

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

September 2013

Volume 19 Issue 9



MEETING/ ACTIVITY NOTES

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.

At the July 12th meeting, member Walt Heskes presented his "Summer 2013 Lightweight Radio Shootout." Walt was kind enough to provide the following update to those members, including your editor, who were unable to attend:

Walt's presentation outlined some of the ups and downs of summertime radio enjoyment. Specifically, he pointed out the hostile effects of excessive sunlight as well as the corrosive effects that salt water and wind-blown sand can have on radio electronic equipment. Excessive summer heat and humidity also can take their toll on batteries and sensitive electronic components. This radio shootout compared four currently available multiband (AM, FM, SW), lightweight radios, namely the Radio Shack Digital Radio 1200587, the Sony ICF-S10MK2, the Tecsun PL-380 and the Kaito 1103.

The Radio Shack digital pocket radio offers the convenience of precise digital AM-FM tuning in a pocket-sized, weatherized plastic case but AM DX is marginal and the price (\$30) is no bargain. It scored lowest of the group. It is available only at Radio Shack stores.

The Sony offers retro styling with fairly good AM DX (and FM, no SW) in a rugged plastic case with controls that can



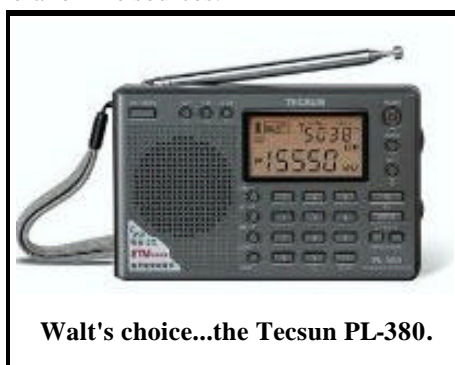
MEETING NOTICE

The next NJARC meeting will take place on Friday, September 13 at 7:30 PM at InfoAge. Directions may be found at the club's website (<http://njarc.org>). This month's meeting will feature a talk by member Robert Forte on the MKII-B2 Type 3 spy radio and the most famous spy group in WWII. Robert gave this talk at the InfoAge WWII Symposium and I can guarantee you that his story will keep you glued to your seats. We'll also hold an auction of some high-end items provided by Ray Chase; see this month's *Broadcaster* for a preview.

be operated with a single hand. Both the Kaito and the Tecsun require two-handed operation. The rock-bottom price (\$10) is hard to beat. It finished a couple of points better than the Radio Shack. This radio is available at Walgreens and other variety stores.

The Kaito is the largest and heaviest of the radios but it offers an incredible number of features with excellent AM DX and pleasant audio from the built-in speaker. At nearly \$90, it also is the most expensive choice of this group and the somewhat painful price is what hurt its overall score. This radio is available from several online sources.

The Tecsun is nearly half the size of the Kaito and offers many useful features in a small package at a modest (\$45) price. Its AM DX performance was solid enough to edge out the top slot in this group. This radio is available from several online sources.



Walt's choice...the Tecsun PL-380.

Walt hopes to offer more comparisons in the future and tells us to stay tuned for the next Radio Shootout.

As posted on the AWA (Antique Wireless Association) yahoo group, Ron

Lawrence suggested that if you were like him and watch shows like Storage Wars about mini storage locker auctions, you might dream about someday opening up one of these and find it to be full of antique radios. Well, this has actually happened!

A few weeks ago, Ron was contacted by the owner of a storage unit facility in North Carolina. During an auction of abandoned units, he raised the door on one and saw it almost full with antique radios. He had the good sense to close the door and not sell it that day. At first, he wanted to sell it all for one money but Ron convinced him that he would lose money on the deal and not many people have room to move and store 75-80 radios. (I'm not too sure I agree with that conclusion...Ed.)

Ron has now convinced the owner to have a radio auction right there on the site of the storage unit. You can see some pictures and follow the progress at <http://reidgreene.homestead.com/index1.html>.

InfoAge's MARCH (Mid Atlantic Retro Computer Hobbyists), is looking for a 1970-1975 transistor radio, preferably with AC power so batteries don't have to be dealt with and possibly accompanying an 8-track player. It would be used for demonstrating the Altair (fool on the hill/daisy demo) and Sol-20 (TARG with sound effects) computers. Please contact Evan (evan@snarc.net) if you have a radio to spare.

The new main power transformer was installed at InfoAge on Friday, August 9th and preparations are going well for a full return to power. As of August 28th, major components were still being walked down

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to ensure a smooth transition considering the limitations of a very old system. NJARC members John Tyminski and Steve Goulart are helping in this effort.



The new addition.



The fire-damaged old transformer on its way out. It was not oil-filled like the new replacement.

The club got some visibility in the March/April issue of Antique Radio Classified with the publication of president Richard Lee's article on the Edwin Armstrong plaque dedication and a photo spread of our April 20th radio meet in Parsippany.

Upcoming Events

- September 20-21: Kutztown Antique Radio Meet
- October 11th: Monthly meeting at Princeton - Talk by Steve Klose on Armstrong plaque project (tentative)
- November 8th: Monthly meeting at InfoAge - Talk by Joe Taylor on the history of the moon bounce project (tentative)
- November 23: NJARC Winter swapmeet at Parsippany
- December 7th: Holiday Party at InfoAge (no meeting this month)

SEPTEMBER MEETING AUCTION LIST

Member Ray Chase has secured a small consignment for auction at the September meeting. The following is a list and photos of these items; some include a copy of the item's manual:

- Precision Apparatus 660 tube tester with instructions.
- Thompson horn speaker in nice condition.
- Radiola 100 "drum" style speaker.
- Radiola 18 with hood in nice condition.
- Westinghouse RA/DA (RC) with tubes. The Tickler and Regen plastic control shafts are broken but the knobs are there and the shafts are easily repaired.
- RCA Duo-Rectron AP-937 B battery eliminator with tubes in good condition.
- RCA 143 domed tombstone in very nice condition.
- Weston 663 early VOM with case.
- Pile of early "Antique Radio Classified" magazines.
- Assorted books and paper, some highly desirable.
- Various tubes, some highly desirable (brass based 201, 45, etc.).





**UNWRAPPING A
WS#19 MK II
TRANSCEIVER**

**By
Marv Beeferman**

Louise Foley of Thendara New York recently contacted the Smithsonian in Washington. Following WWII, her father had brought back an unused WS#19 MKII transceiver and it had rested in its original boxes ever since. With her father's passing, Mrs. Foley felt that it would make a great addition to the Smithsonian's collection but, as most of us know, the museum gets hundreds of these "offers" every day and mostly is interested in items that are examples of our cultural history.

Luckily, the Smithsonian suggested that InfoAge might be interested and ultimately member Ray Chase was contacted. Ray contacted Mrs. Foley and got the dimensions of the boxes containing the transceiver and its accessories and found that they would "just fit" in his van. Ray made a stop at Thendara on his way to the AWA convention in August and the transceiver is now safely in the possession of InfoAge.

The specific example Ray has obtained is of British/Canadian design that was built by RCA in the United States and supplied to the Russians under the lend-lease program. Markings are in both English and Russian. It was specifically targeted for use in Russian tanks but could also be used in other Armored Fighting Vehicles (A.F.V.), various wireless trucks and as a ground station.

The WS#19 MKII consists of an "A" and "B" set. The "A" set runs between 2-8 MHz and provides troop-to-base or troop-to-troop communications (R/T, CW, MCW). It has a range of 10 miles and R/T between vehicles in motion and requires an 8' rod antenna on each vehicle.

The "B" set runs between 230-240 MHz and provides R/T communications between vehicles in a troop. The range is 1,000 yards between vehicles in motion with a half-wave antenna. (An intercommunication amplifier is provided for speech communication among a crew.)

On August 28, with a bit of fanfare, the transceiver was released from its 65-year old, wooden tomb on the InfoAge lawn. It was like Christmas morning with each new discovery bringing "ooh's" and "aah's." Immediately, member Al Klase took charge in putting some of the major components together and mounting them on their racks.

Ray says that we might be missing some spare parts and spare tube kits but a little more digging is required. He's presently working on how to display the complete, integrated unit with all the crew member control boxes, cables, variometer, antennae, etc. If you're interested in the full story of the WS#19 MKII, the complete manual may be found at <http://www.qsl.net/ve3bdb/manpage3.html>.



Ray Chase prepares for the grand opening.



Harry Klancer does the honors.



Due to the efforts of Ray Chase and after some 65 years, the WS19 sees the light of day once more.



The partially assembled unit.



Man...what beautiful insides!

INFOAGE'S 4th ANNUAL WWII WEEKEND

By
Marv Beeferman

On August 24th and 25th, InfoAge held its annual WWII Weekend. I attended on Sunday and was treated to a host of events to choose from. They included radar and Zahl exhibits, a Col. Waterhouse painting display, a military vehicle display, videos, lectures and dioramas. In addition, the Shipwreck Mu-

seum, the EW & WWII Communications Museum, the Radar Museum, the Military Technology Museum and the Radio Technology Museum were open for viewing. Our own Robert Forte gave a presentation on the MKII-B2 Type 3 spy radio and the most famous spy group in WWII (which he shall repeat at our September meeting) and Al Klase lectured on Aircraft Homing Beacons.

Attendance seemed to be brisk with many locals seeing InfoAge for the first time. I even met a former co-worker from the Oyster Creek Station and we chewed the fat over "where is he now" stories.

Parades are a fine way to honor our military service veterans and active duty personnel, but InfoAge honors them in a different way. It is here that people can see the actual artifacts that the fighters used and learn about how this small section of New Jersey played a vital role in their development. There aren't many historic places left in the state where you can show both your appreciation while supporting the actual showcase for those individuals who participated in keeping the peace.



On February 19, 1945, PFC Charles Waterhouse landed on the island of Iwo Jima. A wound to his left shoulder resulted in the loss of feeling to four of his fingers. His right drawing hand remained OK. Waterhouse was designated as the first and only USMC Artist-in-Residence and promoted to colonel. Many of Waterhouse's works were on loan to InfoAge during the weekend - below is an example.



Displays also included very detailed dioramas of WWII battles and models of aircraft and ship formations.



As stated previously, Robert Forte's presentation on the MKII-B2 Type 3 spy radio and the most famous spy group in WWII will be repeated at our September meeting so I won't go into the details here. Al Klase's aircraft homing beacon lecture contained some interesting points.

In general, Al pointed out that stories are legion of the system's ability to lead pilots home, sometimes in total darkness and with dwindling fuel supplies. He stated that enemy Admirals never could understand how our pilots were so adept at returning to their carriers. Finally, Al noted that there are incidents where Japanese pilots landed on our own carriers because they were lost.

One of the questions that Al tried to answer was how did our aircraft homing beacon system avoid giving away the position of our bases and carriers to the enemy? Al explained the following reasons:

- The system operated in the range of 250 MHz with "line-of-sight" transmission limits.
- The system used dual modulation requiring double-detection receivers.
- Enemy VHF direction finding technology was extremely limited.
- Section-code signals, modulation frequency and transmitted VHF frequency could be changed regularly.

Among the examples of aircraft homing beacon equipment that Al displayed included a Navy CW-46048D/RU-18 receiver with 2B-3 homing beacon receiver/converter, a TS-1/ARR-1 VHF Test Set for setting the receive frequency on homing beacon receiver converters and a Navy CRV-46157 ARB Receiver with a R1-ARR-1 homing beacon receiver converter.



Al Klase's homing beacon equipment display.



Robert Forte's MKII-B2 Type 3 spy radio.



An AR-11 compact transceiver for covert action - allegedly supplied to the French resistance.

**AN AWA
CONFERENCE
JOURNAL**

**By
Marv Beeferman**

NJARC member Richard Hurff and I attended this year's Antique Wireless Association Conference in Henrietta New York, just outside Rochester. The conference ran from August 20th to August 24th and we arrived Wednesday night after a pleasant and uneventful journey from Mount Holly. Weather was very pleasant throughout our entire stay except for a short downpour on Thursday.

We tried to meet up with Ray and Edith Chase, Marsha and Jerry Simkin and Dave Snellman but just missed them on their way to a tour of the AWA museum; the official ribbon cutting was on Tuesday but there were so many people in attendance that a second viewing was arranged.

My first order of business was to meet

up with Buford Chidester who had restored two cone speakers that I had left with him at the last Kutztown radio meet. Buford is an authority on cone speakers and many of his articles regarding their history and technology appear in the AWA review. He is also the author of "Classic Cones" which comes highly recommended. Buford performed his usual magic and I was very pleased with the results and the very reasonable cost. If you have any cone speakers which you consider un-repairable, you might want to make contact with Buford and see what he suggests.

Although only the front third of the new AWA museum was available for viewing, Ray Chase said his initial reaction and those of the attendees of the grand opening were very positive. It is laid out with an oval hallway and a number of alcoves. The alcoves have a rounded shape and are completely opened at the top, avoiding that enclosed, cubicle feeling. Each alcove is set up with a different theme and as one commenter noted "a good way to introduce the public to the historical progress and diversification of communications technology. There is a large alcove for the 1920's radio store, a Clapp-Eastham rotary spark TX is set up to inject ozone into the air, a teletype is spewing out news, a late 40's TV is up and running, etc." Although I didn't get to see it, but via Ray's photos, the replica Titanic Wireless Room looked very impressive.

The Book Fair opened on Wednesday morning and is one of the activities that I find a conference plus. Instead of sorting through boxes of disorganized books and paper in the parking lot under a hot sun, you can enjoy a leisurely and comfortable browse in the hotel. The usual vendors were there including Ray and Edith Chase, Jerry and Marsha Simkin, Jim and Felicia Kreuzer and our friend Jon Kummer from Antique Radio Classified. Unfortunately, my tastes are associated with very expensive books but I did settle on a very nice, three-volume set of the history of the Signal Corps offered by Ray. I was also given a gratis copy of Bangay's "The Elementary Principles of Wireless Telegraphy" from Felicia Kreuzer stamped with "Library of the Signal Corps School Camp Alfred Vail, N.J." More on this later.

The flea market opened at 6 a.m. on Thursday with some changes from previous years. Spaces were available on a

first-come-first-served basis with only a single charge regardless of how much "stuff" you brought. Collectors toured the area to collect fees with no waiting on line to register and pay. The layout of the market also brought its entrance a little closer to the hotel although some vendors still insisted on setting up as far back as possible. It was a really slow start as compared to years gone by with the number of vendor estimates ranging from 40 to 60 (at its peak)...a far cry from the days when people were backed up into the woods and next to the highway.

Flea market offerings ran the gamut from reasonable to over-priced but Richard Hurff and I settled on some nice finds. Richard took home a group of Amrad modules, a spherical audion and a tape recorder that represented his college days when he transcribed some recordings from a Russian composer. (It's a long story but that's the fun of sharing the ride with Richard; he never seems to run out of unique and entertaining accounts of his experiences and travels.) I came home with my long sought after Federal 141, a Tuska 224, a 1915 Queen Acme bridge, a collection of photographs of GE cabinets (some eventually produced, others just prototypes), a Beaver "Baby Grand" crystal set that I plan to use for a future AWA contest entry and some NOS UX-200's. I also purchased a 1925 BC-138 tuner (100 to 1000 MHz) that is used with an SCR-132, a "telephone" transmitter with a 100-mile range using an 80' collapsible mast. I purchased the unit because it was stamped "designed at radio laboratories, camp Alfred Vail New Jersey." In 1925, Camp Vail changed its name to Fort Monmouth. I'm in the process of obtaining the manual for the SCR-132 and may come up with an article at a future date.

As a side note, while I was examining the BC-138 and noting its Camp Vail origin, Felicia Kreuzer was listening in to my conversation with the vendor. Later, at the Book Faire, she presented me with a copy of Bangay's "The Elementary Principles of Wireless Telegraphy" stamped with "Library of the Signal Corps School, Camp Alfred Vail, N.J." - a very nice gesture.

While in the flea market, I got a great tip on using germicidal lights to remove mold and mildew from books, magazines and old tube cartons...perhaps the basis of a future article or tech talk. I also had an hour discussion with a retired AT&T em-

ployee on Jon Gertner's book "The Idea Factory - Bell Labs and the Great Age of American Innovation." It's a book worth reading but it raises a lot of controversy regarding Gertner's premise that it was inevitable and natural that Bell Labs dissolve as today's corporate culture evolved.

As usual, I found the presentations both informative and entertaining. Mike Adams' "A conversation with Eleanor deforest," Bart Lee's "Radio Archeology: Do It Now Before It's Too Late," Richard Brewster's "WWII Television System Demonstration," the Moonlight Restorations Seminar, and the Pre-1912 Wireless and Electrical Apparatus Seminar were particularly noteworthy.

Unfortunately, Richard Brewster's power supply for his WWII iconoscope camera (precursor of the drone camera) burnt up about a week before his presentation. However, he substituted a talk on the RCA "TV Eye," the first commercial camera/monitor system available to the general public. It used a 6198 Videocon tube, sold for \$1,000 in 1953 and one of its advertised uses was for baby sitting duties.

Richard also received a lot of interest in his WL-787 tube. It was designed by Westinghouse as a classroom demonstration device in the 1930's. The plate was coated with a phosphor which lit up when struck by electrons emitted from multiple parallel filament strands. The action of bias voltage on the ladder-like grid, and the effect of external magnetic fields could be observed by watching the patterns of light emitted from the plate. These tubes are somewhat rare but Richard said "since I have two, I'm putting one into the auction." I'm not sure what it sold for, but I don't think I'd be this generous.

The exhibition of pre-1912 wireless and electrical devices was my kind of environment. Of special interest was a coulomb-torsion electrometer, 1/8 and 1/4 scale models of dynamos from the Ford museum, an 1863 "Dixie" key used during the Civil War and fabricated on the battlefield from bullet casings, an 1878 Bradley tangent galvanometer and a Marconi audio transformer used with a Fleming valve receiver (approximately 1912).

Bart Lee's radio archeology presentation issued a call for action to find and document old radio sites. He suggested

that once these sites (or their remains) were discovered, we should work with owners and agencies and on behalf of local organizations to explore the site and report with full data and photos.

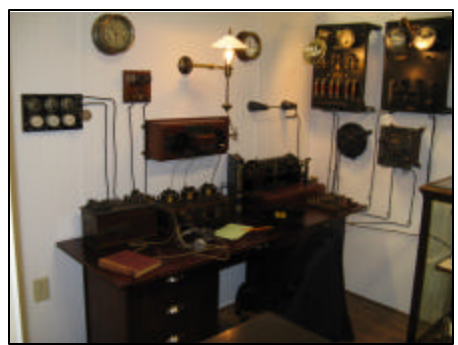
During the Moonlight Restoration presentation, Daniel Gervais described how to construct a semiconductor replacement for the dangerous (prone to shorting out power transformers) 6X5 rectifier. He also described how to make a veneer patch so it fits properly and the wood pattern matches the original. Daniel also demonstrated methods for gluing veneer on curved surfaces.

As usual, the Old Equipment Contest made many a collector foam at the mouth. Best of show went to Tom Peterson's Heathkit O-1 oscilloscope. It was Heathkit's first public offering and used mostly war surplus parts. Dave and Julia Bart won the Ralph Williams Display award for a fantastic assemblage (it took up four tables) of material (original memos, letters, technical correspondence, magazine illustrations, etc.) honoring "Lincoln's Telegraphers." Merrill Bancroft received the Houck Award for preservation. Robert Lozier won the Elle Craftsman award for his glass cased Quadraformer. NJARC member Frank Feczko won a blue ribbon in category 3A (Assembled Test Equipment) for his Heathkit IM-17 solid state voltmeter. NJARC member Bill Zukowski also won a blue ribbon in category 23 (Restoration of Operation) for his VE-301 Volksempfänger (people's radio).

There were about 350 lots in the auction and a good assortment of rare, European tubes. A Paragon tuner with pre-selector and 3-tube detector amp went for \$1,600, considered a bargain by some. I had my eye on a mint Northern Electric R4 with a rare factory power amplifier stage. Ray Chase thought it would go for well over \$800 and the owner was hoping to get \$1200. I decided not to leave a bid with Ray (my mistake) and it sold for a very reasonable \$700...another kick yourself in the butt moment. I did leave bids that got me a Jewell Pattern No. 90 wavemeter and a set of three honeycomb coils on a Branston holder.

Richard and I left about 11:00 AM for the trip home after another satisfying stay at Rochester. Beautiful weather greeted our journey as Richard entertained me with a new collection of stories of his foreign travels.

MUSEUM GRAND OPENING



IN THE FLEA MARKET



Daniel Gervais of Montreal Canada holds up a very special Emerson. Does it look familiar? Yup...it's the same model "two-sided" radio that sold at our recent InfoAge auction (but not the same one).



NJARC members Frank Feczko and Bill Zukowski enjoy shooting the afternoon breeze with an AWA old-timer. Wait...aren't we all getting close to that category?



I lusted over this coherer with integrated relay. It also came with an external relay. Asking price was \$1200 ... maybe next time.

PRESENTATIONS



WL787 tube

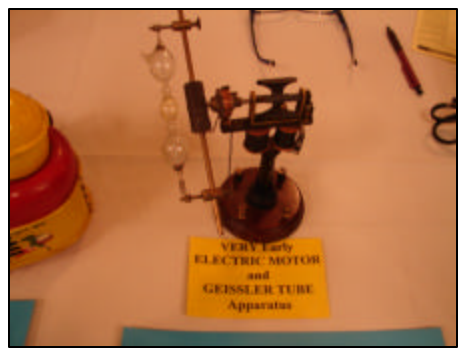


Civil War key



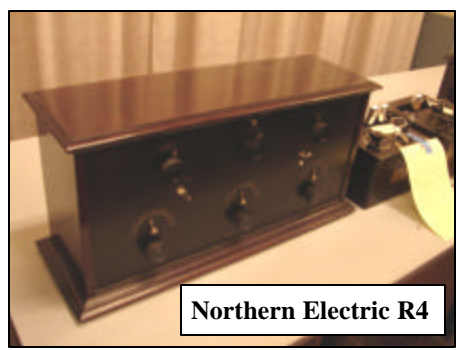
Gluing veneer on curved surfaces.

OLD EQUIPMENT CONTEST



VERY Early ELECTRIC MOTOR and GEISLER TUBE Apparatus

THE AUCTION



Northern Electric R4



The interior of the pristine Northern Electric R4 shown above. Note the factory power amplifier in the back. It sold for \$700...a real bargain.



With the conference being an "international" event, it affords the opportunity to bid on tubes and equipment seldom seen in the U.S.

