

# The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

Summer 1996

Volume 2 Issue 9



## MEETING/ ACTIVITY NOTES

Reported by Marsha Simkin and  
Marv Beeferman

The August meeting of the NJARC was held on the 9th in Freehold. Several items that were discussed at the recent Executive Committee session were brought up to the membership:

A joint swapmeet venture between the NJARC and the Delaware Valley Historic Radio Club (DVHRC) was tabled; however, a motion for a joint picnic with tailgating was passed by members present. Plans are for the picnic to be held next spring, with the emphasis on friendship, family and a shared hobby. Jim Whartenby volunteered to chair this event.

A proposal for a museum committee to investigate the possibilities of a club-sponsored museum was brought to the floor. There was much input on the topic ranging from location (State of New Jersey Technical Museum, Camp Evans) to insurance, donations and security. Members talked about what kind of museum we might be interested in, overhead, utilities, affordability, etc. The question was raised whether it should be orientated toward "radio buffs" only or more in line with an educational facility for the general public and children which would compliment our charter. Discussion was lively, with members asking such question as: Would the exhibits be donations? What are the logistics involved in operating a museum? Would we want to maintain a section of an already established museum?

The membership went on to approve the Executive Board's 8/0 vote in favor of accepting our bank account balance as reviewed and stated. Treasurer Jerry Dowgin requested permission to invest 3/4 of it in CD's, which was also approved.



## MEETING NOTICE

The next meeting of the NJARC will take place on Friday, September 13, 1996 at 7:30 PM at the Grace Lutheran Church, corner of Route 33 and Main Street in Freehold. Contact Marv Beeferman at (609)-693-9430 for directions. This month's technical program will temporarily yield to our always popular show-and-tell session, so please bring an item of interest to share with the club. In addition, be prepared to reserve a choice table for October 5th's swapmeet and auction which is expected to gain momentum following the "what made me buy that ?xx!?!# radio in Rochester" syndrome.

The club's new bank accounts will be maintained at the Ocean Federal Bank in Whiting.

With John Dilks at the helm, the club has approved setting up an Internet Home Page with the following address: <http://www.globalent.net/oldradio>. For the present, the page features information about the club, news of our upcoming swapmeet and auction, John's Mays Landing library exhibit and associated photos. The Web page will be updated several times a week for the next two weeks as additional club information and member's photos become available. After that, it will be updated at least once a month. Our goal is to foster interest in old radios and add new members to our roster. It is estimated that the cost will be around \$20 a month.

Our next swapmeet and auction (including at least 2 estates) will be held on Saturday, October 5th at the Hightstown Country Club; see the attached flyer for details. Bring a list of NJARC donations and/or consignment items to the next meeting (or contact Marv Beeferman or Bill Overbeck) so they can be included in the auction catalog. With regard to future meets, the membership approved a suggestion carried by an 8/0 Executive Board vote that all future events sanctioned by the membership will be run by the Executive Board. Volunteers will still be required for staffing crews for set-up, clean-up,

parking, etc. On the same note, proposals to maintain a club table at official NJARC functions, establishing an individual to coordinate the advertisement of club activities and the printing of club business cards and fliers with key contacts were also passed.

Authorization was requested and received from the membership to increase the Executive Board from eight to nine members with the addition of the Technical Coordinator (presently Tom Provost) in order to ensure a tie-breaking vote.

Hope you got a chance to see the exhibit Phil Vourtsis set up at the Headquarters branch of the Monmouth County Library in Manalapan. The display entitled, RCA Radios and Phonographs-1920's - 1950's, fills 3 glass showcases in the library's lobby. Phil, assisted by Mark Mittleman, Tony Flanagan and Marv Beeferman, did a terrific job.

Lud Sibley presented a very "enlightening" program on lightning and surge protection. Lightning killed more Americans between the years 1941-1991 than tornadoes and is responsible for 20,000 residential blazes a month. I'm sure what Lud said had many of us checking out our homes the next day, or at least ensuring that even a more cherished commodity, our radio collection, is afforded proper protection.

## THE PRESIDENT'S COLUMN

### THE ELGIN ROUTE

By Jim Whartenby

This was our year to try something new. Ruth and I have made three trips to Rochester, NY and we have enjoyed them all, even when the car died some 15 miles from our destination on the first trip...what luck! We drove the 850 miles to Elgin in about 14 hours. The trip was uneventful, and somewhat boring. How much can you see from an interstate highway at 65 miles per hour at night? We arrived at the meet at approximately 9 AM and spent about 20 minutes trying to find a parking space close to the action. I have noticed that when you stop for boat anchors, the heavier the piece the better the bargain. There is no sense in adding distance to this equation. We found a spot on the road in front of the hotel, about comfortable walking distance for loads of thirty pounds or less! By the time we registered and located the facilities, it was about 10 o'clock.

This meet draws people from all over the country. I am forever impressed by the openness of mid-Westerners. They are easy to talk to, helpful, and polite to a fault; but when it comes to bargaining, they are just as hard-nosed as we Easterners. We met John Terry (editor of *Antique Radio Classified*) along with Marty Bunis, Chuck Dachis, Bill Overbeck (president of the DVHRC), Tom Burgess and M.L. Young, both avid collectors from Arkansas, and many others. In any event, Elgin is easily as big as, if not bigger than Rochester with a large hotel parking area and an overflow area in a field across the street. The only difficulty with this arrangement was that the field was not cut and on the first day the weeds were quite high. The weather was clear and in the low 80's and not too humid...in other words, just about perfect.

I found some interesting military equipment almost right for the collection but close inspection revealed flaws that were overlooked the first time around. I couldn't get my price, so I moved on. Ruth

on the other hand had no problem finding a heavy chairside receiver at an extremely good price...we brought in the car for this one.

I skipped the Motorola Museum trip only because it was about three hours after we arrived and I didn't want to miss anything at the flea market. But I would strongly recommend the Muchow Museum...it was spectacular! This private collection was acquired by one man, a dentist, over a thirty year period. All of the display sets work and there are hundreds. There are not many sets from before the early days of broadcasting (1924); the collection is mostly mass produced home entertainment sets. Name the manufacturer and there is at least one example. The first room contained breadboards, most sporting brass based tipped and Arcturus blue "01" tubes. There were other rooms full of more radios and early test equipment, toy motors, communication receivers, and so forth. There were theme displays of DeForest, Armstrong, Atwater Kent and many others. The displays were tight, but I wouldn't say cramped and every item could easily be seen. With at least eight rooms full of equipment, it is hard to remember all the finer details but considerable effort was clearly evident in each display.

We stayed only two days at the meet. The auction was forfeited so that we could see a bit of the country. Taking secondary roads and avoiding the interstates, Ruth and I cut through Illinois and Indiana into Ohio. We stopped at several Antique Malls and had a grand old time. I made a special stop at Fair Radio Sales in Lima Ohio. Anyone who has any special interest in military equipment has one of their catalogues which does not do their show-room justice. Incredibly, in a room about 25 by 40 feet, I saw World War II black crinkle finished radio compass receivers and test equipment right along Halli-crafters and Collins gear of all descriptions. There was even surplus equipment that I installed new when I was in the Air Force in the early 70's...a sure sign of age. There was a smaller room off to one side containing more of the same equipment. But this was just the showroom; the rest of the catalogue equipment is located in the basement and another building out back, both off-limits to customers. I could

easily spend days rummaging around, over, under and through; talk about great vacations!

Ruth and I spent our last night on the road in Kent, Ohio. There we ate at Mike's Place, a very interesting establishment which has a bus as an additional dining area. The menu was so unique that I bought one as a souvenir. The next day we explored Western Pennsylvania. At one of the larger Antique Malls, I found, of all things, a rare military receiver. But I'll reserve this story for this month's show-and-tell session...hope you can make the meeting to hear it.

Jim

## A MUSEUM FOR NJARC

By Ludwell Sibley

*Discussion at last month's meeting resulted in the exchange of some valuable input regarding the feasibility of a NJARC museum. In this article, Ludwell Sibley formalizes some of his ideas. All members' views are both solicited and appreciated. Ed.*

### 1. WHY A MUSEUM?

Apart from a general view that museums are a good thing, people and organizations run them for a variety of reasons. In NJARC's case, the motives might be:

- Build the public's consciousness of "radio" - on whatever basis they prefer: funky old-time material that they hadn't encountered before, simple nostalgia, or true historical insight. Subject matter can be either artifacts (radios) or program material, preferably a mix.
- Draw attention to the hobby of collecting radios and other electronic equipment.
- Make the club more visible and thus attractive to new members.
- Preserve historic artifacts and papers for future examination.



- Lend radios and other equipment to other museums and TV/video program producers.

- Provide resources (artifacts and a library) for research by restorers and writers.

## 2. THE TARGET AUDIENCE

It is assumed that prospective museum visitors come from the general public and are of all ages. This is a hard group to satisfy because it requires both "hands-on" displays and more static exhibits. There is also a need to address more sophisticated visitors - radio collectors/historians, amateur radio operators, and electronics professionals.

## 3. THE MONMOUTH COUNTY ASPECT

A strong assumption is that an NJARC museum is to be in Monmouth County. No state has a richer heritage in radio-electronics development and manufacture than New Jersey, and one can point out numerous cases where Monmouth County figured prominently. Examples:

- "First use of radio in North America": Marconi's reporting of the 1899 America's Cup races off Sandy Hook, using a temporary receiving station at the Atlantic Highlands towers.

- Pioneering radio research by AT&T (later Bell Labs) at coastal sites like Deal Beach and Bradley Beach; later, radio astronomy research and satellite trials at Crawford's Hill (Holmdel). [The radio astronomy led to a Nobel Prize for W. O. Baker of Bell labs!]

- Early manufacturing - there wasn't a lot locally, but examples from 1924 are MuRad and Marlodyne in Asbury Park, and Robinson Specialty Co. in Keyport. Later manufacturing included small defense contractors around Red Bank, including production of tubes by Bendix at Eatontown, the Electronic Assistance Corp. of Red Bank, and the Trad Television Corp.

of Asbury Park.

- Early broadcasting: AT&T developers were doing experimental broadcasting from Monmouth County before WEAJ was built. WJLK in Asbury Park went on the air in 1926.

- Military radio-electronics: Ft. Monmouth figured in radio and radar development from the '20s. Examples: first Army radars, 1937-40; moon radar, 1946; Project Echo satellite project, 1960.

- Wireless communications: the reinstalled 1913 Marconi tower at Shark River, Wall Township, represents a role in ship-to-shore and transatlantic communications.

These are purely Monmouth County examples. It would be reasonable to cover any number of other aspects of radio history in neighboring counties or the rest of the state. For example, aircraft radio was developed with major roles by Western Electric/Bell Labs at Whippany, the Aircraft Radio Corporation at Boonton, and RCA Victor at Camden. The Boonton area has been a sort of "Silicon Valley" of electronic test-equipment manufacture from the '30s to today.

## 4. SIMILAR OR COMPETING MUSEUMS

There is little museum coverage of radio-electronics NJARC-style in or near New Jersey. The following is believed to reflect the situation realistically:

- The Signal Corps museum at Ft. Monmouth is focused on Army communications-electronics. Its displays are new and quite good, and much of the material exhibited is unique. However, it suffers from lack of funds (a staff of one, and displays are not often rotated), limited operating hours (weekdays only), and a location away from public traffic.

- The Historical Electronics Museum outside Baltimore is dedicated to military equipment (mainly radars) of its sponsor, Westinghouse. Its facilities are new, the displays are fairly good, hours are long, and there are both professional and volun-

teer staff. Again, however, the subject is not "civilian" radio.

- The Museum of Broadcasting in New York City has new facilities, good funding, and long hours. However, its purpose is programming, mostly TV; there is no coverage of broader aspects of radio-electronic history or in artifacts. Likewise, the American Museum of the Moving Image in NYC is tied to film and TV programming, with some TV receivers.

- The Edison Historic Site at West Orange is a "fine tour" focused on Thomas Edison. It offers long hours and professional staff. There are phonographs and an Edison radio or two on display but, again, no dedication to radio-electronics.

- The Speedwell Village Museum in Morristown offers unique insight into the earliest (1838-44) development of wire telegraphy, as well as iron-founding and other industries. It operates only seasonally, on weekends. Again, there is no electronic content.

- The Bell Telephone Museum at 140 West St. in New York had unique early vacuum tubes, telephones, and other treasures. It was apparently crated up when the company moved to Holmdel in the '60s. Given the leaner funding of today's AT&T Bell Labs, nothing is likely to be heard from it. (Indeed, if the material still exists, it might be a source of loaned displays for NJARC.)

- The Atwater Kent Museum in Philadelphia displays a few AK radios, but only incidentally to its main mission of displaying Philadelphia history. It did put on a "Philadelphia Radio" exhibit a couple of years ago.

- MAARC's subsidiary Radio History Society plans to establish a museum in the Silver Spring area, similar to what NJARC would set up, but well outside NJARC's drawing area.

Thus it appears that "there is a place" for an NJARC museum.

## 5. ORGANIZATION AND FUNDING

A successful volunteer museum requires leadership by a task-oriented curator and ongoing effort by a staff of trained guides. To do a proper job and maintain the interest of the public, it needs many more artifacts than are on display at a given moment, and the resources to rotate displays seasonally or yearly.

Funding necessarily comes, or fails to come, from the usual sources: corporate or governmental grants, private donations or bequests in wills, proceeds of a "museum shop," proceeds of donation auctions, etc. Effective public outreach requires consistent publication of a newsletter. Ideally, the museum owns its building.

It may be useful to review other volunteer radio-electronics museums comparable to NJARC's idea in terms of their structures and "performance."

- The former ARCA - West Virginia Chapter museum in Charleston owns its building (a former school), and is apparently paying the mortgage from proceeds of its mail-order radio bookstore. Staff, and operating hours, appear to be small. Subject material is entertainment radio-TV. It seems to be a success despite remote location and limited objectives.

- The AWA museum is probably the long-run success story of the "industry." In one location since 1975, it has prospered under the single-minded enthusiasm of its founder-curator. The site is on a long-term lease from the local historical society, which has its museum in the other half of the building. The off-site storage annex is AWA-owned, on leased land. The museum covers professional communications somewhat more than entertainment radio, and has a huge assortment of "backup" artifacts in storage. The material on display is perhaps a third of the total holdings. Articles on display include numerous unique pieces (e. g., from Edwin Armstrong), but are weak on items

of current vogue like transistor radios or post-1950 TV sets. The museum is widely known. It has no real financial need (makes no particular attempt to solicit donations or cull its collection). However, it suffers from a badly outgrown facility having safety-code problems, non-rotation of displays, an obscure location, a weak public-outreach program, limited hours (only seven hours per week, and then only during the warm months), and limited management controls over the collection.

- The Pavek Museum of Broadcasting near Minneapolis, which began as the estate of a long-term collector who willed money to start operation, is probably the best facility of its type (see feature story in the May 1994 OTB.) It has a professional curator and volunteers, owns its building (which was built for its use), is tied in with the local radio club (NARC), and operates long hours. Being "hungry" financially, it has approached the local broadcast stations for major support, and has heavy general public representation on its board. It has a strong "outreach" program to local schools, publishes a good bimonthly newsletter, and otherwise tries to broaden its base of support.

- The Perham Foundation (ex-Foothill) museum-in-storage failed after 15 years because its site, once thought secure, was re-taken by the host college. It had good general-public displays, much unique material (one of the two surviving Federal arc magnets, Lee De Forest's papers), fairly long operating hours, and a good site in an accessible location. However, it also apparently lacks community/industry support, strong management, and an effective back-office. Publication of its newsletter is sporadic. It is now fund-arising for a permanent building, to opened ca. 1998.

- The NFWA exhibit at the Amherst Colony Museum outside Buffalo represents a low-cost/low-risk approach to museum operation. NFWA's small size precludes operating a museum of its own. Instead, the club provides a display, rotated yearly, at a regular public museum. (A typical dis-

play theme: Buffalo-made radios.) The Aug. 1993 OTB, p. 60, gives a good description of this display.

- The forthcoming MAARC museum is, of course, unformed as yet. MAARC's relatively strong management structure, and the location in the Washington metro area, should lead to success. However, the club is approaching the project cautiously, making it as much a library as a museum.

### BOOK REVIEW

#### TUBE LORE

A REFERENCE FOR USERS AND COLLECTORS

Written and Published by  
Ludwell Sibley

Up to this point, standard tube references have been dedicated to the historical development of vacuum tubes in general (Tyne's *Saga of the Vacuum Tube*, Stoke's *70 Yearsof Radio Tubes and Valves*) or those of a specific manufacturer (Mager's *75 Years of WE Tube Manufacturing*). In most cases, stress is placed on the progression of tube technology and refinements, with little emphasis on application. In this sense, Ludwell Sibley's *Tube Lore* comes as a welcome addition, uniting both the practical with the historical, with an appeal to the restorer, collector and historian alike. In the author's own words:

*This book is intended to aid the present-day user and collector of electron tubes by providing historical insight and specific technical data. It supplies information, from a variety of sources, on the characteristics and design relationships of tubes. With this insight, the user (equipment restorer, audiophile, etc.) may be aided in finding suitable replacement tubes as the supply grows smaller, and the collector may be able to determine the nature and uses of a fresh acquisition.*

The data chapters are divided into three major sections, each with an individual theme: types preceding centralized registration by the Radio Manufacturer's



Association (today's EIA), receiving tubes registered by the RMA/EIA, and special-purpose tubes registered by the RMA/EIA. Supplementary chapters deal with nonregistered special-purpose tubes as produced by multiple makers and those unique to particular manufacturers such as De Forest, Eimac, GE, Raytheon, RCA, Sylvania, Western Electric and Westinghouse.

The information in the data sections goes beyond supplementing conventional tube manuals and guides. For example, the Arcturus AC Series, in addition to its technical characteristics, is described as: Promoted for use w/"common toy transformer." (A)28 and (A)30 first used in Hugo Gernsback's "Electrified Peridyne," *Radio News*, Feb. 1928. Comments such as "Two in WE 50-kw broadcast xmtr." for the 298A & B, and "Two in Galaxy V Mk. 3 and (WERL) Galaxy GT-550 xcvsr" for the 6LB6 are typical of Sibley's extensive knowledge of application and attention to detail. The author explains his reason for taking this approach: "Because it is not tied to the products of a particular manufacturer, (Tube Lore) contains information unobtainable elsewhere. (Tubemakers did not publish handbooks covering types available only from their competitors!)." Sibley also refers to his data as a "vector sum...because errors and ambiguities are often present in old-time tube material, and may send the unwary reader in the wrong direction."

Additional chapters include trends in tube design which traces the physical development from acorn tube through the novar; a section on interpreting tube data with extensive interpretations of abbreviations, codes and tube numbering; a tube user's guide with practical guidance on replacement, testing, substitution, building a repair stock, repair and reactivation (Sibley's "Tube Hospital"), identifying and dating; a section on TV sweep tubes in RF and audio use and a listing of recent tube auction prices. You'll find typical information on how to repair a loose base but also less typical guidance such as fixing broken keys on octals or restoring "open filaments." Sibley's lighthearted "tube scoop" style makes reading pleasant and unencumbered.

For the novice, locating a particular tube in the data tables may take a little effort. For example, one would have to know that a 6005 is included in the RMA-EIA 5500 Series section or that a 1B23 is under the RMA 1942-1944 system. But with such an extensive listing as one finds in *Tube Lore*, it would be difficult to index individual types in a more structured manner.

*Tube Lore* is not a coffee table edition; extensive illustrative "filler" material takes a back seat to useful technical information. Don't expect it to take a place next to Tyne on your bookshelf either; it would feel more comfortable on your repair bench suffering the same solder flux onslaught as Rider's Volume 1.

Information regarding availability may be obtained from the author, Ludwell Sibley, at 44 E. Main St., Flemington, N.J., 08822 (908-782-4896).

## AN "AWARDING" MEET

By Marv Beeferman

Congratulations are in order to NJARC member Mike Feher for an excellent showing at the recent AWA Rochester meet. Besides the usual flea market goodies, Mike also carried home:

- \*A second-place award in the passive receiver division for his 1910 MESCO crystal set with original catalog and headset.
- \*A second-place award in the 1-2 tube receiver division for his one-tube Martian Beauty.
- \*A first-place award in the spark transmitters and artifacts division for his 1913 Hunt and McRee crystal set/spark transmitter combination, and
- \*A second place in the vacuum tube transmitter division for his 1927 80 meter amateur homebrew receiver/transmitter.

Great job Mike!

*Digital be damned! These days,  
for high-end audio...*

## VACUUM TUBES ARE AGLOW AGAIN

By Ron Wilson

*With the pending publication of Ludwell Sibley's TUBE LORE, it seems fitting that NJARC readers might be interested in sharing Ron Wilson's insight into the renewed focus on these small (but what Wilson now refers to as "mammoth") wonders. By 1930, radio listeners started to become just as demanding with regard to audio amplifiers of good design and performance as their "hi-fidelity" and "stereo" counterparts of later years. Appreciation is offered to Electronic Engineering Times for permission to reprint the following article from their July 8th, 1996 issue. Ed.*

### PART I

As process technology marches inexorably forward, DRAMs and microprocessors are ramping in 0.35-micron CMOS. ASICs and FPGAs are moving into various 0.6- to 0.5-micron processes. Gallium arsenide is consolidating its hold on 2-GHz communications. And the latest thing in high-end audio design is--vacuum tubes?

Paradoxical as it might seem, those mammoth, glowing artifacts of the days of Lee DeForest are once again a--ahem--hot item. Collectors scour garage sales, paying hundreds of dollars for the rusting hulks of consumer amps that have lain in attics for decades. Sleuths seek out unused inventories of tubes left over from shuttered repair shops, abandoned hobbies, even military-surplus stores.

But the tube movement is far from just a historical retrospective. Designers are turning out tube amplifier designs in numbers not seen since the 1950s. Prices range from thousands of dollars to tens of thousands for high-powered, single-channel power amps.

The designs are fueling a demand for

new tubes--a critical problem in the United States, where the last tube manufacturers shut down decades ago. So distributors are courting tube makers in Eastern Europe, the former Soviet Union and the People's Republic of China to supply copies of classic vacuum-tube types. Rare, unused original tubes sell for more than the equipment for which they were built.

Bowing before the inevitable, Western Electric has restarted manufacture of one of the oldest and most beloved--or despised, if you had to design with it--tubes, the 300B triode.

What is going on here? A generation ago audio designers fled the power, heat, reliability, distortion and noise problems of tubes to embrace transistors. Perhaps that first hug for germanium power transistors wasn't a long-lasting clinch, but soon modern hi-fi equipment was, by definition, transistor equipment. "Solid state" became a code phrase for quality. Transistorized preamps reached levels of distortion and signal-to-noise ratios (S/N) unimaginable in the tube days. And amps' power levels soared.

But somehow a quiet, contrarian voice persisted. Some audiophiles kept their beloved vacuum-tube gear, for sentimental or financial reasons, or just because they insisted, in the face of evidence to the contrary, that the tube stuff sounded better. Over time, the voices grew in number. And just as the pursuit of power for power's sake was reaching its screeching peak in the 1980s, some serious and respected sound critics began to say that the solid-state emperor had very skimpy underwear.

Today, the cream of the audiophile community--those fortunate few who can afford to spend the price of a Jaguar for a stereo--take it for granted that an expensive line stage, power amp or even digital-to-analog converter will use vacuum tubes, not transistors. A Usenet group, *rec.audio.tubes*, is devoted to the faith. There is even, according to the World Wide Web, an Oregon Triode Society dedicated to the appreciation of simple amplifiers made from triode tubes.

The informed skeptic might protest that even average solid-state amps are measurably superior to the best tube equipment, but that argument may not

hold water. It depends on where you stand in the debate over how to measure an amplifier.

"During the 1960s and '70s, when solid state took over in the United States, our high-fidelity magazines, unlike those in the rest of the world, bought into the concept that if amplifiers measured the same on bench tests, they would sound the same," said Mike Elliot, president of Counterpoint Electronic Systems Inc. (Carlsbad, Calif.). "It was kind of like reviewing wines by mass spectrometry."

Lost, say many designers, was the understanding that bench tests such as frequency response, total harmonic distortion, intermodulation distortion and S/N were never more than point tools in the design process. Producing a great-sounding amp for a given set of speakers meant an exhaustive, iterative process of listening to music, making subjective observations, doing bench measurements to try to confirm the subjective data and then tweaking the design. Until the great stereo marketing push of the 1970s, designing hi-fi hadn't meant designing to the numbers.

In conceptual terms, the problem for an audio amp-and-speaker combo is to reproduce the pressure wave that struck the microphone when the recording was made. All you want is a completely linear recording and playback system. But with recording and playback equipment, recording engineers, mastering equipment, amplifiers and speakers all adding non-linearities, there is no hope of that simple ideal. Instead, the goal, nearly as ambitious, is to produce a sound wave that the listener will find pleasantly reminiscent of the original. Unfortunately, psycho-acoustics has been unable to determine just where compromises are possible.

Moreover, "Fashion is a part of why people buy tube equipment," said Luke Manley, president of Vacuum Tube Logic, a Chino, Calif., manufacturer of audio gear. "A lot of people like to see the glow of the tubes, and you design the cosmetics of the equipment for that. People will buy tube sound because they like the look of the amps."

Some designers of tube equipment admit that this is one fashion statement that's getting out of hand. "There is some very expensive equipment out there that is very bad," said one. "I'm afraid tubes are get-

ting to be a fad in the bad sense of the word."

**PART II** of this article will continue in the October issue of the *Broadcaster*. Ed.

## 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

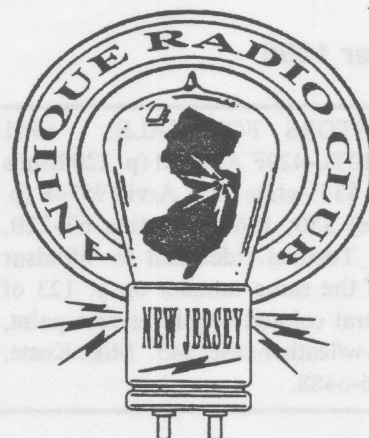
**FREE FOR THE ASKING:** Radio chassis with all parts available because my restoration plans ran out of steam. Choose from the following: Early 30's Philco console, Emerson model 541 table radio, late 30's table radio with no manufacturer indicated. Also, EMC model 206 tube tester. The condition is rough but it works. Bruce Knapp, Rutherford, NJ.

**TRANSISTORS FOR SALE:** 1961 Toshiba 10TL-429F AM/FM (p. 220 Bunis Xsistor I) \$35; white 1957 Arvin 9574P (p. 226 Lane) \$50; 1961 Crestline 6T-220, made by Toshiba (identical to Windsor model of the same number on p. 123 of Lane), coral colored w/gold reverse paint, complete w/leather case, \$45. Mike Koste, (215)-646-6488.

Tubes, schematics, service notes, Riders, Sams, Photofact folders, transistor books, etc. for early radios. Send LSASE for price list. Sam Faust, PO Box 94, Changewater, N.J., 07831.



# NEW JERSEY ANTIQUE RADIO CLUB



## ANTIQUE RADIO SWAPMEET AND AUCTION

SATURDAY, OCTOBER 5, 7:30AM - 3:30PM\*

HIGHTSTOWN COUNTRY CLUB, HIGHTSTOWN, NJ

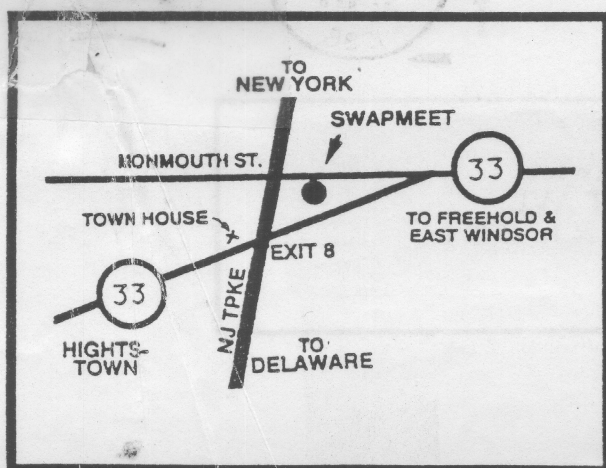
NJARC presents its close-the-season outdoor swapmeet and indoor auction with vendors displaying a spectrum of collectible old-time radios, military and civilian communication equipment, audio equipment, phonographs, and associated parts and literature. Ample on-site parking is available. Admission/parking is \$2.00 to help defer rental fee. Everyone is welcome!

**LOCATION:** The Hightstown Country Club, near Exit 8 of the NJ Turnpike and just off Route 33. From the Turnpike, go east on Rte. 33 about 200 yards (past "Mom's Peppermill" restaurant); continue 1/4 mile to the first jughandle, and then come back west. After the first traffic light, bear right onto Monmouth St. (watch for sign), then 300 yards to the Country Club on the left. There is a Ramada Inn across the street.

**RATES:** NJARC members \$12/table; non-members \$15/table (deposits will not be refunded due to bad weather). Advance reservation is suggested for best locations.

**CONTACTS:** Marv Beeferman, 2265 Emerald Park Drive, Forked River, NJ 08731 (609-693-9430). Bill Overbeck, 29 Campbell Ave., Havertown, PA 19083-2424 (610-789-8199). Send a large self-addressed, stamped envelope with your check for table confirmation and auction catalog.

**ACCOMMODATIONS:** Town House Motel on Rte 33 (800-922-0622 or 609-448-2400); there is also a Ramada Inn across the street (609-448-7000).



\*Vendors set up at 7:00; no early admittance. Auction starts promptly at noon.

Formed in mid-1992, NJARC has a membership above 160. The club meets at Grace Lutheran Church, corner of Route 33 and Main Street in Freehold, on the second Friday of each month at 7:30 PM. Visitors are welcome. The club publishes the monthly *Jersey Broadcaster* and has a program providing members with replacement tubes and capacitors at moderate prices. Technical, restoration and historical presentations are provided by members at each meeting. Contact Jim Whartenby (908-271-7701) for additional information.

**TRANSISTORS FOR SALE:** 1961 Toshiba 10TL-429F AM/FM (p. 220 Bunis Xsistor I) \$35; white 1957 Arvin 9574P (p. 226 Lane) \$50; 1961 Crestline 6T-220, made by Toshiba (identical to Windsor model of the same number on p. 123 of Lane), coral colored w/gold reverse paint, complete w/leather case, \$45. Mike Koste, (215)-646-6488.

All or part of 6 cartons of old radio & TV schematics, manuals, books, substitution guides, Sam's Photo Fax, test equipment, magazines, etc. 1930-1960's. Martin Fleisher, 12 Zellers Road, Box 123, Long Valley, N.J. 07853 (908)-832-7947

**Estate Items:** RCA Geiger Counter from the 1950's with Government book on how to prospect for Uranium; large transistor and diode collection and assortment (inventory is available upon request); NC-183 receiver; Heathkit Chyenne and two-meter transceiver; huge selection of '40's, '50's, and '60's tubes and oldie radio parts - all best offer and sold as-is. TS-413 Signal Generator (75kHz - 40 MHz); \$100. Delivery available at NJARC meetings. John Dilks, (609)-927-3873. Please leave

Howard W. Sams repair books: transistor (TSM), auto radio (AR), and hi-fi (MHF). Good supply. Lewie Newhard, (610)-262-3255 (evenings).

Tubes, NIB (over 6,000), 50% off AES prices; minimum purchase \$20 (for \$40 worth of tubes) or buy the whole lot. J J Papovich, 53 Magnolia Ave., Pitman, N.J. 08071, (609)-582-8279.

Collection of the late John Kara (former club member) consisting of: AK 188, early battery set, hi-fi equipment, ham receivers, consoles, wooden and plastic tabletops, transistor radios, test equipment, crystal sets, between 2,000 to 3,000 radio and TV tubes, etc. Elsie Kara, Whiting N.J. (908)-849-4318.

**Novelty Items - RCA, Victor, Edison, Spindorf and others.** Send LSASE (55 cents postage). Sams Photofacts #500 up to 1000 - you pick up - 50 cents each. Over 300 books - send LSASE (55 cents postage) for list. J.J. Papovich, 53 Magnolia Ave., Pitman NJ, 08071. (609)-582-8279

## WANTED

Spark gear - have Pepsi bottle radio to trade for same. John Dilks, K2TQN, (609)-927-3873 (evenings).

Someone to repair/rebuild a small Philco cathedral at a reasonable price. Mark Freilich, (609)-275-3140 (days)

A.C. Dayton Model XL-60 chassis. Can be a junker but speaker and cabinet must be in better shape. A picture would be helpful. Stanley Thompson, 43 Cozy Corner, Avenel N.J. 07001-1122. (908)-636-3630

For Philco Model 21: speaker, escutcheon and dial. Aaron Hunter, 23 Lenape Trail, Southampton, N.J., 08088. (609)-267-3065

EV 666 microphone with cord and correct connector; Emerson 790B in blue, black or red; National NTS-2 loudspeaker for NC-303 receiver; Hitachi TH-660A 6-transistor radio (black); Polyrad "Capri" 6-transistor in blue; Shalco 3-transistor in black; Shure M63 Audiomaster. Frank Feczko, 37 E. 36th Street, Bayonne N.J., 07002. (201)-437-6895

Ware cathedral model B-1 "Bantham" (Bunis 1 & 2) manufactured by the Ware Mfg. Corp., Trenton N.J. All original - \$200. Freed Eiseman model NR-5 battery set (Bunis 2, pg. 81). All original, no tubes, nice - \$90. Crosley model XJ battery set (Bunis 1 & 2). All original, no tubes - \$175. Freshman Masterpiece, slanted front, table model, no tubes, all original - \$75. Elwood F. Hunt, 308 Georgetown Road, Carneys Point, N.J., 08069. (609)-299-5259

MARVIN P. BEEFERMAN  
2265 EMERALDA PARK DRIVE  
FORKED RIVER, N.J. 08731



BOB OLAWSKI  
230 COURT AVE.  
LYNDHURST, N.J. 07071

