

# **The Jersey Broadcaster**

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB



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Volume 21 Issue 8

**MEETING NOTICE** 

The next NJARC meeting will take place on Friday, August 14th, 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 meeting will feature a talk by NJARC member Charles Blanding about his history with local NJ radio broad-





Reported by Marv Beeferman

## The ON-LINE Broadcaster

The New Jersey Broadcaster is now on -line. The majority of your fellow NJARC members have already 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.

Although I wasn't able to attend the July meeting, thanks go out to member Dave Sica for updating us on the exciting events that took place at the recent Early Television Convention in Ohio. Dave has been a long time contributor to and supporter of the Early Television Museum and this year was no exception, taking part in video coverage and live internet streaming of the event, participating in a tribute to early television preservationist Ed Reitan and helping out with the displays. It's great to have Dave as an interface with this organization, considering its support of the restoration of our Radio Technology Museum's CT-100 television and the potential for a resource for the restoration of vintage CRT's.

NJARC president described our Summer Tailgate Swap Meet at InfoAge as the "biggest and best" ever with over 30 vendors and 130 buyers attending. The meet was blessed with perfect weather and a short write-up and photos are included in this month's *Broadcaster*. On a more somber note, we will also note the passing of long time NJARC member Ben Tongue with a summary of his many accomplishments and contributions to CATV, overthe-air-television and the antique radio hobby.

From the *Tom Taylor Now* column for July 29th comes the announcement that future AT&T Android phones will get FM chips. It was reported that the idea resonated with listeners who wanted their cellphones to become, in essence, the 21st century transistor radio with access to local radio news, entertainment, weather and fail-safe emergency connectivity. With the possibility of future FM chip targets like Verizon and T-Mobile, it looks like another nail has been added to radio's coffin. On the positive side, look for an uptick in an interest in the uniqueness of radio collectables.



Twenty-first century transistor radio?

Ludwell Sibley, NJARC honorary member and president of the *Tube Collectors Association* (TCA), has announced that the association's web site now houses a suite of indexes to U.S. antique-electronics publications. They may be found at the "Archives" link of www.tubecollectors.org. Included are all *Antique Wireless Association* (AWA) publications, the Dowd-RCA Archive held by the AWA, all TCA publications, all issues of "Vacuum Tube Valley," and all issues of the *Antique Radio Club of America* "Gazette."

Ludewell notes that "this material is offered on the theory that an index makes

the different between 'a pile of literature' and 'research!' This is in addition to a cache of oldie tube catalogs under the same tab. The files are posted in both .DOC and PDF formats. I personally have used this resource numerous times in the past and can attest to the fact that it provides a great asset in researching antique radio topics.

Ludwell also notes that the Mid-Atlantic Antique Radio Club has an index to its wonderful newsletter *Radio Age* which goes back to 1994. It may be found at www.maarc.org.

Another helpful resource that your editor has recently been made aware of is the Antique Wireless Association's "AWA Gateway." It's a free, online publication designed especially for newcomers to the antique radio hobby and accessible to AWA members and non-members alike. Gateway's content runs the gamut of antique radio topics, including broadcasting history, technical and aesthetic evolution of radio receivers, restoration techniques and radio collectibles. Articles are suitable for both beginners in the hobby and the mature, technically-oriented reader. The May 2015 issue includes such articles as Collecting Books and Periodicals, the Sonora Phonograph Company, Radio Listening on the Great Plains, Installing the President's Hi Fi and Radios of the Late 1930s. To access the AWA Gateway, visit the Antique Wireless Association's website at www.antiquewireless.org. Then, click on "media-pubs" at the top of the screen, select "AWA Gateway" from the dropdown menu and click on "Gateway Downloads."

InfoAge has announced its WWII Weekend/VJ Day 70th Anniversary for August 15-16 from Noon to 5 PM. Admission is \$5 per person. This commemoration of the 70th anniversary of the end of WWII includes a special ceremony on August 15th honoring surviving veterans

casting. We'll also have a small auction of tabletop radios.

#### **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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#### **MEMBERSHIP SECRETARY:**

Marsha Simkin 33 Lakeland Drive Barnegat, N.J. 08005 (609)-660-8160 of the Pacific Theater and a special lecture on Operation downfall, the planned invasion of Japan. Also included is a National Archives WWII exhibit, the grand opening of the Military Technology Museum, WWII displays and dioramas, a Marine Corps artist exhibit (Col Charles Waterhouse) and a special atomic bomb exhibit.



Member Ed Papson (KC2QBK) is looking to purchase a reasonably functional RCA Mark VII tube CB transceiver. His uncle Jack used these radios in his HVAC business in the late 60s and 70s. Ed would visit his uncle in his workshop and was allowed to play with the Mark VII and chat with local CBer's. This led him to Ham radio and he never forgot those past days. Can anyone help Ed out? Ed may be reached at etpapson@comcast.net.

In the Summer 2015 AWA Journal, honorary member Ludwell Sibley and president of the *Tube Collectors Association* published a refreshing article on those interested on purchasing tubes on eBay. The article sheds some light on a "couple of notions (nowadays called 'memes') that have taken hold in the world of tube commerce."

The first consideration are tubes that are offered with <u>engraved bases</u>. Ludwell says there is no such thing. He notes the difficulty of engraving a cylindrical surface and the limitation of mass production. "A stamping die, heated by electricity or a gas flame, burned its way into the Bakelite, leaving clean script that looked like engraving." In later years, tube identification was stamped with inks that contrasted with the black base material.

Some tubes are offered as "new old stock" (NOS) based on tube tester read-

ings. However, Ludwell says that claims that newness can be gauged from a test of transconductance are meaningless. This is based on the fact that even for new tubes, wide swings in transconductance were expected and acceptable and that nominal figures also depend on operating conditions.

The final characteristic open to interpretation is the case of the "matched pair." Web sellers claim "matchedness" mostly based on personal criteria. These might be simply that the tubes are of the same brand, carry the same date code, or read the same on a tube tester. Ludwell notes that Penta Laboratories claims that their matched audio tubes, after 48 hours of aging, measure within 5% of each other on plate current, screen current and gm. However, as Ludwell points out: "...afficionadi of output tubes are not enthusiastic about matching via an ordinary tube tester, on grounds that the operating point of the tubes in an amplifier usually differs from that in the tester, and that a reported match may not mean much."

In summary: caveat emptor.

## **Upcoming Events**

August 11-15th: AWA Convention Sept. 11: Monthly meeting at InfoAge; Bob Tevis presentation (T.B.A.) Sept. 18-19th: Kutztown swapmeet. October 9th: Monthly meeting at Princeton's Bowen Hall; Mike Molnar presentation (T.B.A.)

October 24th: Fall repair clinic at InfoAge Nov. 7th: Fall swapmeet at Parsippany PAL.

Nov. 13: Monthly meeting at InfoAge; Al Klase presentation (T.B.A.) Dec. 12th: Holiday Party

# BEN TONGUE PASSES

# By Ludwell Sibley

The following article celebrating the life of Ben Tongue will also appear in the "Tube Collector," the bulletin of the Tube Collectors Association. It is used here with permission with minor changes by your Broadcaster editor.

The NJARC is saddened to report the passing of one of its most prominent members, Ben Hapgood Tongue, who died in his sleep on July 4th, 2015. He will be sorrowfully missed by the membership.



Ben was best known as the co-founder, with NJARC member Isaac Blonder, of Blonder-Tongue Laboratories. He did most of the electrical design work on the company's products while Blonder, another electrical engineer, handled most of the mechanical design.

Ben graduated with a BSEE degree from Northeastern University in 1945 and a MSEE from Polytechnic University in 1948. He initially worked for the Panoramic Radio Company in New York as a designer of spectrum analyzers (where he met Ike Blonder) and then for the Federal Telephone & Radio Laboratories in Clifton, NJ.

Blonder-Tongue was started in 1950 with a broadband antenna preamplifier for TV use as its initial product. The "Antensifier" was broadbanded across the whole VHF spectrum at a time when competing products from Astatic, Regency, and Anchor required tuning controls. When UHF TV began in the early '50s, a series of UHF converters was added.

Many older NJARC members may remember Blonder/Tongue reminiscences recounted at meetings at the Grace Lutheran Church in Freehold. One of the most amusing involves the duo's first "laboratory," an old dance hall in Yonkers which had formerly housed an illegal gambling operation that took bets on horse races from the nearby track. It featured a long row of toilets in the basement, all without stalls. Within days. Blonder-Tongue was raided by the local police, who suspected that the two engineers were actually bookies attempting to again set up shop. The toilets, it turned out, were there to flush away the evidence of betting slips during raids.

Ben Tongue was an imaginative designer, with 30 or so patents to his credit. Bob Palle, present President of Blonder Tongue Laboratories, noted that "it was the combination of Ben's innovative ideas and rugged, reliable and cost effective products produced by the company that were the deciding factors to purchase the company back in 1989." When tunnel diodes became available, Ben designed a consummately simple UHF converter (the BTD-44) that was simply an oscillating diode acting as an autodyne converter and powered by a single flashlight cell. One of his patents (U.S. 2, 790, 036) covers the neutralization of a pentode amplifier by using the suppressor grid. He mastered the transition to solid-state VHF circuitry when it became feasible, an example being the BT-3 FM-TV preamp of 1960.



Ben Tongue - the early years.

Blonder-Tongue developed a major share in the market for master-antenna systems for apartment houses under the "Masterline" brand and video distribution for security systems. It competed for business in the area of small CATV systems with Jerrold Electronics, capturing perhaps a third of the market. The company offered head-end equipment like channel amplifiers, equalizers and modulators.

The company ventured into TV broadcasting, activating Channel 47 from Paterson in 1964. It was an early opera-

tor in pay television, putting WBTV on Channel 68 as licensed to Newark in 1974 and selling it in 1989.

In the late '50s, Blonder-Tongue got into the tube-audio market with an AM-FM tuner, amplifier (the A-1, 6V6based integrated preamp-amp) and a compact speaker. Ben also devised a very early version of today's graphic equalizer. He didn't have biquad operational amplifiers or digital signal processing available, but came up with a nine-octave unit using five 12AX7s and received a patent for his B-9 "Audio Baton." The unit required no inductors in its selective circuits. Blonder -Tongue got out of the audio business when stereo systems became the market standard.

Blonder-Tongue went on to develop "Observer" industrial TV systems, making vidicon cameras and monitors of multiple sizes. Looking toward reducing the cost of a camera, the company built a tube development lab with the idea of making an electrostatically deflected vidicon. Costs forced the end of the project, and the company exited the camera business after cheaper Japanese products appeared.

Ben Tongue was a Fellow of the IEEE and of the Radio Club of America and a member of the Tube Collector's Association and New Jersey Antique Radio Club. He and Issac Blonder were inducted into the New Jersey Inventors Hall of Fame in 2002. The transcript of a comprehensive audio history interview is available at www.cablecenter.org.

Idle retirement was not in Ben's nature after he stepped down from Blonder-Tongue in 1989, returning to a passion of his youth - the study of crystal radios. Soon, his personal crystal radio website, www.bentongue.com, had a devoted worldwide following and he authored numerous technical articles that have served to advance the state of the art of crystal radio technology.

Ben developed a SPICE model for characterizing the operation of a diode detector, promoted the concept of operating the detector in the square-law portion



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of its V-I curve, applied the notion of "available power," published designs for high-Q tuning coils, and made other re-finements.

Ben even refined the now-old concept of the "free power" set. In the original version, the radio has a second tuned circuit, tuned to the most powerful local station, whose rectified output operates a transistor amplifier. Tongue's version eliminates the "power" source, using the rectified carrier signal of the listened-to station to operate a low-voltage (micropower) op-amp. Another version uses the carrier to charge a 330,000 uf "supercapacitor" (yes, 0.33 farad!) overnight to run the op-amp.

An obituary published in the *Star-Ledger* on July 12, 2015, sums up Ben Tongue's legacy that will be recognized by the many NJARC members who had the opportunity to know him:

"That Ben would so easily move the needle on crystal radio technology isn't surprising; he was a born engineer. His hometown newspapers chronicled the early adventures of the local youth who created his own radio from odds and ends and installed it on his bicycle, a wonderful antecedent of our current in-car entertainment systems, and a presagement of his contributions yet to come."

# SUMMER BREEZES UNDER THE TREES AT INFOAGE

# By Marv Beeferman

Our Summer tailgate swapmeet attracted over 30 vendors and 130 buyers to the grounds of InfoAge. As club president Richard Lee pointed out, it was the "biggest and best" yet. Thanks to Richard, Bill Zukowski, Harry Klancer, John Tyminski, Vince Lobosco (supplemented by your editors' "radio bagels"), Sal Brisindi and Jeff Harshman for helping make this event the great success it was.

A unique feature to this year's meet was that the Ocean Monmouth Amateur Radio Club (OMARC) co-sponsored the event. The invitation extended to OM-ARC was a reciprocation of an invitation the NJARC received for a previous event of the amateur radio club. Jeff Harshman, OMARC president, noted that both clubs support the InfoAge mission, not only with swapmeets, but by bringing people together to learn about the history of radio and the history of Camp Evans.



NJARC member Sal Brisindi, clothed appropriately, poses with Ben Tongue (left) and Issac Blonder (right) after purchasing one of their early products.



Ben Tongue talks "radio" at the Sarnoff Library.

President Lee hopes that dual participation becomes a part of the annual event from now on. Hopefully, word-of-mouth from both NJARC and OMARC members "talking up" the success of the meet, especially with fellow hams, will lead to a significant increase in attendance in future years. With the Radio Technology Museum, Military Technology Museum and other on-site resources for attendees to visit during the day, perhaps the event may grow to be a prime stop on the Northeast swapmeet circuit.

Your editor could not stay the entire day and missed the walk-around auction and award of door prizes (\$50 and \$25 gift certificates from the ARRL), but certainly enjoyed the day. I came with the intent of just "looking," but the inspiration of such a beautiful day took hold. I purchased an RCA advertising sign and battery display rack, a Sprague Tel-Ohmike TO-4 capacitor-resistor analyzer and an early crystal set made by the Detroit Coil Company. The set is described in the index of the book "Crystal Clear" but no photos are provided, noting that the index information was obtained from a catalog. Hopefully, some member has seen it advertised and I can locate some price and date information.



This early crystal set from the Detroit Coil Company (still in business) of Detroit Michigan was a nice find. A listing in an early radio catalog would enhance its pedigree.

A few of the items I saw at the meet took me down memory lane. I immediately recognized a TEAC Model RA-405 tape recorder. Six months before I was assigned to nuclear power school, I served aboard a destroyer tender, the U.S.S. Grand Canyon. We made a trip to Naples Italy and I purchased this recorder and two Kenwood speakers at the NATO exchange. I still remember the manipulations it took to get the units aboard the liberty launch and then up the ship's ladder (we were anchored in the harbor), a one hundred foot, almost vertical trip. I slept with these items at the foot of my undersized bunk with my feet draped over the speakers, but managed to get them safely home. When I put the tape recorder to sleep in my attic some 25 years ago, it was still working.



When I was in high school, my brother and I convinced my dad that we needed a hi-fidelity amplifier. We all took a train trip to Cortlandt street; my dad was thinking low-end and his sons were thinking high-end. Since my dad was picking up tab, you can figure who won out. We settled on a Heathkit EA-3, 14 watt "ultralinear" 6BQ5 push-pull mono amplifier which sold for \$29.95. The cooperative spirit in which the kit was built still

amazes me to this day. The amplifier seemed to work well, but when power was applied, one of the 6BQ5's lit up like a photo flash gun, only to settle down in a few seconds. We took the unit to my brother's friend who had some electronic experience and he couldn't find the problem. It didn't seem to affect the amplifier and I remember many years of music pleasure. It seems these units are gaining renewed interest lately and I'm now thinking about digging mine out to see what it's all about.



But enough about the good old days. You can get an eight-minute review of what went on at the meet from our "selfproclaimed maniac of all good things radio" Bob Bennett. Just go to his YouTube video at "Radiowild." For those of you who are a little more conservative, a bunch of "stills" follow.







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# A WORLD WAR II WEEKEND Bv **Robert Forte**

Although the WWII weekend that member Robert Forte describes in the following article has come and gone, you still have the opportunity to honor the heroes of this critical period in American history by attending InfoAge's WW II celebration on August 15-16 (see page 1)...Ed

While the WW II weekend show I am about to describe is only peripherally connected to antique (military) radio, it is none-the-less a very worthwhile event, especially if you are a WW II military history buff. This past June, during the weekend of the 5th, 6th and 7th, the Mid-Atlantic Air Museum in Reading Pennsylvania had its 25th WW II air show at the Reading airport.

The event brings you back to a typical small French village of 1944. Many attendees, from ages 5 through 85, are dressed in period costumes supplemented by perhaps an additional 1700 military and civilian reenactors. Also displayed are about 200 military vehicles of all types...tanks, jeeps, half-tracks, artillery pieces and radio trucks...both American and German. One jeep I noticed had a working BC-654 receiver/transmitter complete with dynamotor, huge battery cables and a tall whip antenna.

Among the activities were WW II veterans giving lectures on their experiences. A radio station was set up to broadcast an "on the air" drama staged with live actors, sound effects and vintage 1944 commercials. I also came across some working American and German radio sets in field tents along with a demonstration of Tom Perera's Enigma machine.

I noticed about 120 flea market vendors with all sorts of military memorabilia for sale but few radios. A "Gibson Girl" radio, complete with all accessories, including the parachute, sold for \$1500. This hand-cranked emergency radio, stored on B-17s and B-24s, was tossed out of the plane as it was going down (although this was probably the last thing I'd be thinking of if I were on board). The set would broadcast on 500 kHz plus another selected frequency,

sending out an S.O.S automatically as you cranked the generator (no easy task). An aerial was kept vertical via a balloon in calm weather or a kite in windy conditions

The airshow included a B-29, B-17, B-25 and the sole flying B-24 as well as vintage fighter planes. Rides on some of them were available but cost was in the hundreds. The typical French village is a permanent fixture of the airport, and mock battles are part of the entertainment.

Reading is just 15 miles from Kutztown and cost for the entire weekend is \$25. However, it gets quite crowded. But if you want to experience the "feel" of the WW II era, nothing beats this show. The dates for next year's weekend is June 3,4 and 5.



At our recent tailgate swapmeet at InfoAge, NJARC member John Ruccolo showed off his B-24 T-shirt, a souvenir of an actual flight he took on this vintage bomber. I wonder if he got it at **Reading**?





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# MEMBER PROFILE: BILL ZUKOWSKI

# By Sharon Hahar

It's nice to see ourselves in the eyes of non -collectors. Bill prefaced the following article with the following: "I live in an "over 55" community where I'm the photo editor for our local monthly magazine. With just over 1400 families living here, there is no shortage of interests and hobbies. A few months ago, the staff decided to start running articles on collections that some residents have. I normally don't make a big thing about my hobby, as it's sometimes outside the norm - most interests here are golf, card playing, glassware and doll collections, etc. Well, someone "turned me in" and suggested an article be written about my interests and collections."

Would you like to be "turned in?" I'd be glad to stop by, take a few photos and spotlight your collecting interests...Ed

Way before cell phones, my husband and I had CB's in our cars. I still remember my handle, "Breaker, Breaker 19, Snapper Blue signing on," or something similar. What brings this memory to my mind is that I was invited into the home of Bill and Lynn Zukowski to listen to Bill talk about his electronics collection. Bill swears that this interest is not hereditary and doesn't know where it came from. It seems that a young Bill (three years of age), was sitting on his mother's Electrolux and proceeded to pull the power cord from the vacuum and put it in his mouth. His mother, finding him blue, whisked him up, ran to a friend for help and, fortunately, they revived him. He remembers (at four years of age), being under a table and taking apart the phone jack with his dad's screwdriver. By eight years of age, everyone was giving Bill their broken radios to take apart and he even fixed one! (Probably accidently...)

We started off by Bill speaking about his collection of 200 radios ranging from a 1926 Atwater Kent to transistor radios from the 1980's, and more than several were outstanding. My personal favorite was a WW II radio made in Germany in 1945 that he restored. This very basic radio, priced reasonably, was sold to the

German people to enable them to listen to local propaganda. Unfortunately, things backfired. Yes, listeners heard the local broadcasts during the day, but due to radio signals traveling farther at night, they also heard broadcasts from the Allies. Bill entered this beauty in a contest and won first prize. Instead of replacing the faulty components with contemporary ones, he painstakingly rebuilt them by inserting new components inside the old ones. The detailed way Bill restored the radio did not change the inside or the outside, thereby keeping it pristine.

Bill chose three radios that I thought would be of particular interest. Bill says that his Majestic Model 52 was the company's first to use the newly developed "Superheterodyne" circuit and sold for \$112 in 1930. His metal-cased Hallicrafters "Sky Courier" was made for and distributed to the military in 1942; this radio could run on batteries or house current, and was used as troop entertainment and morale-boosting during WWII. His yet to be restored Radiola 17 was RCA's first "light socket" powered radio. Most other radios of the time were considered "farm radios" that only ran on batteries, but the Radiola17 was RCA's first to use house current and was a big step forward for consumers. The Radiola 17 sold for \$130 in 1927 and is a wood table radio.

But wait, it's not over! Next we were on to Bill's collection of about 190 microphones. One, shaped like a rectangle, is an RCA 44B, circa 1935. This type was used by Frank Sinatra, Chet Baker, Kate Smith, Alan Freed, Lowell Thomas, Margaret O'Brien and Durwood Kirby. One shaped like a pill is an RCA 77D, circa 1945, the likes of which was used by Larry King, an early Johnny Carson, Hoagy Carmichael, Edward R. Murrow, Nat King Cole, Groucho Marx (on "You Bet Your Life"), and (sigh) Elvis Presley.

Bill's enjoyment in restoring radios and microphones brings us to two organizations that he belongs to: The Antique Wireless Association (AWA), an international organization, who holds an annual convention in Rochester, NY and the New Jersey Antique Radio Club (NJARC) that meets in Wall Township and Princeton, NJ where Bill is also a trustee. The NJARC holds quarterly "Clinics" where the public can bring their old radios to be repaired for the cost of parts. Where else can one get their 1940 Philco "refrigerator radio" repaired?

An interesting collection. "Snapper Blue over and out!"



Bill Zukowski congratulates NJARC president Richard Lee on a successful Summer swapmeet at InfoAge.



Just when you think that radio collectors are slowly becoming a fading breed, a closet enthusiast shows up to rekindle hope for the future. In a recent article in the *Montclair Times*, Bob Cannon describes how Montclair New Jersey native and longtime fan and restorer of vintage radios Al Schapira spotted an Adams-Morgan RA-10 tuner on eBay and arranged with the Montclair Historical Society to bid on the item. With some private funding from the Historical Society, Schapira bought the tuner from its Kansas owner for \$285.

The Adams-Morgan Company was founded around 1910 by Montclair NJ resident Alfred P. Morgan. Per Alan Doulas (*Radio Manufacturers of the 1920's*), Paul Godley met Howard Armstrong in 1914 and found that Armstrong was unable to make his new regenerative circuit on short waves where the amateurs were. Godley set to work, tuned his grid and plate circuits with self-resonant variometers, and the Paragon receiver was born.

Godley bought into Adams-Morgan in 1915 and the RA-6 (180 to 580 meters) was offered in 1916 at a cost of \$35. It quickly could be found in many of the better ham stations. The RA-6, like the RA-10, was a tuner only; the user had to provide the vacuum tube detector and amplifier.

Godley redesigned the tuner, adding a variable condenser in the secondary circuit and a variometer in the plate circuit, and this became the RA-10 in 1920 which I also have in my collection. The RA-10 was Godley's choice as one of the receivers taken to Ardrossen, Scotland for the Amateur Transatlantic Tests in 1921. Though most of the stations were actually received on Godley's homebrew superhet, an RA-10 and prototype DA-2 detector/ amplifier were set up. Adams-Morgan took full advantage of the advertising potential of the transatlantic tests claiming the Paragon had received all of the ham stations.

Schapira is still restoring the RA-10 in his basement workshop; he said it was delivered in terrible condition with 95 years of grunge and dirt on the outside and termite damage on the bottom. But for Schapira, bringing back such relics and being able to display them for all to see is a joy that many of us share. "Living in Montclair, I had no idea there was a radio factory here until I saw this radio that said 'Made in Montclair' on it, and that started the whole thing." Although Montclair is no longer a hub of radio innovation, collectors like Al Schapira help preserve this little-known aspect of a New Jersey town's history.

