

# The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB



July 2002

Volume 8 Issue 7



## MEETING/ ACTIVITY NOTES

Reported by Mary Beeferman

NJARC members attended another very pleasant meeting at the Sarnoff Library this June. John Dilks provided some pre-meeting entertainment with tours of his mobile radio museum which was also enjoyed by members of the Sarnoff Radio Club who attended as guests. Reinstatement of the present slate of officers for a two-year term was confirmed by a hand vote of the membership since all positions, except one Trustee position which was won by Ray Chase, remained uncontested by the start of the meeting.

Richard Lee presented an amusing video which captured his visit to an Italian flea market during a recent vacation. Richard noted that, quite unlike flea markets in the US, those in Italy start about 8 AM and may continue through the evening. Although prices are considered high, Richard managed to bargain successfully for two nice "radioricevitori" which he displayed at the meeting. In addition, a 6U5 was purchased for a reasonable price (\$5) and a Philips DF-91 (IT4) with its tax stamp attached was purchased for its display value.

Richard also provided some nice handouts including examples of early Italian radios, a listing of popular Italian radio manufacturers (most are located in Milan and Torin), a translation of Italian radio terms and website examples for collectors of vintage Italian radios. Some sites that may be of interest include:

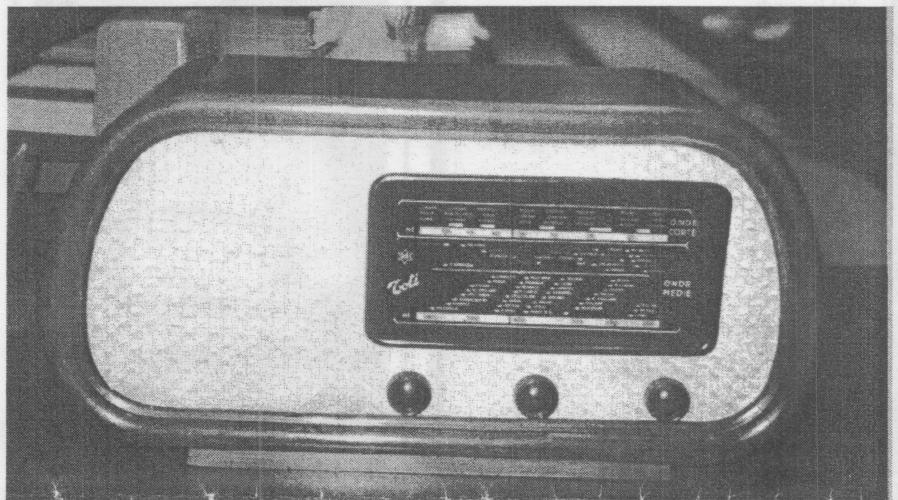
- <http://www.radionostalgia.net/inizio-e.html>
- <http://www.museoscienza.org/english/Default.htm>
- <http://aireradio.org/index-i.asp>

## MEETING NOTICE

### \*\*\*\*\*IMPORTANT!\*\*\*\*\*

The next meeting of the NJARC will take place on Friday, July 12th at the Sarnoff Library on 201 Washington Road in Princeton. A map was provided in the May *Broadcaster*. This is only a temporary location until a permanent meeting place can be found.

\*\*\*\*\*  
A show-and-tell session will highlight the July meeting so bring in one or two items that you feel our members might find interesting, fascinating, engrossing, absorbing, engaging or just plain fun. We'll also update you on progress at InfoAge with regard to the National Broadcaster's Hall of Fame.



One of Richard Lee's "Italian" finds in a beautiful bentwood cabinet.

Dave Sica also made use of the Sarnoff Library's presentation capabilities by giving members an on-line tour of our website. A mini-auction capped off the evening's activities.

The club's display at the East Jersey Olde Towne Village in Middlesex County is just about complete and has been named "A Visual History of Home Radios: 1920 to 1950." Radios and display pieces were dropped off during the last two weeks of June by Martin Friedman, Walt Heskes, Phil Vourtsis, John Ruccolo, Ray Chase

(who has made multiple trips), Rich Skoba, Joe Bentrovato, Marsha and Jerry Simkin and your editor. The ability to divide the display over three rooms, each with its own theme, and place the items in well-placed display cases gives the presentation a very organized and professional look. We'll have some pictures ready for next month's *Broadcaster*. We do have some photos of Ray Chase's Plainfield Library exhibit as an example of what can be done locally to support our club charter and advertise our existence.

**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 \$15 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.

**PRESIDENT:**

Phil Vourtsis  
13 Cornell Place  
Manalapan, N.J. 07726  
(732)-446-2427

**VICE PRESIDENT:**

Richard Lee  
154 Hudson Terrace  
Piermont, N.Y. 10686-1014  
(845)-359-3809

**SECRETARY/EDITOR:**

Marv Beeferman  
2265 Emerald Park Drive  
Forked River, N.J. 08731  
(609)-693-9430

**TREASURER:**

Sal Brisindis  
203 Cannon Road  
Freehold, N.J. 07728  
(732)-308-1748

**SERGEANT-AT-ARMS:**

Dave Snellman  
Box 5113  
New Britain, PA 18091  
(215)-345-4248

**TRUSTEES:**

John Ruccolo (609)-426-4568  
Gary D'Amico (732)-271-0421  
Martin Friedman (732)-238-1047

**TECHNICAL COORDINATOR:**

Al Klase  
22 Cherryville-Station Road  
Flemington, N.J. 08822  
(908)-782-4829

**TUBE PROGRAM:**

Gary D'Amico  
84 Noble Street  
South Bound Brook, N.J. 08880  
(732)-271-0421

**SCHEMATIC PROGRAM:**

Aaron Hunter  
23 Lenape Trail  
Southampton, N.J. 08088  
(609)-267-3065

**CAPACITOR PROGRAM:**

John Ruccolo  
335 Butcher Rd.  
Hightstown, N.J. 08520  
(609)-426-4568

**WEB COORDINATOR:**

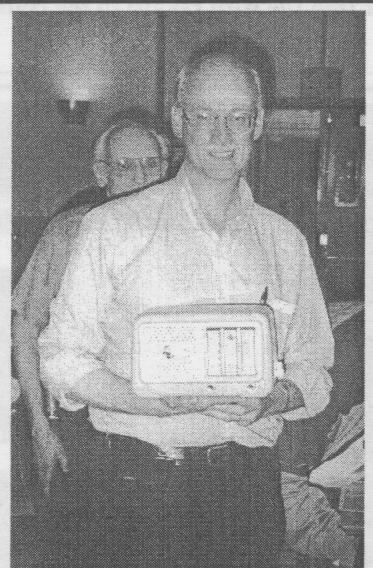
Dave Sica  
(732)-382-0516  
<http://www.njarc.org>

**MEMBERSHIP SECRETARY:**

Marsha Simkin  
33 Lakeland Drive  
Barneget, N.J. 08005  
(609)-660-8160



Ray Chase's Plainfield Library exhibit.



Another of Richard's Italian imports.



Marsha and Jerry Simkin display their wares.



Although this unit is not plugged in, your editor still observes proper safety precautions.



John Dilk's Mobile Museum is nicely framed by the Sarnoff Library's landscaping; as usual, somebody always has to turn the dials.

## NJARC CONTINUES WITH BROADCASTER HALL OF FAME INVENTORY... Temporary Location Announced

By Marv Beeferman

On Saturday, June 29th, 11 members of the NJARC gathered at InfoAge to continue with the inventory of the artifacts, tubes and reference material of the National Broadcaster's Hall of Fame. (For the history of the NBHF, see Ray Chase's article in this issue of the *Broadcaster*.) Included in the group were Phil Vourtsis, Edith and Ray Chase, Marsha and Jerry Simkin, Steve Rosenfeld, Nathan Guedalia, Dave Snellman, Al Klase, Rich Skoba and your editor. The group also received an update from InfoAge director Fred Carl on the progress being made on readying the home for the NBHF and other important InfoAge developments.



The volunteers

The NBHF is destined for a permanent home in Area B building 9001 which was scheduled for transfer in June. Except for needing a new floor and some air conditioner work, the rest of the building is in excellent condition. However, the sewer repair issue is still a sticking point and until it is resolved, transfer may be delayed until the Fall or as late as Spring 2003. But, with the 9003 cottage now available, it has been offered to the NJARC as a temporary NBHF home until the Area B transfer is completed.

Following base closure, the Army allowed the 9003 cottage to deteriorate from

its former excellent condition; water in the basement initiated a mildew attack that played havoc with the walls and floors on the lower level. But following this discovery, a coat of mildew-resistant paint and the addition of dehumidifiers has stabilized the problem. The cottage is presently close to a move-in condition with some six small rooms available to accommodate the themes of the NBHF. Plans for a security system to protect the building have been initiated in addition to reconnecting the toilet lines to its original septic tank (similar to the method used for the restoration of the neighboring 9002 cottage).

The grounds surrounding the cottage are extensive and beautiful and are slowly being restored; InfoAge has an agreement with the township for free upkeep in the future. The club is seriously considering a picnic and swapmeet for late Summer so as many members as possible can have a chance to get a first-hand look at the cottage, building 9001 and the NBHF artifacts.

In other developments, the Diana site restoration is progressing very nicely with extensive work being done by the OMARC (Ocean-Monmouth Amateur Radio Club) on building 9116. The building was used as a base for International Marconi Day and a local group of Boy Scouts were given an introductory class on wireless; this fall, the club hopes to offer Ham license classes. InfoAge has also presented a interesting proposition to a wireless tower construction company. The idea is to build a reproduction SCR-271

"bedspring" antenna that was used in 1946 for Project Diana and operate it as an active cell tower. Additionally, painting the Diana Dish would be part of the proposition, with InfoAge supplying the paint.

InfoAge is also investigating the possibility of purchasing a non-functional (but "looks like it's working") SCR-584 radar from a company that offers a fully restored unit for \$12,500.

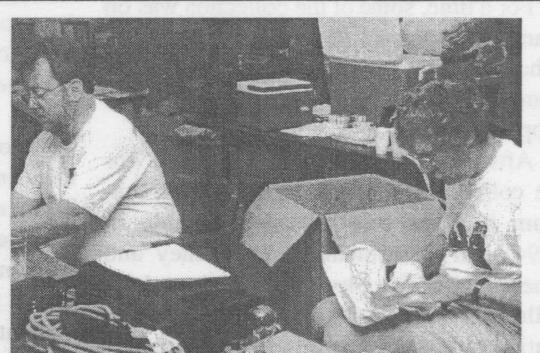
What is the relationship of the SCR-584 to Camp Evans? Here's how director Fred Carl describes it:

"In the 1930s, our Camp Evans heroes wanted to use micro-waves in their radar but they could not build or buy a powerful enough tube to generate the waves. Dr. Zahl was able to develop a long-wave tube and the Signal Corps went with it. In late 1939, when the scientists of Harvard and MIT offered to help the war effort in radar development, the Signal Corps appreciated their offer but what did a bunch of 'long-haired scientists' know about military systems?

To keep the MIT guys busy so the Signal Corps could run the current war, they were given the task of developing radar based on micro-waves. Dr. Zahl and friends felt they would have something ready for the next war. Surprise! During early 1940, British scientists developed the breakthrough cavity magnetron in secret. It used micro-waves and was 10 times better than any micro-wave generator before.

The British gave us the device and the MIT scientists had a prototype radar system (the XT-1) ready in December 1941. So much for keeping them occupied for long! The prototype was re-engineered and integrated with IFF at Camp Evans in secret into the SCR-584.

First used in the Anzio landings in February 1944, it saved the landing since the Nazi's had developed jammers for our long-wave radar. Until the SCR-584s were set up on the second day, the Nazi's had air superiority. In a few hours, the Germans had flaming wreckage."



Dave Snellman and Marv Beeferman catalog the tube inventory with assistance from Al Klase, Ray Chase and Nathan Guedalia.

## THE NATIONAL BROADCASTERS HALL OF FAME

### What Is It and Where Does It Come From?

By Ray Chase

Now that NJARC is custodian of The National Broadcasters Hall of Fame, some of you may be asking the question, where did it originate and what is its history? Since I had the same questions, I checked into some of the material now housed at Camp Evans and reviewed the information on [www.infoage.org](http://www.infoage.org). The following is a brief summary.

Arthur Schreiber of Freehold who was the publisher of the Freehold Transcript and the Colonial News created the Hall of Fame on May 1st, 1977 along with his son Josh. They collected artifacts, both the physical equipment as well as program material, advertising and anything else related to broadcasting. (Many of the older artifacts came from the Ed Rasher collection in Trenton). Much emphasis was placed on programming so that visitors could hear and relive the experience of famous broadcasts as well as many of the dramatic and entertainment shows of the "Golden Age of Radio". Fred Shay of Mt Arlington, NJ was also instrumental in the Hall of Fame as he has collected more than 45,000 radio shows, some in script form but most on tape. The Schreibers housed the collection in a former bank building in freehold from 1977 to 1984 when they lost their lease there.

For a time, some of the collection was on loan for display in an Asbury Park hotel. When that hotel went bankrupt, the Hall of Fame had to go to court to reclaim their property and that took several years.

After searching for a new location for the collection, a site at the Anaheim Stadium in California became available in 1994 with sponsorship from Disney and others. Extensive plans were made and the collection was moved to California in anticipation of a grand opening in new quarters. Unfortunately, about that time the baseball strike occurred and the political winds in California shifted and the museum was suddenly without a home.

The collection languished in storage

through several other unsuccessful attempts to find a home for it and then in 2001 it was offered to Info Age. The New Jersey Broadcasters Association (NJBA) paid for the shipping to bring the collection back to New Jersey and store it at Camp Evans. This is where it now sits waiting for us to reassemble it and put it on display once more.

Over the years, the Hall of Fame has held elaborate induction ceremonies to induct 89 pioneers and celebrities from the broadcasting field into the Hall of Fame. Induction ceremonies from 1977 to 1993 were conducted in New York and New Jersey. For example, the 1993 induction ceremonies were held at the Friends of Old Time Radio convention at the Holiday Inn North in Newark. Induction ceremonies in 1994 and 1995 were held in Beverly Hills and Anaheim, CA. The last induction ceremonies were supposedly held in New Jersey in 1996. The list of past inductees is truly notable and represents a veritable "who's who" of the broadcasting and entertainment industry.

## THE THEREMIN: STORY OF THE FIRST ELECTRONIC MUSICAL INSTRUMENT

By Scott Marshall

*Unfortunately, the photos Scott provided with this article were in a format that could not be transferred. Poor quality copies can be found on page 8. I'll bring copies of his original article to the next meeting...Ed*

Working with early electronic equipment in Russia in 1920, Lev Sergeyevich Terman, a 24 year old laboratory assistant, discovered that moving his hands near his vacuum tube circuits would make them emit a rising and falling musical tone. A student of the cello, he spontaneously started to play tunes on it. After showing the effect to his supervisor, he was encouraged to develop a musical instrument using the principle. The result, about a year later, was a device that used two antennas

to generate a pair of electromagnetic fields, one of which controlled the instrument's pitch, and the other the volume. It was, and still is, the only musical instrument played without touching it.

Lev demonstrated his "Termenvox" around Moscow to great acclaim. After showing it to Lenin, he was sent on a concert, demonstration and propaganda tour throughout Europe as proof of the dominance of Soviet technology.

His name was anglicized to Leon Theremin upon his arrival in the United States, and his "Theremin" caused a sensation. In 1929, RCA test marketed commercial instruments. Five hundred were built, but sold very poorly.

A petite teenage Russian girl, Clara Reisenberg, was touring at that time as a violin prodigy and was introduced to "Professor" Theremin in New York. She became fascinated with its possibilities. Medical problems forced her to abandon the violin, but she became so proficient on the theremin that she remains to this day its most accomplished performer. Better known by her married name, Rockmore, a CD, "The Art of the Theremin," is available of her playing on the Delos label.

During World War II, a violinist/thereminist from New York named Samuel Hoffman, moved to Los Angeles to set up a podiatry business and registered there with the musician's union. Soon after the war, he was asked to play in the soundtrack of Alfred Hitchcock's classic 1945 movie *Spellbound*. Dr. Hoffman's nervous theremin style henceforth became Hollywood's voice of madness, psychosis, drunkenness, delirium, ghosts and aliens in dozens of films in the 40s and 50s...all performed by Hoffman.

Other devices appeared that made "the theremin sound," like test oscillators (e.g., Paul Tanner's playing for the *Dark Shadows* TV show and the pop song *Good Vibrations*) and synthesizers. Because of their comparative ease in playing on pitch, they retired the theremin instrument from the popular culture, though the sound survives as a psychological trigger for disturbing situations in recent movies (*Mars Attacks*) and television commercials.

Robert Moog built commercial theremins while in college in the 1940s, and in the 1960s redirected his efforts to produce the groundbreaking keyboard "Moog Synthesizer." The theremin is therefore often regarded as the ancestor of

nearly all the electronic musical instruments we use today. Dr. Moog returned to building theremins in the 1980s and through his company Big Briar, Inc., still produces some of the finest and most popular instruments.

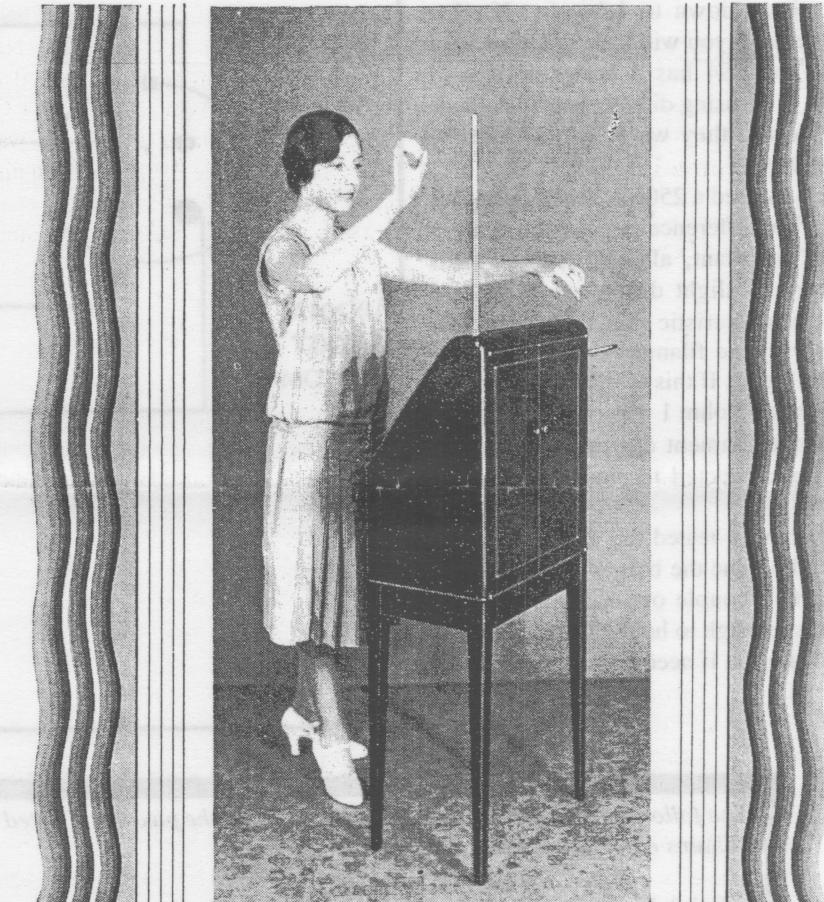
Interest in the theremin was renewed in 1993 because of the award-winning documentary film "Theremin: An Electronic Odyssey." In November of 2000, the complete story of Leon Theremin and his instruments was published in book form, *Theremin: Ether Music and Espionage*.

## REBUILDING A UX201A (Sort Of)

*There's nothing prettier than an exposed-tube radio, like an Atwater Kent breadboard, populated with brass-based/tipped 01A's. If you're interested only in a display piece, duds will do nicely and the price will be significantly lower than if working tubes are used. But if you prefer a fully operational radio and want to avoid the expense of purchasing working tubes, the following article may be helpful. It was suggested by NJARC member Aaron Hunter and comes from the Canadian site <http://www.joystick.ca/radiola.htm>. Aaron notes that the site is interesting since its home page is run by a bowling manufacturer...Ed*

This neat trick can be accomplished using a commonly available 1S4 tube or something similar. I have found through some experiments that this tube gives results close to the original 01A, although you can easily use other tubes like a 1U4 or even a 6BA5, etc.

The first step in your quest is to disassemble a dead 01A, preferably a nicely silvered globe. The silvering in the original will serve to hide our new tube from being easily detected. The old wires must be unsoldered from the tube pins (these are hollow and the wire is soldered into the tip). Sometimes you will see that the old solder joints have cracked and let go. If that is true, lucky you! Just re-solder them, and test the tube! If you are lucky it will still work.



*Simple and graceful movements of the hands produce and control the tone of the RCA Theremin. The young lady is playing a note of rather high pitch (note position of right hand) and powerful volume (controlled with left hand).*

I find that decent solder sucker can be a big help when removing the old solder. The holes in the pins will be large enough to allow the lead to move back and forth when it has been unsoldered. Once all four leads are loose, you will now have to remove the glass from the socket. Usually the original adhesive has already let go and a gentle turn of the glass in the socket will free it up so you can then pull it out. Use extreme caution when doing this in order to not damage the bulb or cut yourself. You might want to use gloves when doing this. If the bulb is stubborn, you might be able to loosen by immersing the socket in hot water.

Once the bulb is out, you can remove the vacuum by breaking the evacuation nipple in the bottom of the tube.

The bottom of the tube must now be opened up completely, to make room for the new tube & socket. I have found that this can be done by using a carbide grout scraper to score the glass around the base. By gently scoring around the bottom you will eventually be able to cut away the glass and then remove the insides.

Get some clear coat automotive lacquer and spray it as evenly as possible inside the bulb. This will prevent the silvering from being exposed to the atmosphere, preventing it from turning white with age.

The 1S4 must fit in a small socket - this means that you may have to remove the mounting flanges - they may have to be cut off so every thing will fit inside the old bulb.

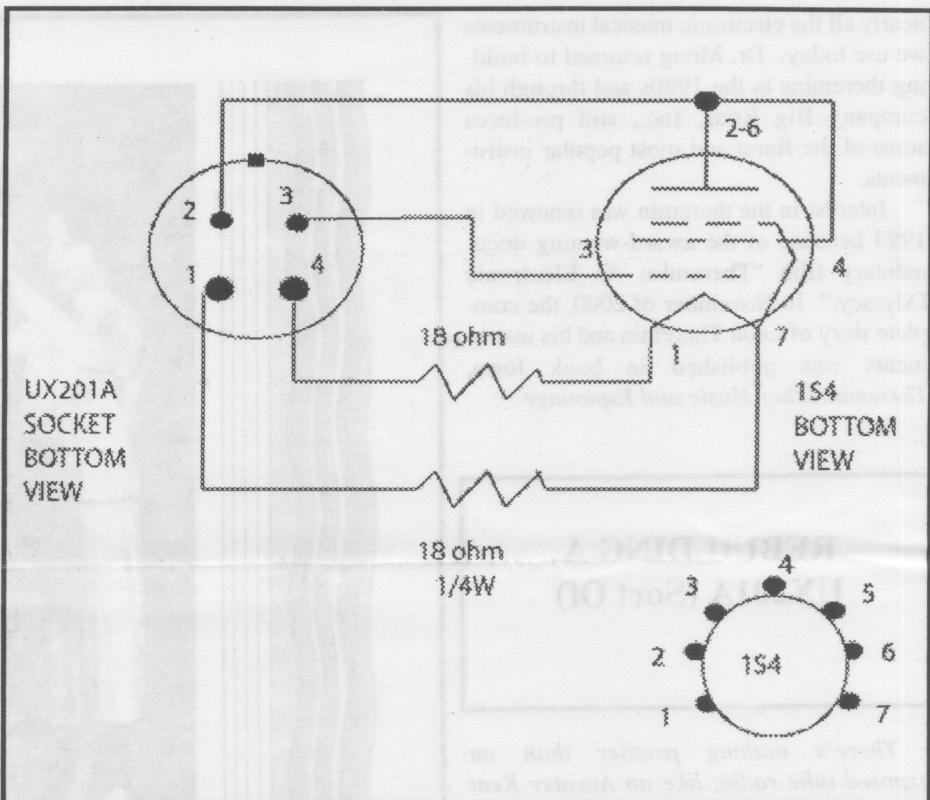
Now the fun starts! The rest is easy,

just follow the wiring diagram to the right. The resistors are necessary to drop the filament voltage down to 1.4 volts. If other tubes are used, you will have to chose other values. The 1S4 has a heater current of 100mA. I like using directly heated cathode tubes because they warm up fast like the original 01A.

The 01A used a 250mA heater current at 5 volts. The difference in current usually is not too important, although some radios may notice a slight difference in volume control characteristic due to the rheostat used to vary the filament current and thus the overall gain. If this is a problem you can add an extra 33 ohm 1 watt resistor in parallel with the filament circuit. This resistor would be connected to pins 1 & 4 of the 01A.

After having tested the tube in your favorite radio, glue the bulb over the new innards with a couple of small dabs of silicone - just enough to hold it there - so it can be opened again if needed.

Enjoy!



*The following was provided by Ludwell Sibley on the passing of noted Atwater Kent historian Ralph Williams early last month...Ed*

Ralph Williams, the country's leading expert on the Atwater Kent company and its radios, was born in 1920. After serving in WW II as a radar officer, he graduated from Northeastern University in engineering in 1947 and later attained a masters degree. He had a career in electronics with General Electric, first in the broadcast-equipment area and then in missile-guidance systems. He began collecting radios in 1958. While living in the Philadelphia area, he developed an strong interest in former radio manufacturers in the vicinity like RCA Victor and especially AK.

Williams developed a superb collection of Atwater Kent documentation and receivers, particularly breadboards. From this, he wrote profusely on AK corporate history, radios, and speakers: 14 articles in "Antique Radio Classified"; four articles in, and one complete issue of, the "AWA Review"; and a 37-part series in "Radio Age." In 1985, he opened his "Voice of the Twenties" private museum on Long Island with about 220 Atwater Kent receivers (including the country's finest collection of breadboards) and another 250 sets of other makes. He participated in the ceremony in Philadelphia opening the 1927 time capsule at the former AK factory at its 50th anniversary.

He was a founder, president, and board member of the Antique Radio Club of America. Ralph and his wife Elinor for many years organized the equipment contests at the annual AWA conference. He and the late Bruce Kelley were the only holders of AWA Houck Awards for both preservation and documentation. He had been a member of the IEEE and was a Fellow of the Radio Club of America, a recipient of its Ralph Batcher Memorial Award.

Williams was an radio amateur with Extra Class license N3VT. He remained active in the areas of VHF repeaters and license coordination recently.

# NEW JERSEY ANTIQUES RADIO CLUB

## ANTIQUES RADIO SWAPMEET

SATURDAY, JULY 27, 8:00AM - 1:00PM

AMERICAN LEGION HALL, DOVER NJ

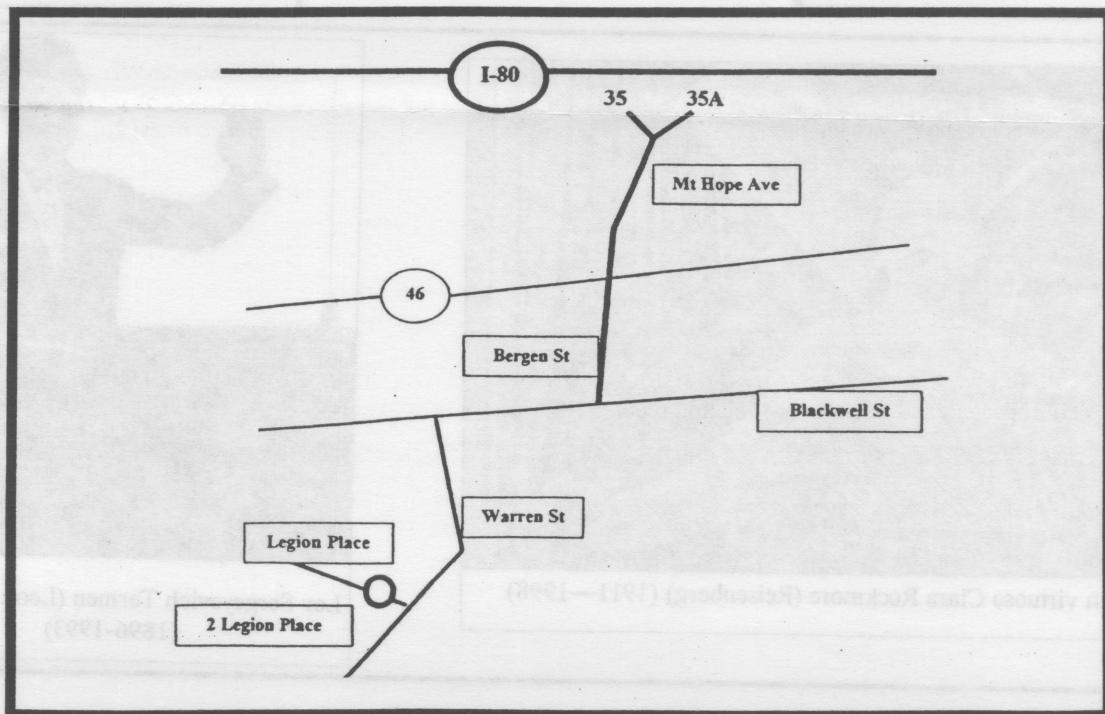
NJARC presents its Summer swapmeet at the spacious, air conditioned American Legion Hall in Dover NJ. A \$2.00 club donation from buyers is suggested. Tables are guaranteed to the first 65 reservations.

**DIRECTIONS:** From the East, North or South, take I-80 West to exit 35A (Dover). I-80 West can be reached from the North via I-287 South or the Garden State Parkway (South) or from the South via the NJ Turnpike (North) to the Garden State Parkway (North) to I-280 West. From the West, take I-80 East to Exit 35 (Mt Hope, Dover).

Follow Mt Hope Ave. South, crossing Route 46 (where Mt Hope Ave. becomes Bergen St.) and turn right on Blackwell St. Go to the third light and turn left on Warren St. Go two blocks, crossing the RR tracks. The American Legion is on the right (2 Legion Place).

**RATES:** NJARC members \$15/table; non-members \$20/table.

**CONTACTS/RESERVATIONS:** Marv Beeferman, 2265 Emeralda Park Drive, Forked River, NJ 08731 (609-693-9430). Phil Vourtsis, 13 Cornell Place, Manalapan NJ 07726 (732-446-2427)



**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.

**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.

**For trade only...repair clinics, savings on swapmeet tables, tubes and capacitors, 12 issues of this year's Broadcaster, mini-auctions, technical presentations, contests, parties, fellowship of sharing a common interest with friends...\$15 check made out to NJARC. Marsha Simkin, 33 Lakeland Drive, Barnegat, NJ 08005**

Need a new home for a 1950 Admiral radio, TV, phono combination, model 32X36A. Complete, cabinet in good condition, has 12" round picture tube. Make an offer...must go. Local delivery possible. Aaron Hunter, 23 Lenape Trail, Southampton, NJ, 08088, 609-267-3065.

The NJARC tube program offers clean, tested, boxed tubes at very reasonable prices with availability at any club meeting (no dealers, please...not for resale). Proceeds go to the club. Of course, donations of radio-type tubes in any condition are welcome. See Gary D'Amico at the next meeting.

New index to AWA publications (*Old Timer's Bulletin*, *AWA Review*, misc.), 1960 through Aug. 1999. Formatted like the earlier version but with new "Author" section. Has 63 pages, 8-1/2" X 11" size. Gives 7000+ citations. \$12 postpaid anywhere. Make check/MO payable to: Ludwell Sibley, 102 McDonough Rd., Gold Hill, OR 97525.

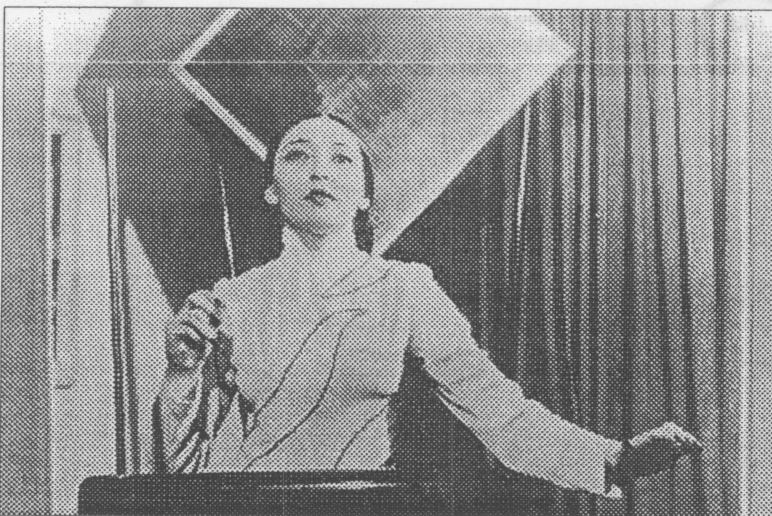
Philco console, circa 1940, needs minor repairs. \$60 or will take best offer. Tom Musocchio, 609-448-1688.

Supplement 3 to Ludwell Sibley's *Tube Lore* is now available. At 24 pages, it replaces the 1997 8-page supplement. Included is an expanded index, new details on early Western Electric tubes, info on Western Electric tube sockets, fuller material (a page-plus) on Rogers tubes, pinouts for post-1948 Western Electric tubes (published for the first time ever!), the date code for RCA '50s-'70s receiving tubes and the 200 "most-often-needed" basing diagrams covering 1300+ tubes found in everything from an All-American 5 to a Trans-Oceanic. To order, mail your name and address, printed clearly, with six 34-cent stamps to:

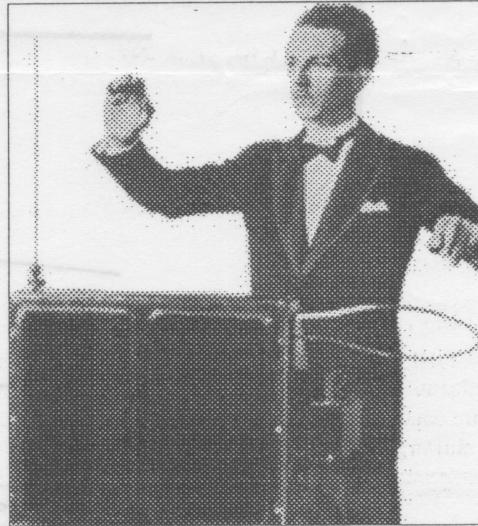
**Ludwell Sibley  
102 McDonough Rd.  
Gold Hill, OR 975-9626**

**WANTED**

Your surplus radio knobs. Buying bulk stock of pulls for matching service and resale. Look for Gobs of Knobs at regional swapmeets and monthly DVHRC meetings. Bring your orphans and I just might have its relatives in stock. Dial pointers also available. Mike Koste, 57 Tennis Ave., Ambler, PA 19002. (215)-646-6488



Theremin virtuoso Clara Rockmore (Reisenberg) (1911—1998)



Lev Sergeyevich Termen (Leon Theremin) (1896-1993)