced as you are, but has rolled up their sleeves and got in the game.

Some common techniques are listening for when the operator asks for the next station and before they have finished speaking, shoot your call and the operator might catch your last two or three letters and if so fire right back. Also "Tail Ending" can work well and is done by hanging back slightly as the calls slow down and firing off your call then. Try using your full call or maybe just the last letters, trial This is a reprint of a restoration documentation originally written in 2013. Part 1, presented in last month's Broadcaster, was a background of the radio. Part 2 is a documented restoration of that radio.

Volksempfänger VE 301 Dyn Translation: People's radio, People's set



Volksempfänger VE 301 Dyn Translation: People´s radio, People´s set <u>(Click to enlarge</u>)

App. Nr. (Serial Number): 307474 Manufacture Date: 9 March, 1944

Manufactured by: Wega-Radio, Stuttgart, Germany

Purchased August 2011, AWA Conference Auction

Restoration

Upon examination, it was apparent that the previous owner had attempted restoring or repairing this radio, but it was clear that it was not completed, and that some connections were missing or incorrect. He had included a binder containing a schematic and tube data, but the schematic was for a different variation of the radio, and by a different manufacturer.

I decided to correct the wiring while replacing any defective or out of tolerance components. Capacitors

The first obvious step was to replace any faulty capacitors. The electrolytic filter caps were first. I wanted to retain as much of the original appearance as possible, so I decided to "rebuild" whatever components I could.

I used a technique that had worked for me in the past. I heated the electrolytics in a toaster oven, at about 175 degrees, until the hardened filler started to melt. (I picked up an inexpensive toaster oven in Walmart for \$19.99 and it was perfect. I modified it by disconnecting the broiler elements, so as not to burn the components.)



(Click to enlarge)

After the melted glue had cooled and hardened, I broke it up into small pieces.

I inserted the replacement capacitor into the original housing, supporting the leads with end caps removed from the original capacitor.



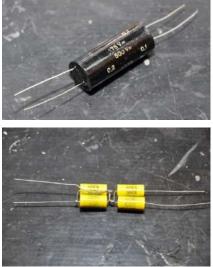
(Click to enlarge)

I then filled the void with fiberglass insulation, pushing it in about 1/4 inch from each end. The space was the filled with the powdered filler glue previously removed. A heat gun with a small nozzle was then used to melt the glue until it sealed the end of the capacitor housing, forming a smooth surface.



(Click to enlarge)

A dual section paper capacitor was repaired using 4 discrete film capacitors, 2 wired in parallel to obtain the correct value.



(Click on photos to enlarge)

Two sealed capacitors measured within tolerance, with no leakage, so they were left in place. Another capacitor was replaced by the previous owner, so I had no reference as to what the original one looked like. I left that one for future consideration.

- Resistors
 - Many resistors were found to (Continued on page 5)

Volksempfänger

(Continued from previous page)

be out of tolerance (>10%), and were replaced. Again, I did not have all replacements that resembled the original, so regular carbon resistors were used. A $28k\Omega$ resistor mounted on the speaker frame measured $78k\Omega$, and it was replaced by one that looked to be from the same vintage.



(Click to enlarge)

• Hum pot

The previous owner replaced the hum pot that was wired across the filaments. The original was a carbon pot, but he replaced it with a conventional wire wound unit, similar to a TV focus pot. However, he was also kind enough to include the original in a bag with some of the other components that he replaced. I really wanted to reinstall the original pot as was unique in that it actually had the Third Reich eagle engraved on it, but it was intermittent. By bending one of the terminals, which also functioned as an end stop, I was able to move the wiper past the end of the body and add tension to the wiper by gently bending it.



(Click to enlarge)

The wiper was then given an extra cleaning with crocus cloth. The added tension made it fully functional and I was able to re-install it.



(Click to enlarge)

Power Switch

At this point I was confident that all faulty components were replaced, so the first step was to check continuity. It was then that I discovered that the power switch was open. It was a Bakelite switch with a matching Bakelite toggle handle, so replacing it with a duplicate was impossible. As the switch body was not completely sealed, I decided to try soaking it in DeoxIT[®]. (I had only recently started using DeoxIT[®] and was unsure if simply soaking the switch would work). I soaked it over night, and in the morning it was completely operational!



(Click to enlarge)

Powering Up

I gradually brought up the voltage using a Variac[®]. There was no smoke or indication of imminent destruction, but the voltages around the output stage were all off. A quick inspection did not reveal any obvious component fault, so I continued see if the set would receive. I was getting hum from the speaker, but nothing else. So, I naturally assumed that the incorrect voltages were the cause of the radio not working.

Speaker

Using a signal tracer, I was able to hear signals all the way to the secondary of the output transformer, even at the eyelet connections on the speaker frame! A closer examination revealed that the lead from the voice coil lead was disconnected from the other side of the eyelet. Reconnecting it restored the audio, albeit weak. So how was I getting hum from the speaker with the voice coil disconnected? Apparently it was from the field coil!

• Faulty Tube

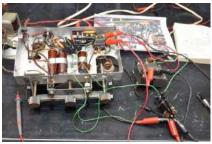
Now that the radio was working, but not operating at full potential, I was back to locating the source of the incorrect voltages. As I could find no faulty components, I started considering the output tube as the cause. The tube is a L416D pentode with a 4 volt, 1½ amp filament. This tube has been out of production since the 1940s, with no apparent equivalent. I had located one on ebay, but it was a "Buy it Now" sale for \$199, too steep to buy as an experiment.

I decided to substitute another tube, for testing, and selected a 6K6 from my assorted tube collection. Using an external transformer to power the filament, I used clip leads to connect it to the radio.

(Continued on page 6)

Volksempfänger (Continued from previous page)

The voltages came significantly closer to those indicated on the schematic and the radio played louder.



(Click to enlarge)

While the voltages were now closer to specifications, they still were not "right on". My thought is that this might be due to present day test equipment, compared to what was available, during war-time, in the 1930s.

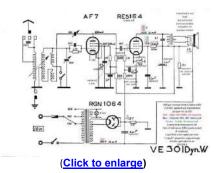
I was using a Fluke DMM with $11m\Omega$ input resistance. The lowest resistance meter I have is a cheap $1k\Omega$ / volt analog meter. Using that meter did give lower readings, so presumably 1930s contemporary meter might even be lower input resistance, resulting in lower readings.

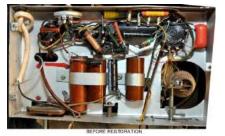
I decided to wait for another L416D to become available and my paid off when another one appeared on ebay for \$60 in a "make an offer" auction. My \$40 offer was accepted, and I received the tube, from Lithuania, about 2 months ago. The tube was sold as NOS (New Old Stock), and it is definitely an improvement. Unfortunately being a regen, the amount of signal determines the maximum audio level. As I live in an antenna restricted community (a definite crimp in my ham activities), and have only one AM station nearby, I haven't been able to see this radio at its full potential. This station comes in loud, with other stations from NYC a little weaker, using a 39 foot, stealth, long wire antenna. One impressive thing about this receiver is the dial accuracy, especially considering it's a simple regenerative circuit.

14 August, 2013



(Click to enlarge)





(Click to enlarge)



(Click to enlarge)

Bibliography

Phil's Old Radios https://bit.ly/3OQEbzs

War Relics Forum https://bit.ly/3cW818p

Powerhouse Museum, Sydney, Australia <u>https://bit.ly/3zMSYGS</u>

Bill Harris' A Website Dedicated To the Vintage Radio and Television Enthusiasts https://bit.ly/30GKif4

Wehrmacht-Awards.com Militaria Forums https://bit.ly/3POrCpu

Radiomuseum http://www.radiomuseum.org/

WOR Postcard

(Continued from page #.)

Store and WOR Radio. It also has a very interesting provenance.



(Click to enlarge)

On October 16, 1912, Bamberger's opened its flagship store at 131 Market Street in downtown Newark. The historic building once ranked among the nation's largest department stores. In 1929,(see insert) the store was expanded and covered a whole city block.

In the early 1920s, Bamberger's was selling radio receivers and wanted to put a radio station on the air to help promote receiver sales,

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WOR Postcard (Continued from page #.)

as well as for general publicity. The store applied for a license which was granted in February, 1922 with the randomly assigned call sign of WOR. The station's original city of license was Newark. The station made its debut broadcast on February 22, 1922, from a studio located on an upper floor of the store. A 250-watt De Forest transmitter was constructed on the roof.

The card is addressed to Associated Merchandising Corporation, 114 Lindenstrasse, Berlin, Germany, Attention of Mr RMC Day. The Associated Merchandising Corporation was a sort of central buying organization for department stores. At one time it represented about 30 stores. Whether Bamberger's, was part of this is unknown.

The very next year, 1929, Bamberger's did join the RH Macy Group but retained its own name and identity until the late 1980's when it became known as Macy's. WOR became an affiliate of the Mutual Broadcasting System of which Louis Bamberger was a shareholder.

This card was mailed from the Varick St station of the US Post Office in NYC on Oct 27 1928 and traveled via Graf Zeppelin, LZ 127, from Lakehurst NJ on Oct 28/29 (varying date reports) 1928 to Friedrichshafen, Germany and then onto Berlin. It has a special postmark indicating First Flight Airmail via Graf Zeppelin, United States \Leftrightarrow Germany, Oct 28 1928. This was the return leg of the first intercontinental flight of the Graf Zeppelin.

Graf Zeppelin made its first intercontinental trip leaving Friedrichshafen, Germany, its' home base, on July 11 1928. The destina-

tion was the Lakehurst Naval Air Station, Lakehurst, New Jersey, USA. On Oct 14, the zeppelin's fabric was damaged during a storm. Although the torn fabric was temporarily repaired, a distress call was sent out. When nothing else was heard from the airship, many believed it was lost. The zeppelin had to fly at reduced speed because of the damage. Its' wind-driven generator could not produce enough power to send messages. The overdue ship arrived safely at Lakehurst on Oct 15. The trip had taken 111 hours 44 minutes or well over 4 days. After repairs were made, Graf Zeppelin departed Lakehurst for Germany on October 28/29, 1928. The return flight took 71 hours and 49 minutes, or just under three days. At that time, ocean liners took twice as long to cross the Atlantic. This postcard was on that trip.

Wikipedia.com Encyclopedia.com Zippia.com Airships.net Britannia.com ZeppelinHistory.com FadedSignals.com

> My First Radio (Continued from page 2)

serves me correctly) eventually made its way to my parent's room. It was replaced in the basement with a larger screen set, a Sylvania that advertised HaloLight, a feature that appears to have been very short lived.



(Click to enlarge)



After my mother moved to Florida in the 70's, the Pilot radio found a new home at my brother's house in Pennsylvania. Alas, after two children and a klutzy Weimaraner, the radio and its attractive cabinet are no more. I doubt that it would have held that place of honor in our living room for so many years if it had not been considered, "a real piece of furniture".

Event Operating Basics (Continued from page 3)

and error here and your mileage may vary.

Let's say Saudi Arabia is on and I want to acquire my "N2KPS Fifty Nine ... ORZ" If that's what I hear him doing then I know his style. No chat, just hi and bye, no contest exchange, in and out and goes in your DXCC (100 countries worked) count if you want, or just to say you got em! In the log is in the log period. So what to do? Well I will use my "Kilo Papa Sugar" (KPS) and not my "Kilo Papa Sierra" but why? Simple, foreign operators love "Sugar" and also "Charlee" for letter C. I might hear the station ending in "Sugar" ?? Then boom I fire back quick

(Continued on page 8)

Event Operating Basics (Continued from previous page)

and what do I get? OK November 2 Kilo Papa Sugar Fifty Nine QRZ. All done. I have tried Nancy 2 Kilo but it doesn't seem as good. No matter what your ending letters are, somebody else has something similar and listening can be a guide as to what they pick up on like "X-ray" for letter X and so on.

Always remember time and patience and listening a bit will get you into any event you want to work and the more you practice, the more comfortable you will be and you'll be surprised at how fast your skills improve. Start with events like a POTA where it's more casual and the operator is more likely to exchange some information with you about the site before moving on to the next customer. Good luck and happy hunting.

--73 de N2KPS Ted

Meeting Review (Continued from page 1)

Dave Snellman brought in a pair of very unusual morale radios, and Bob Bennett talked about a strange problem he encountered with a particular voltage regulator tube. Ted Copp showed off some new-to-him vintage digital cameras, and Robert Forte showed us another type of digital camera, this one intended to be swallowed!

A recording of the meeting presentations is available on the club's YouTube channel.

Club Parts Programs

Sal Brisindi is supplying capacitors and resistors to club members at special 'member prices' as part of the club's Capacitor Program. As a member benefit, mention that you are an NJARC member to get a discount off of Sal's already low prices. Sal also has lots of other great radio restoration supplies available through his business "Sal's Capacitor Corner." Check out all the parts and goodies he has to offer on his website: www.tuberadios.com/capacitors/

The NJARC <u>Sams Photofacts</u> <u>Library</u> is available to all members.

> Swapmeet Photos (Click on photos to enlarge) Click here for more photos





Read the coverage of our Swapmeet in the Coast Star. (Click to enlarge)
Ham Fest and Swap Meet delights radio enthusiasts
New Jersey Antique Radio Club holds annual summer tailgate event at InfoAge in Wal

BY COREY ROTHAUSER THE DOAST STAR	ham radio, is the use of the radio		particular piece of radio equipment	over a profit."
WALL TOWNSHIP - The New Jersey Antique Radio Club hosted its an-	non-commercial exchange of mes- sages, wireless experimentation,	on advice and parts for restoring	ham. Some people might be look-	edly try their luck with the n online sellers on the internet.