



The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

September 2010

Volume 16 Issue 9



Reported by
Marv Beeferman

The ON-LINE Broadcaster

The New Jersey Broadcaster is now online. To date, close to 100 of your fellow NJARC members have subscribed, saving the club nearly \$2000 a year and a significant amount of worked. Interested? Send your e-mail address to mbeeferman@verizon.net. Be sure to include your full name.

We had a full and enjoyable meeting in August as attested to by one of our members:

"I had a terrific time at last night's meeting. The show-and-tell was terrific, and above all I really enjoyed seeing and talking with everyone there. The auction after the meeting was among the best I've attended and would like to thank Rich, Sal and all those who made it happen. It felt good to bring home a souvenir or two for a change. I NEED more radios!"

Thanks for the kind words. As requested by many members like yourself, your Board will try to continue to keep our auctions more club-orientated for those who find it difficult to attend those at more distant locations.

On a similar note, we received some nice compliments regarding our dues collection efforts and the *Broadcaster* in general:

"Thank you for the gentle and very polite reminder regarding 2010 dues. Thanks for your forbearance in not sending the radio goons after me. Although presently unable to participate in any club or radio



MEETING NOTICE

NOTE: MEETING AT INFOAGE

This month's meeting will take place at InfoAge on Friday, September 10th, at 7:30 PM. Directions are posted on the club's website (<http://www.njarc.org>). Please join us for another "members only auction." President Richard Lee asks that you bring your Catalins, your shutter-dial Zeniths, your Hammarlunds or anything else you've become tired of and want to put on the block... but please, no "junque." For those members who are still in arrears, you must have your dues paid for 2010 in order to sell or bid.

activities, I fully support the organization and its goals.

I elect to receive the *Broadcaster* by e-mail to help conserve funds and reduce your burden. Clearly, it's a lot of extra work and expense to produce, stuff, and mail hard copies in addition to your fine editorial work in creating so much of the content and helping others look good in print. For some of us, the *Broadcaster* is the only news of NJARC's happy group and its progress.

Your substantial personal efforts and sacrifices in knitting the club together via the *Broadcaster* and now, apparently as acting membership secretary, are very much appreciated."

Again, thanks for the kind words. However, a minor correction. Marsha Simkin, assisted by Edith Chase, are really the ones instrumental in maintaining our membership base and dues situation up-to-date. I occasionally help out with the "gentle reminder" referred to above. On that subject, Marsha reports that there are about 40 members still in arrears. Those members will receive a "Last Issue" notice on their September *Broadcaster* and will be dropped from the roles. If you plan to come to September meeting, please come ready to pay your dues or you will be denied admittance.

The following request has been posted by our Technical Coordinator, Al Klase:

We did a preview opening of our WWII Tactical Communication Display last Sunday to coincide with the InfoAge's

VJ-day observance. You can see a few grab shots here: http://www.rtm.ar88.net/Tac_Comm/Tac_Comm.html.

We intend to cover wire line and radio relay (ANTRAC) as well as the usual radio stuff. There are a number of things we're looking for. We have the TX and RX for an AN/TRC-8 on display. We need an AS-52/TRC-8 antenna (just the corner reflectors, no room for the mast). Has anyone held on to a CF-1 multiplexer to go with it? That's sure to be a heavy beast; closer to New Jersey is better. I guess I'd switch to AN/TRC-1 if one showed up.

SCR-508 Tank Radio: Need a mount. A proper tanker helmet would be a good thing too.

One of the jeep radios (SCR-509/510/609/610) and an SCR-300 walkie-talkie would help complete the FM picture. (Note: InfoAge is the site where Armstrong demonstrated the regen receiver to David Sarnoff in 1914.)

Wire and Cable: Looking for some short sections of WWII field and assault wire. Would also like to have samples of spiral four cable to compliment the ANTRAC.

SCR-694: Need a real BC-1306 rather than the ersatz RT-77/GRC-9 shown in the grab shot.

The crazy stuff: M-94 or M-209 cipher devices.

Budget is limited, so don't expect to make a big score. We are a 501-C-3 corporation if the donation angle works for you.

Thanks in advance,
Al Klase - N3FRQ

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 \$20 per year and meetings are held the second Friday of each month.

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

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Upcoming Events:

Sept. 17th, 18th: Kutztown XXIII radio meet

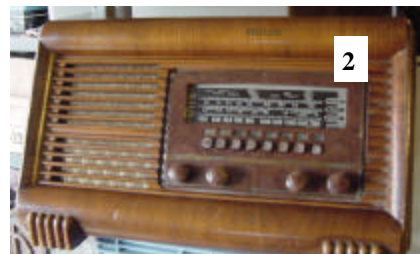
Sept. 25th (verify date on NJARC web

site): Repair/Scope Clinic at InfoAge
Sept. 25th (7:30 PM): Wall of Honor
Dinner at InfoAge
Nov. 6th: NJARC Fall Swapmeet @ Parsippany

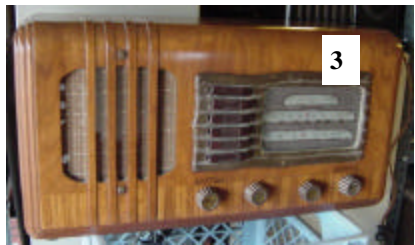
Meeting Auction Results (Ferrara Collection)



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10



11

1. Neutrowound All-Electric: \$55
2. Philco 41-255: \$30
3. GE G-53: \$20
4. Philco 37-630: \$35
5. Freshman Masterpiece: \$35
6. Brandes Electric: \$60
7. Fada Neutrodyne: \$30
8. Stromberg Carlson Neutrodyne: \$65
9. Atwater Kent 30: \$30
10. Atwater Kent 40: \$20
11. Radiola 17: \$18

**JOHN DILKS
CAPTURES
HOUCK AWARD
FOR
DOCUMENTATION**

As reported by NJARC honorary member Ludwell Sibley, NJARC member John Dilks (K2TQN) has been awarded the 2010 Houck Award for Documentation at this year's Antique Wireless Association's (AWA) Rochester convention. The Houck Award goes to an AWA member who has written several original articles on radio development or history in *The AWA Journal*, *AWA Review* or in any other publication, or who has written a book on related subjects.

John's selection was based heavily on his 11-plus years as editor of the monthly "Vintage Radio" columns in *QST*. These columns have represented a remarkable range of topics (radio stations, amateur radio equipment, early radio operators, expeditions using early radio equipment, etc.) and are based on unique original research resources.

John received the 2002 Houck Award for Preservation based on his high-quality collection and outreach efforts to display it via his Mobile Museum, seen at many hamfests, swapmeets and other events. John holds the honor of the only individual in the 38-year history of the AWA Houck Awards to capture them both.



**2010 AWA
CONVENTION**

**As Reported by
Robert Lozier**

I usually don't report on the annual Antique Wireless Association (AWA) convention since we usually get an update at our monthly meeting. However, with many new members, some who don't get a chance to attend meetings, it may be worth to give it a little exposure (especially to get a look at recent trends). Although it is a topic of some grumbling, many members find the convention rewarding, especially those who are not solely interested in buying and selling and enjoy the lectures, displays, auctions and other absorbing activities. You can google "AWA" to find out more about the association and its many activities.

The following report was posted by Robert Lozier and is presented here with minor editing.

For me, the meet was a resounding success. Within minutes of arriving Tuesday evening. Geoff Bourne told me that he had found a radio I have been looking for some five years and it was in his van... Turned out, he was more than right! I have every intention of exhibiting it next year..

Tuesday evening you could preview the Babcock estate items and there certainly seemed to be 1920's items of interest even to advanced collectors. Wednesday, from 9AM to 4PM, Rich Estes auctioned without a break... By the time it was over, about \$94k was realized. It was obvious that the prices realized are down quite a bit from just a few years ago. I was able to pick up a couple of items so came away happy.

Wednesday evening there was a pizza party with a 4 piece band in the hotel... At any one time, there were 100 or so folks in the room.

The tent erected in the back of the flea market was indeed huge and guaranteed that there would not be a rain-out. As it turned out, the weather was pretty close to fantastic. There were good items to be found in the flea market, but it was clear that the participation of sellers is low. I

would estimate that the good news is that the participation is on an upward trend for the second year in a row.

There was plenty of time to enjoy lectures during Thursday & Friday. The contest participation was good with a number of never-before-seen items. As is usual, the Friday flea market fell flat pretty soon and the hard-core buy/sell/traders were packing up after lunch. Still looking forward to the banquet and the General Auction tomorrow morning. It will be interesting to see how many folks show up here for the Rochester hamfest on the grounds tomorrow.

The general auction Saturday morning was smaller than last year but there were certainly a number of interesting items available at generally lower than expected prices. A little strange on the timing... The sale started at 9AM and it was pretty clear by 11AM that the selling could be wrapped up by 1PM, but they stopped at Noon for lunch. A lot of folks like me decided to bail rather than hang around to 2PM or so. There were a few interesting items yet to sell like a not-so-spiffy Mercury Super 10 (but a rare version) and a very fine looking A-K Model 50. I figured that both would be out of my budget range.

As far as the Rochester hamfest, no people turned up. It will be interesting to find out what happened. I heard someone remark that they were wondering why it had not been listed as a ARRL sanctioned event in the last couple of issues of *QST*. (Editor's Note: The local club that had promised to support the AWA Saturday event backed out at the last minute. Without their support the event failed. This was regrettable as the event could have been successful with the large amateur population in Rochester.)



NJARC members attend the awards banquet.

**JIM FISHER
PASSES**

By
Marv Beeferman



Tailgating at Heightstown.

The club has recently learned that NJARC member Jim Fisher passed away on December 21, 2009. Our condolences go out to his wife Analee who is also an NJARC member. Jim was elected Vice President in June 1998 and held the post until moving to Port Royal, Pennsylvania when the seeds of InfoAge were just taking root.

Although moving quite a distance away, Jim maintained his NJARC membership until his death. Jim and Analee were constant fixtures at meetings at the Grace Lutheran Church in Freehold and, through their support of numerous club activities, were instrumental in contributing to the club's present success.

Jim was known for his restoration abilities. His presentations at our show-and-tells were both practical and humorous. At a Summer 1997 meeting, he demonstrated how a veneer press could be fabricated from some threaded rod, channel iron, 3/4" plywood and Plexiglas. On the other hand, he also demonstrated the use of the covers from the book "One Hundred Ways to Prepare Liver" for the backs of 30's and 40's radios (once you get rid of the liver odor, of course).

But one of Jim's restorations that sticks most in my mind (and probably in the minds of most of the Grace Lutheran Church crowd) goes back to June 1999. The 1938 Zenith "Walton" radio is a fa-

vorite of collectors, however, the price is high. With this in mind Jim teamed up with his son (a carpenter by trade) to reproduce a cabinet from Jim's original. The interior was fitted with a chassis from a junk console and two hundred dollars later, the result was amazing. Jim brought both his original and the reproduction to our monthly meeting and you had to look very closely to distinguish between the two.



Jim and Analee share a moment with member Mark Mittleman at a Heightstown Country Club swapmeet.

You can contact Analee at 76 Fisher Lane, Port Royal, Pa. 17082 (717-527-2224) (yrless@embarqmail.com). She has expressed her plans on selling Jim's collection of some 20 years. Some radios are finished, others are not and the collection includes numerous radio parts. If you are interested, Analee will answer any questions to the best of her knowledge.

**THOSE COLORFUL,
PAINTED BAKELITES**

By
Bob Bennett

At the August show-and-tell, I presented a Bakelite radio painted red and white radio to Scott Roberts and his finance Donna. They recently purchased a home and wanted to remodel their kitchen with a Coca Cola theme. Many members were impressed with the results and Marv has asked me to summarize the major steps in giving new life to basically bland radios.



Basically the radio receives a full shotgun recap and alignment – that's the easy part. To achieve the look I want, the radio is sandblasted and the old, original colored chipped and scratched paint removed. Next, the case is washed and dried using a tack cloth.

The case is primed using a lacquer based paint (available at the Home Depot), then sanded with a 1000 grit wet/dry sandpaper. The case is wiped down again with a tack cloth and painted using "ball in can" lacquer of the desired color. The case is sanded and painted three times. I start with 1000 grit, then 1500 and then 2500 on the last coat with the case wiped down with a tack cloth between sandings.

Next is two coats of clear lacquer, sanding with 1500 grit following the first coat and 2500 grit following the second, again wiping the sanded case with a tack cloth.

The final step is to literally "wax" the case with DuPont #7 rubbing compound (this is what your father used on his car) followed by a good car wax. The clear lacquer coat gives the radio a "wet" look that takes your All-American 5 radio to a new level.

A video of the presentation to Scott and Donna can be found on the following "YouTube" link: <http://www.youtube.com/user/Radiowild#p/a/u/1/fPbEaEdftsY>.



SHOW-AND-TELL



Alex Magoun & son: Ednalite projection pointer used in RCA laboratories.



Bob Bennett: Coca Cola-themed painted radio presentation to Scott Roberts and his finance Donna. (See article in this month's *Broadcaster*.)



Al Klase: Oki Denki Japanese key; part of translation reads "back seat/ front seat" (perhaps for a torpedo plane?).



Aaron Hunter: Philco Trans-World, T-9. This is Philco's first transistorized shortwave portable radio. Dial is unique in that the logging scale slides below each band as it is selected. Troubleshooting was a problem since schematic biasing was incorrect. Radio sold for \$229 in 1958 (\$1690 in today's dollars).



Peter Olin talks about some ferrite rods that he used to construct a 30 kHz antenna with a Q of 300 and 42 db gain.



John Acacia presses a can of WWII soldering paste.



Matt Reynolds discusses this RCA portable record player with an interesting design flaw; when 33-1/3 records are played, the control knobs are covered.



Marty Friedman displayed this NRI Model 33 ("Professional") signal tracer and discussed its unique features. It is basically a tunable, TRF radio with two stages of RF and an AF amplifier; with its speaker, it can be used as a broadcast radio. The user can use it to troubleshoot a radio's circuits through all stages, right up to the voice coil, over a range of 170 kHz thru 11 MHz.



Ray Chase obtained this homebrew transconductance tube tester from a recent Estes auction; construction is first class (notice the digital displays). Its builder (D. K. Owens) even wrote an instruction manual that included a calibration procedure and schematic.





John Ruccolo displayed a completed Philmore AC-DC radio kit and Birnbach outdoor antenna kit.



Jerry Dowgin discussed a number of radio accessories that he purchased at one of the first NJARC auctions in 1993. Included was a Kester "radio" solder can, a Sterling voltmeter and ammeter for checking batteries, a crystal case, battery lead tags (B+, -, etc.) and an Edison battery oil bottle. Battery oil was used to prevent the bubbling of charging batteries from causing spills.



Jon Butz-Fiscina talked about a Vetrola radio that he obtained from his mother's estate.

INFOAGE'S FIRST ANNUAL WWII SYMPOSIUM

On August 15th, I had the pleasure of attending, with some invited friends, InfoAge's "First Annual WWII Symposium." The symposium was held in conjunction with the celebration of the 65th anniversary of VJ Day and consisted of a series of presentations by technical experts on some very stimulating topics related to electronic developments during the war and, in some cases, the role that Camp Evans played in these developments. There were over 45 attendees. The Military Vehicle Museum was also open for business along with our Museum of Radio Technology, The Historical Divers Museum, The Radar History Exhibit, etc.

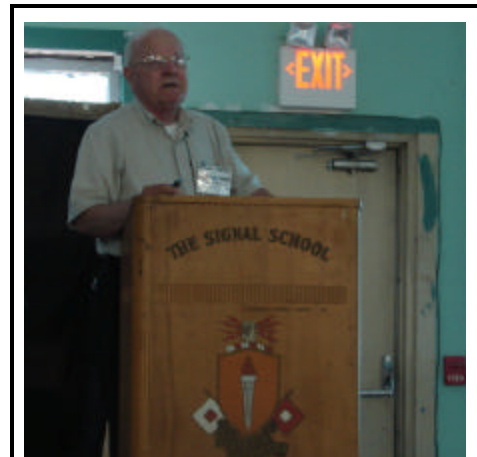
Among the programs, two were pre-

sented by NJARC members. Ray Chase informed us on how radar failed us at Pearl Harbor and Al Klase talked about tactical communication advances during WW II. Unfortunately, my friends had a previous engagement and we could not stay for Al's presentation, but they told me they were quite impressed by Ray's knowledge on his subject and his ability to talk about it and illustrate it in a clear and understandable manner. My friends and I were also intrigued by the story of the USS Murphy, a WW II destroyer that was nearly mortally wounded in a collision in New Jersey waters that was overhauled to finish her WW II mission with distinction.

Special thanks should also go out to Steve Goulart, John Tyminski and Dave Snellman for providing some of the grunt work for preparing the InfoAge site for visitors and manning the museum.

It was quite pleasurable to "show-off" all the progress that InfoAge has made

since my friends first visited some three years ago. One recommendation, though, was to make the existence of such an interesting resource more evident to surrounding towns and counties.



Ray Chase takes the podium.



One of many military vehicles on display.



The Military Vehicle Museum was quite a hit.



A SERENDIPITOUS BOXLOT

By
Marv Beeferman

About two months ago, I started to sort through some box lots that had been stored away for some time. In one, where the time and place of acquisition still escapes me, I found a homebrew piece of test equipment that appeared to be some type of capacitance bridge. Except for the markings, construction looked good. I especially liked the vintage look of the tuning-eye escutcheon. The unit was repacked for future investigation.

At a recent InfoAge auction, I purchased a lot of some early *Popular Electronics*, most from the early 60's. I like to page through these and cut out the articles related to the construction of tube radios and test equipment, tips and techniques, interesting ads, etc. A few days before finalizing what articles I wanted to cover in the September *Broadcaster*, I came across a construction article in the July, 1961 issue for something called a "Universal Workshop Tester." It looked very familiar and I immediately dug out what I originally thought was a capacitance bridge from storage. Sure enough, the two were almost identical!

What I originally thought was a capacitance bridge turned out to be a resistance-capacitance bridge, audio generator and tuning and modulation indicator all rolled into one. With the aid of this in-

strument, you can find values of capacitors from 10uuf to 40 uf with ratings as low as 10 volts. The capacitor can also be measured at a frequency other than 60 Hz by using an external frequency source, and earphones can be used as the null detector rather than the tuning-eye. You can also use the bridge to find matched pairs of resistors. The tuning-eye feature gives you an accurate tuning indicator for AM and FM tuners and tells you the amount of modulation present in the received signal. Added to this, the instrument can serve as an audio generator which puts out a 10- and 1000-cycle tone for testing audio amplifiers or for signal tracing.

Does it work? Well, I'd like to maintain the original components so an attempt will be made to form up the original electrolytics before changing them out. I'll tell you about the results in a future issue.



The project suggested a balance potentiometer with a scale of 0 to 100 using capacitor values read from a chart. The builder decided on a direct-reading scale.

UNIVERSAL WORKSHOP TESTER

Versatile instrument measures capacitance and resistance, checks tuning and modulation, also acts as a signal generator

By FRANK A. PARKER

AN IN-CIRCUIT CAPACITOR TESTER

By
Marv Beeferman

Sometimes, if you look closely amongst the clothes, sneakers, board games, toys, and gaudy knickknacks of a yard sale, you can come up with something useful...useful in the eyes of an electronic hobbyist that is. For me, about a week ago, it was a Heathkit Model IG-28 color bar/dot generator and a PACO Model C-25 capacitor tester that I picked up for a couple of bucks. (I gave a pass to

CONNECTIONS

Free exposure for buyers and sellers! Unless requested otherwise, each ad will run for two months in both the *Jersey Broadcaster* and the *Delaware Valley Oscillator*. All buying and selling transactions are the responsibility of the parties involved. **Send your ad to mbeeferman@cs.com**

Are you aware that NJARC now has a resistor program which includes many commonly needed replacements? Contact Walt Heskes at any club meeting for details.

a very early Heathkit scope that was too rusted to be salvageable.)

Capacitor testers are not that exciting in of themselves, but the C-25 will test capacitors for opens and shorts while they are still connected to other components or also measure the in-circuit value of electrolytics over a range of 2-400 mfd. For older radios, where wholesale capacitor replacement is common, and where stage-to-stage troubleshooting is the preferred problem isolation solution, in-circuit component testing is not that useful. But for newer audio and test equipment and not-so-vintage radio testing, you might want to leave the majority of capacitors alone.

(Editor's Note: For the present, I won't get into the debate about the limitations of in-circuit testing and lifting a lead as the only approach. I am also aware that modern day in-circuit electrolytic capacitor testers get around most limitations by measuring ESR.)

The C-25 has two interesting design features. First, it uses an EM84 horizontal magic eye tube similar to those used in later Grundig radios and some Heathkit equipment. For all capacitors, a closed eye indicates a defective (open/shorted) capacitor. For electrolytics, no eye movement while adjusting to measure capacity indicates a defective capacitor. Also, the plate supply to the EM84 and 6C4 tubes used in the test circuit is raw ac! In 1961, the C-25 kit version sold for \$19.95 and the assembled C-25W sold for \$29.95.

FOR SALE

Check out NJARC's capacitor program for those most commonly needed replacements. Contact John Ruccolo at any club meeting or call him at home (609)-426-4568 to find out what's available. All proceeds go to the club.

Car stereo system by Kenwood consisting of KRC-777 in-dash AM/FM/cassette stereo, KGC-9400 under-dash graphics equalizer and KAC-7020 70 watt stereo power amp. Upgrade your 1970-80s vehicle with great sound. All items new in original packaging. Being sold for a club supporter; can bring to next meeting. \$100 Ray Chase, ray-dio862@verizon.net, (908)-757-9741

WANTED

Now that you've disposed of some of that old stuff by using our FOR SALE section and have plenty of empty space, or just need a few parts to complete that restoration...

YOUR "WANT" AD HERE!

TIPS & KINKS

As promised, here's the "Broadcaster's" first "tips and kinks" installment. The following were found in "Popular Electronics." Now it's your turn...a supporting photo would be appreciated.

Increase Small Speaker Bass Response

Apply a few light coats of spray varnish or lacquer to the cone of a small speaker and a more "bassy" sound will be produced. The spray treatment lowers the cone's resonant frequency and at the same time cuts down on its high-frequency response. A greater ratio of bass to treble output is thus produced. Spraying also protects the cone from dampness, lengthening its life.

Repairing Broken Tube Socket Pins

When a pin on a molded tube socket breaks off, there is no need to replace the entire socket. Just remove the defective pin by applying pressure with a small screwdriver to the small indent on the lug end of the pin and pushing the pin out of the socket. The indent is just visible at the point where the pin's lug enters the molded part of the socket. Replace the broken pin with a good pin carefully taken out of another socket.



No rectification - raw ac is used for plate voltages. Notice the EM84 horizontal magic eye tube at the right.