

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB



February 2015

Volume 21 Issue 2

MEETING NOTICE

The next NJARC meeting will take place on Friday, February 13th at 7:30 PM at Princeton's Bowen Hall (70 Prospect Ave.). Directions may be found at the club's website (http://njarc.org). This month's program will include a talk by member Richard Hurff on Nikola Tesla, an auction of a few pieces of electronic test equipment donated by former NJARC member Joe Farca and a continua-





Reported by Marv Beeferman

The ON-LINE Broadcaster

The New Jersey Broadcaster is now on -line. To date, over 120 of your fellow NJARC members have subscribed, saving the club and your editor a significant amount of money and work. Interested? Send your e-mail address to mbeeferman@verizon.net. Be sure to include your full name.

Our InfoAge meeting location was turned into DX central last month in preparation for the NJARC BCB DX contest. Hopefully, you were successful in your efforts to pull in some long distance stations and produce a high-mileage log. The night's events and some of our members' entries are documented in this month's *Broadcaster*. We'll publish the final results in March.

The meeting opened with a continuation of the Harry Goehner estate auction with additional offerings scheduled for the March meeting. Sal Brisindi will also be bringing in a few pieces of test equipment donated by former NJARC member Joe Farca; the items belonged to Joe's uncle.



NJARC President Richard Lee solicits bids for an offering from the Harry Goehner estate. Club members always try to go that extra mile to add interest to our meetings.

Please note two date changes for our upcoming events. As a result of poor planning by the Parsippany PAL (they "gave away" our initial swapmeet reservation), our Spring swapmeet has been moved to March 14th. This required that our meeting at Princeton be moved to March 6th. Our Winter Repair Clinic at InfoAge is still scheduled for February 21st.

tion of the Harry Goehner estate auction.

I was recently contacted by member Joe Bentrovato who asked that I query the membership for the optional power adapter (model RK-198) for his 1955 RCA, 45 rpm record player/AM radio (model 6-BY-4). The record player is also referred to as "The Skipper." Joe says that he would be willing to pay a generous amount to anyone who would want to part with this adapter. Please contact Joe at 84 E. Munson Ave., Dover, NJ 07801. (973-361-7392, jbentrovat@msn.com).

CALL FOR DUES

With the new year comes our call for dues for 2015. Your Board feels that the \$25 annual cost (\$30 for a family membership) still remains quite a bargain in light of the club's benefits:

- Twelve issues of the NJARC Broadcaster.
- An entertaining and informative web site.
- Meetings broadcast on the web.
- Two convenient meeting locations.
- Technical presentations and contests.
- Capacitors, tubes and parts at bargain prices.

• A constantly expanding and improving radio museum.

• Meeting auctions, estate auctions,

member-only auctions, "PAL" swapmeets and our yearly InfoAge tailgate.

Repair clinics

• Our Holiday Party ... and much, much more!

Check the code next to your name on your *Broadcaster* mailing label. Honorary (H) and Lifetime (L) members are exempt from paying dues. For the rest, including family (F) memberships, dues will be collected at monthly meetings and club activities or you may send a check made out to "NJARC" to our membership secretary:

Marsha Simkin 33 Lakeland Drive Barnegat, NJ 08005

Payment via PayPal is also available at the club's website but it will cost the club a fee. Please renew early and avoid the membership cutoff date of March 31st.

Upcoming Events

February 21st: Winter Repair Clinic at InfoAge.

March 6th: Monthly meeting at Princeton; Mike Molnar discusses Edward Weston.

March 14th: Spring swapmeet at Parsippany PAL.

April 10th: Monthly meeting at InfoAge; Dave Sica and Al Klase talk on the NJARC website and Reflector.

May 1st: Monthly meeting at InfoAge; Homebrew and Basket Case Restoration Contest (tentative).

May 8-9th: Kutztown swapmeet.

June 6th: Spring Repair Clinic at InfoAge.

June 12th: Monthly meeting at Princeton; Show & Tell.

Sept. 18-19th: Kutztown swapmeet.

THE JERSEY BROADCASTER is the newsletter of the New Jersey Antique Radio Club (NJARC) which is dedicated to preserving the history and enhancing the knowledge of radio and related disciplines. Dues are \$25 per year and meetings are held the second Friday of each month at InfoAge or Princeton University.

The Editor or NJARC is not liable for any other use of the contents of this publication.

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THE STORY OF A LITTLE RED RADIO

By Ray Chase

In mid-January, an InfoAge visitor donated a small radio and some tubes to the NJARC RTM (Radio Technology Museum). Included with the donation was a typewritten description of the interesting history behind the radio, transforming what appeared to be a very modest receiver into something to be treasured for its background story.

The radio, a Majestic model LA-50, is simply designed with a single volume knob, a tuning dial and a red color that its label calls "mahogany." The manufacturer's name, the Majestic International Corp., is somewhat misleading. The Majestic (Grigsby-Grunow) company that we are all familiar with went bankrupt in 1934. The "Majestic" name was revived in 1937 but with no connection to the original company and was bought by Wilcox-Gay in 1950. In 1954, Majestic Radio and Television (under Wilcox-Gay) joined with Grundig to form Grundig-Majestic (G-M) with the Majestic International Corp. as its American sales division. The LA-50 was probably manufactured in West Germany to U.S. specifications.

With four tubes including the rectifier. this is truly a minimalist radio. The tube lineup is 35W4, 12AU6, 12AV6 and 50C5. The tuning capacitor has two gangs like any other superhet of the period but I could not see anything that looked like an IF transformer. Somewhere along the line, a "bite" was taken out of the top of the case but it had been cleanly glued back in place and was hardly noticeable. The Radiomuseum web site lists a Majestic 5LA50 produced in 1954 with a five-tube lineup of 12SA7, 12SK7, 12SQ7, 50L6 and 35Z5. Perhaps the LA-50 is the low-end cousin of the 5LA50.

The following is the story that the donor, Rik van Hemmen, kindly provided with this radio:

"The radio was sold to my father, Henk van Hemmen, in the early 1950's somewhere along Radio Row in New York City. Radio Row was a section of downtown New York where presently the World Trade Centers are located. Henk van Hemmen was a Dutch apprentice marine engineering officer sailing for the Holland America Line. Holland American Line's berth was in Hoboken. The berth, and the ship Henk sailed on, is shown in a scene in the movie *On the Waterfront*.

Henk had taken the ferry from Hoboken to downtown Manhattan to check out Radio Row. He took a liking to this two dial "Majestic" radio and realized he had exactly enough money to buy it. On an impulse, he bought it. However, when walking back to the ferry, he realized that he did not have any money for the return ferry. The ferry was the only way across the river except for the George Washington Bridge, which would have been about a 20-mile walk. Fortunately, while he was pondering his problem, he saw one of his shipmates leave the ferry and he borrowed the ferry fare from him.

Aboard the ship, he swapped out the plug to run the radio on 220 VAC. (I am not sure if he fitted a different transformer or if the transformer in the radio allowed dual voltage.)

The radio was used in Holland for a number of years and in the early seventies was the radio in our workshop. On July 1, 1976, our family moved from Holland to Monmouth County, New Jersey. Even though much better radios were available, the radio was converted back to 120 VAC service and played in the United States again.

Around 2000, my father was going to throw it out, but I decided to keep it. I have always kept it on a shelf in my workshops, but it no longer fired up. It is neat to think that this piece of equipment was purchased in New York City by a young man who adored the postwar power and technology of the United States, went to Europe, and returned with it to the United States many years later on the eve of the country's bicentennial.

Personally, I like the radio's association with the World Trade Centers and the Emergency Broadcast frequency triangles on the dial. Fortunately, the radio outplayed the cold war."

I later called Mr. van Hemmen and he told me that his father set up a very successful business in the U.S. that the son is still active in. He recalled that his father did use a small transformer to use the radio on board his ship and in Europe. It would be nice if we could obtain additional information on this "little red radio" to complete its story.



Marlon Brando of *On the Waterfront* fame with Hoboken's Holland America Line pier in the background.



The "little red radio."



Rear view of the little red radio. Note the horizontal chassis mounting.

WHAT THE HECK IS A VOISOMETER?

By Marv Beeferman

When I was at the NJARC RTM (Radio Technology Museum) at InfoAge about a month ago, laying on the back table was a component that I had never seen before that was removed from a "parts" set. The component was labelled "VOISOMETER PRODUCTS" with its "sole distributor" being Co-Operative Sales Co. of St. Louis, MO. Embossed in the wax filler at the top of the unit identi-

fied the manufacturer as the Voisometer Mfg. Co. of Kirkwood, Mo. with a price of \$5.50. The radio that it was removed from was long gone so the component's use was difficult to determine. The only clues to its purpose were the four connection terminals labelled "P", "G", "C", and "A."

PRODUC

O-OPERATIVE SALES CO

ST.LOUIS.MO

With my interest stirred, I began my

research at the AmericanRadio.Com

website and came up with advertisements from September 1923, December

1923 and November 1924. The Radio-

museum website listed two broadcast

"voisometer" radios (with information

based on McMahon's Radio Collectors

Guide) that were "manufactured" by the

Co-Operative Sales Co.; a 2-tube model for \$55 and a 3-tube model for \$75, both

with 1923/1924 dates. Unfortunately, no

other technical information was provid-

dio and *Radio* News made things a little

clearer, but not much. They offered the

voisometer as a device that "eliminates

the variomotor (note the ad's misspelling

of variometer...ed), variocoupler and

other parts" stating that "You save two

or more parts of a tube set, a saving of 70

per cent for the Radio Fan." The ads

Ads from 1923 found in Popular Ra-

ed.

also note that the only parts used in a Voisometer <u>radio set</u> are the voisometer, vernier rheostat, grid leak, tube socket, and a vernier variable condenser.



A *Popular Radio* ad from November 1924 by Co-Operative Sales Co. of St. Louis Mo. offered a "voisometer" 1-tube set for \$18, a 2-tube set for \$30 and a 3tube set for \$40, all in oak or mahogany cabinets. The ad stated: "No coils to loosen or break, no soldered wiring and all parts within easy reach of operators at all times." The ad also notes that "All parts can be purchased in separate units if desired." But what exactly was the voisometer still remained a mystery.



Get REAL Radio	Results
FROM all parts of meter quality sets. bring in coast to coast coils to loosen or break all parts within easy times. Voisometer qu sold direct from the m sumer. Oak or mahog the following prices. I sets \$30.00; 3 tube set ing diagram of sets w booklet of voisometer t of the country sent fre can be purchased in se	the country with voiso. It is not unusual to Canada and Cuba. No. C, no soldered wiring ann reach of operator at al ality sets are now being anufacturer to the con- gany finished cabinets for tube sets \$18.00; 2 tubs \$40.00. Complete wir with all instructions and estimonials from all part e upon request. All part parate units if desired.
CO-OPERATIV	E SALES CO.
461 Calumet Bldg	St. Louis Mo

Fortunately, things began to get a little clearer with a "Missouri Mystery Radio" posting (Dec. 8, 2014) that I came across in the *Antique Radio Forums*. The writer had purchased an interesting homebrew radio at an antique store in Fulton, Mo.:

"I did hook it up to the proper voltages and got it working. Close examination has never revealed the builder. I don't think it was homebrew, although it may have been a kit...The very curious Voisometer says it was made by the Voisometer Mfg. Co., Kirkwood MO."

Luckily, the writer provided good photos of his "mystery radio." Upon close examination, it appears that the voisometer "A" connection goes to the radio's antenna terminal, the "C" connection goes to a variable condenser, the "P" connection goes to the plate of the detector tube and, as best as I can determine, the "G" connection goes to the grid via some type of grid leak. Based on the following, the radio itself appears to be a regenerative set with two stages of AF amplification:

1. The radio uses only 3-tubes. The front panel provides a detector, 1st stage audio and 2nd stage audio jack.

2. The radio has two audio transformers with typical ratios of 3:1 and 6:1 and no



The Missouri Mystery Radio. Note the cardboard, printed voisometer cover as compared to the wax seal shown in the photo on page 3.



Front panel of the Missouri Mystery Radio.

visible RF transformers.

So what assumptions may be made about the "voisometer" as an individual component, as a radio brand and the company that manufactured them?

1. Variocouplers and variometers were used in radios of the early 1920's. Not going too deeply into their distinct differences, the variocoupler was normally used to vary the coupling of an antenna to a set whereas the variometer was used to tune the set inductively. A typical example is the companion tuning unit to the Adams-Morgan RA-10 which included a tapped antenna variometer, an antenna tuning capacitor and a variocoupler for regeneration.

Since the voisometer advertises that it does away with both components, it appears that it contains fixed coils that, in conjunction with a variable capacitor, provides coupling, tuning and a regeneration path for the radio's front end. (Note that below the filament adjust rheostat in the photo to the left is something that could be a variable inductor, but it is hard to tell its connection points and relationship to other components.)

The fact that the voisometer is encased in wax could also indicate that it was hiding Armstrong's regenerative circuit to get around paying patent royalties. Or perhaps, similar to the potting of RCA catacombs, the company did not want to reveal the internals.

2. It is hard to tell the difference between the Voisometer Mfg. Co. and the Co-Operative Sales Co. They both seem to be interchangeable with regard to the Voisometer radio and the individual voisometer component. Although the Co-Operative Sales Co. advertises itself as a "sole distributor," an ad in the Alton (Missouri) Evening Telegraph by L. S. Noble ("Anything Electrical") also advertises itself as a voisometer distributor.

3. No matter what the case, advertising indicates that the company produced products from late 1923 until late 1924.

Up to this point, I have not located any other information regarding the existence of a manufactured Voisometer radio. It appears that most sales were for the individual voisometer component for use in kits or homebrews. When you purchased a voisometer, a wiring diagram for its use in a radio circuit was included.

4. Addresses associated with the voisometer included 401 Calumet Bldg. and 112 North 7th Street in St. Louis and Kirkwood, MO.

What the heck is a voisometer? Any other ideas? Perhaps the next stage in revealing its full secret is to examine its wax-enclosed interior.

THE NJARC AT MONMOUTH UNIVERSITY By Ray Chase

Melissa Ziobro of Monmouth University recently invited the NJARC and RTM (Radio Technology Museum) to set up a display in one of the new display cases at the entrance to the Department of History and Anthropology. Miss Ziobro is an instructor in the department. The NJARC crew included Harry Klancer, Al Klase, Henry Kearny, Jules Belissio and myself.

The display items were contributed by the above club members and the remainder came from the museum itself. Descriptive nameplates were principally created by Harry and Henry and the display was finalized on January 28th. Its configuration was somewhat challenging because of the confines of the cases and the use of glass shelves that could not support too much weight.



The display is titled "The Evoulution of Radio in the Home - 1920 - 1970." It will be up for several months through the current semester. Miss Ziobro previously worked in the history department at Fort Monmouth and is a great supporter of InfoAge and its educational programs. We hope that this display will promote more interactions with Monmouth University.

PROBING THE ETHER: THE 2015 NJARC BCB DX CONTEST

By Marv Beeferman

At this writing, the results NJARC 2015 BCB DX contest should be tabulated and will be published in the March *Broadcaster*. For your editor and a few others, it did offer some disappointments but hopefully for most it was an enjoyable experience.

The contest was prefaced by a DXpedition hosted by our Technical Coordinator Al Klase at the January meeting at InfoAge where a number of radios representing the various eras of radio design were offered for NJARC members to operate. Al offered a coax feed from the RTM antenna system (LF-MF-HF) for sets needing an outside antenna. A couple of tuned-loop antennas and a 100-foot outside wire were also offered to feed crystal sets or other low-gain receivers.

Member Dave Sica suggested that the good performance of some of the radios offered at the DX-pedition might be attributed to something other than Al Klase's antenna systems or good environmental conditions:

"If you attended the meeting last night, hopefully you had a chance to do a bit of DXing on the radios that were there. My favorite was the crystal set that was among the radios set up and fed with an antenna via an elaborate distribution network. I've been monkeying around with crystal sets for over fifty years, but the ability to tune through perhaps a halfdozen stations last night eclipsed any of my previous experiences. It was impressive...most likely testimony to the performance of that particular set and/or the antenna and/or the quietness of the rf noise environment in InfoAge's neck of the woods. Or was the ghost of Marconi just smiling favorably on us last night?"





Hopefully, the scarce photo input that was received following the contest itself was the result of the shyness of the contestants and not the limited number of entries. Among those received were from our Technical Coordinator Al Klase who noted the following:

"I had good intentions of competing with

the Grebe Synchrophase and lugged it, a horn and power supplies up to the attic listening post. No good. The DX stations are a thousand times (30 dB) weaker than the locals here in Jersey City. A three dialer just can't summon up enough selectivity to hear anything between NYC stations. In the end, the answer was the trusty 1938 Hammarlund HQ-120; 9048 miles for 10 stations. It did almost as well as a rather modern, and expensive, Drake R-4B. Homebrew loops were used with all radios."



Member Marty Drift submitted the following:

"The transistor radio was used at bedside. The second one is my newest acquisition, a Collins 51 communications receiver. It has the same type of dial readout as an R-390 but is 70 pounds lighter. It's a good performer; wherever you put the dial, the station is immediately there."



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It appears that member Ed Suhaka had some very productive listening experiences, considering a DX contest as a good excuse for staying up late:

"I submitted two entries in category F (any radio of your choosing). The receivers are a homebrew AA5 and a 1967 vintage Philco 12 transistor AM/FM radio, model QT-97 WA. In a way I was competing against myself by submitting two logs in the same category. Still, from time-to-time, I like to DX the BCB anyway, so the contest gave me an excuse to stay up late.

This was a chance to see what my homebrew could do. For a long time, I wanted to build a superhet AA5 as a fun challenge. Someone told me it looks like a high school science project gone wrong, but to me it is beautiful. I had a derelict clock radio that I got at a yard sale. I cannibalized its clock motor for another repair which left met with parts to salvage for my homebrew project. The ferrite antenna used in my project was a NOS seven-inch Superex loopstick. The antenna's box advertised that "this king size loopstick will outperform them all ... recommended for the most severe requirements." I picked up the antenna from the club's free table a few meetings ago and it does the job. Thanks to whomever brought it in; it found a good home.

My other entry is a Philco QT-97 WA, a nice quality 12-transistor AM/FM radio in a wood case with a nice sounding speaker. I bought it in 1967 with some of the earnings from my first, real full-time job. I seem to remember it cost somewhere between \$35 and \$40, not inexpensive at that time. It exhibits a bit of wear and tear and has undergone a couple of simple repairs over the years. I had not used it for quite a while but decided to try it out; I must say it did a pretty good job.

In years past, the NJARC DX contest had a category for transistor radios made before 1970. I wish that was the case for this year's contest.

All in all, it was fun and I'm glad I gave it a go.





Past NJARC President Phil Vourtsis did not submit any text but he did manage to send a cell phone photo of his Zenith console entry.



Your editor had great expectations for this contest, but they were quickly dashed. I used to use a 75' long wire fed to a tree directly opposite my second floor master bedroom. This year, I ran the antenna from end-to-end in my attic and used a small bedroom on the opposite side of the house as my listening post.

I planned to enter a Gilfillan GN-1 neutrodyne, but the *Broadcaster* story on the next page describes why it didn't work out. I then tried a few other neutrodynes and TRF's, but reception was terrible. A beautiful Kennedy 110 which I had purchased last year was a total bust. I then tried six different homebrews from the Corkutt collection and could only bring in one or two stations on each.

In total frustration, I gave up and spent the rest of my contest time trying to figure out what went wrong...unfortunately, I'm still working on it.

DON'T JUDGE A GILFILLAN GN-1 BY ITS COVER

By Marv Beeferman

Many years ago, I purchased a 1924 Gilfillan GN-1 neutrodyne from a local resident. The set was in beautiful condition with no scratches and only minor finish crazing (which you needed to look at very closely in order to detect). The interior chassis was bright and shiny without a bit of dust. The radio even had its original paper sales/inspection tag. The price was extremely reasonable.

The two-tone, walnut cabinet was divided into three compartments with each compartment protected by an access door. The first was used to hold the "A" and "B" batteries. Its door held the original operating manual where the owner had filled out four pages of different stations that he had logged! Inside the panel was a "Finding Chart" which graphed the position (0-100) of the three tuning dials in relation to the broadcast frequency in meters. (With a long antenna, all three dials were supposed to "read closely alike.")

The second compartment enclosed the three tuning dials. The third compartment enclosed a detector rheostat dial, a volume control dial and a voltmeter that could be switched to read the "A" or "B" battery voltage. Also included were two audio jacks for earphones.

It appeared on the surface that this radio was " ready to go" and would make a perfect candidate for the club's BCB DX contest. The original owner's log was very impressive with stations such as WLW, WTAM, WGY, WREO, WMBF, KOA, WOC, CNRO, WHB and numerous

others. So, with good, strong tubes installed, I connected the "A," "B" and "C" supplies in accordance with my ARBE power supply directions, pulled out the power switch, heard the solid "click" of its contacts being made up, and patiently awaited the tubes to glow. Unfortunately, there was no glow. I turned the battery voltage switch to the right and 88 volts from the "B" supply registered on the meter. When turned to the left to read the "A" supply, there was zip.

There wasn't anything to find wrong from the top of the chassis, so I removed it from its cabinet. Immediately, I noticed that the power switch was in series with the "A" supply and the meter. A quick resistance check showed that the power switch was still open in its 'closed" position. I've seen many of these types of power switches in the past and you can just tell from its "feel" if it will be operable. In this case, it opened and closed with a hard, positive "snap" but no amount of exercising could get it to work properly. Since I didn't have a similar switch handy, I bypassed it for an easy fix.

With the chassis back in its cabinet, I was able to bring back that beautiful, soft glow of five 201A's ready to do their job. With static from the earphones, I started to try to tune in a station...and, tried, and tried, and tried. The simplicity of these sets doesn't leave much to go wrong; a single capacitor, the grid leak, and the rheostats checked fine when I had the chassis out. What else could go wrong? A quick check of the detector plate voltage quickly confirmed the most dreaded fear of all battery set owners; the audio transformer primary was open. I went on to find that the secondary was also open!

Besides counting your DX chickens before their hatched, what's the moral of this story? Most early battery sets, unless there are major structural problems (pot

metal is not your friend), are easily restored. But even if you find one that is in fantastic cosmetic condition like mine, make sure you take into account the possible existence of hidden problems.

First, if you don't have a small inventory of 201A's, it may cost you at least \$75 to \$100 to "tube up" a typical 5-tube radio. But even more important is the condition of RF and audio amplifiers. Transformers were relatively expensive parts of early radios and many manufacturers tried to cut their costs which resulted in some unreliable units. Windings were made of thousands of turns of verv fine wire only a few thousandths of an inch in diameter. Some collectors can rewind transformers with ease, but if you don't have this talent (or don't even want to attempt it), expect to pay over \$25 for a non-direct replacement. If more than one transformer is bad, it might get pricey!

No matter what the external appearance of a radio, you can never know what's "under the hood" or what problems the original owner had before he retired the set, even after it was lovingly cared for. If you're planning to purchase that "perfect specimen," always check the transformers and other potentially costly components before you settle on a price.

Here are excerpts from an ebay add I came across for a Gilfillan GN-1 that emphasizes my point:

"This radio is as good as it gets...It is nearly flawless, looks like it was manufactured yesterday...The cabinet is fantastic...The top of the line chassis is complete and appears to be original. It also gleams like new. I don't have enough tubes or batteries or transformers to power it up but I can't believe that there will be any surprises."

Caveat Emptor!





Typical log pages testifying to quite a performer.

