

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

March 2000

Volume 6 Issue 3



MEETING/ ACTIVITY NOTES

Reported by Marsha Simkin and
Marv Beeferman

February's NJARC meeting finalized plans for our repair workshop on the 19th. The workshop turned out to be a very successful event as documented in this month's *Broadcaster*. Results of the 2000 NJARC BCB DX Contest won't be available until April at which time contestants are urged to bring in their entries for display or demonstration. And don't forget that entries for the **Home-brew, One-Tube Radio Contest** are due at the April 14th meeting. Contact Al Klase at (908)-782-4829 if you're not quite sure about the contest guidelines.

Jon Butz Fiscina hosted a video of the NJARC vintage radio exhibition at Raritan Valley Community College. Jon's efforts were admirable, considering he was limited to only two glass cases. The exhibit was also supported by Ray Chase and other club members who contributed artifacts and was well received by the college's President and Vice President. Jon stressed that although the exhibit's sponsors only represented a very small percentage of the club's membership, the exhibit was still advertised as a NJARC event. A talk emphasizing the history and social aspects of radio was scheduled for February 28th at the college. Let's hope that "us Southerners" can live up to Jon's standards at a similar exhibit scheduled for the Spring in Barnegat.

The response was great for volunteers to man a NJARC display at the 25th Trenton Computer Festival at the Edison Expo Center on May 6th and 7th. With approximately 10 members available for duty, there will also be ample time for them to



MEETING NOTICE

The next meeting of the NJARC will take place on Friday, March 10th at 7:30 PM in the Grace Lutheran Church, corner of Route 33 and Main Street in Freehold. Contact Marv Beeferman at 609-693-9430 or Phil Vourtsis at 732-446-2427 for directions. This month's meeting will feature a show-and-tell session devoted to all aspects of television development including actual models (working or not), components (CRT's, tuners, etc.), literature, novelties, advertising, etc. Radio-related items will also be welcomed for display. In addition, we'll also be discussing feedback from our last radio repair session and the upcoming swapmeet on May 20th.

take in the wares of close to 1,000 exhibitors. John Dilks will also be bringing his fabulous MWM (Mobile Wireless Museum) to this very popular event. If you haven't yet signed up to participate in this great opportunity to publicize the club (and perhaps bring some new members into the fold), with the added attraction of

hammered down included an Akai tape recorder, a Sherwood amplifier, a Zenith turntable, a Philco signal generator and the components of an RCA 630TS TV. Thanks Ray...

The Spring outdoor swapmeet is scheduled for May 20th at the Hightstown Country Club. After considering other locations, it was decided that the Country Club still represented the best compromise with regard to convenience of setup, location, accessibility and most of all, price. A mini-auction is also planned for the event...more information will be offered at a future date. The Board has also started initial investigation into the possibility of a MegaMeet in association with other clubs, possibly at a location outside of New Jersey.

Thanks to Ted Sowirka, an informative but amusing video from the BBC's "Secret Life of Machines" series on the development of television was viewed by the club. The video touched on early investigations of light on selium, the introduction of the vacuum tube, the work of John Baird and the social impact of TV. Each show usually ends with an impressive ending...in this case, a 10-foot funeral pyre of unrestorable TV's of every size and shape sparked by the producer's remote control from the comfort of an easy chair (watch out for those selium rectifier fumes!).



NJARC member carefully inspects part of an RCA 630TS television before committing a bid in February's mini-auction.

viewing a computer museum exhibit and schmoozing with thousands of fellow techno-nuts, call Marv Beeferman or Phil Vourtsis to add your name to our list of volunteers.

Ray Chase contributed the makings of a mini-auction which netted the club close to \$150. Some of the items that that were

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 at the Grace Lutheran Church, corner of Route 33 and Main Street in Freehold N.J. The Editor or NJARC is not liable for any buying and selling transactions or for any other use of the contents of this publication.

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(732)-583-5196

2000 DUES: We are still 50 members short of 100% renewal. Membership secretary Marsha Simkin will be sending out final notices this month; to save her some effort (and save the club some money), it would be nice to receive at least 25 more renewals before mid-month. It's as easy as 1-2-3: 1-Check the date on your mailing label 2-If its 1/00, mail a \$15 check to Marsha Simkin at 10 Avalon Lane, Matawan, NJ, 07747 3-SMILE! For another year, you're a member of the best radio club in the USA.

Your editor recently came across a great idea for a fundraiser based on a letter in Vol. 2, No. 1 of *The Tube Collector*. To raise money for the National Atomic Museum to move to a new quarters, a teacher has been making small vacuum-tube displays for sale in the museum gift shop. Approximately 6 dud tubes with interesting looking envelopes (to anyone born after 1960, any tube looks interesting) are mounted on an ornately finished wood plaque with an engraved plastic "Vacuum Tubes 1900-1970" label. Do you think we could have some available for the Trenton Computer Fest? Send me your ideas...

RADIO ER BRINGS 'EM BACK TO LIFE

Although weather was threatening in the morning, the second NJARC radio repair clinic was held at the Grace Lutheran Church on February 19th with approximately 25 people in attendance. A quick fix of a slippery spot at the entrance reminiscent of the Muppets Christmas show ("Watch out for that icy patch!") cleared the last obstacle to a very enjoyable Saturday.

The facilitators under the able leadership of "master instructor" Al Klase began arriving about 8 AM. With Masonite installed on the table tops and the coffee pot perking away, the first order of business was to wake up and calibrate President Phil Vourtsis' signal generator, which would later be used to align some

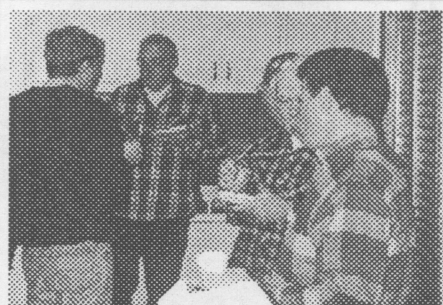
of the repaired sets. Phil also provided instruction in basic electronic and radio theory to those new to the repair aspect of the hobby.



"Clients" began arriving about 9:00 with approximately fifteen assorted radios in tow. Some of these included a Montgomery-Ward 14WG-518, a Philco 38-62, 46-250, 611, and 111, a Hallcrafters TW2000, a GE GD60, a Zenith 5-tube "All-American" and an Atwater Kent 60. Once again, the aim was to guide participants through the repair of their treasures. Gary D'Amico dispensed a fair number of tubes from club stock and John Ruccolo reported brisk capacitor sales. John was also kind enough to bring out his set of Rider's Perpetual Troubleshooter's Manual to provide the essential schematics. A pizza interlude was provided by the club about midway in the session to take the edge off the morning's intensity.

About three-quarters of the sets went home playing nicely by about 4:00 PM. An unplanned session on the perils of escaping internals from Philco block condensers did not distract from a wrap-up at 5:00 PM.





Pizza party

THE FINAL SILVER BULLET

Bob Hite Sr., whose commanding voice made countless fans of "The Lone Ranger" pull their chairs closer to the family radio, died recently in Florida at the age of 86. Mr. Hite began his radio career in the 1930's when he worked for station WXYZ in Detroit. His voice was soon being heard on several shows, including "The Green Hornet" serial but it was his delivery of the introduction to "The Lone Ranger" that regularly carried listeners back to "those thrilling days of yesteryear" when the Western hero rode out of the past on his great steed Silver, "a fiery horse with the speed of light."

Mr. Hite worked for CBS in New York during World War II, reading news reports from correspondents overseas. There he met Walter Cronkite, who became a close friend. And when Frank Sinatra appeared with the Tommy Dorsey Orchestra for the first time, Mr. Hite introduced him to the audience. He retired from CBS in 1979.

One of Mr. Hite's three daughters, Nancy Speck, lives in New Jersey.

FORT MONMOUTH MUSEUM IS FOR THE BIRDS

The following piece is based on "At the museum, no fly-by-night hero" by Sherry Figdore which appeared in the Asbury Park Press of January 20, 2000.

The displays at the U.S. Army Electronics Communications Museum "represent

an era in American history," says Mindy Rosewitz, the museum's curator. Rosewitz earned her degrees in fine arts and art history, but quickly learned to appreciate the beauty of hand-made radios and wood instrument cases with dovetailed joints. She is the curator and one-person staff for an enormous collection of material that traces the growth of the fabled Fort Monmouth Electronics Command from its birth in 1917, when 32 soldiers arrived at the "briar-covered tract" of Camp Little Silver, all the way through Desert Storm and Desert Shield.

The museum's displays chronicle a long series of "firsts" – the first radar sig-



Museum curator Mindy Rosewitz shows off a vintage radio direction finder.

nal sent to the moon in 1946 from the Evans Signal Lab, and the first walkie-talkies, radios, telephones and cameras that were prototype for today's communication instruments. However, the original core of the museum's collection came from Bell Labs. In 1918-19, Rosewitz says, "They went on a worldwide search for communications equipment to see what was out there. And when they were done with it, it all came here."

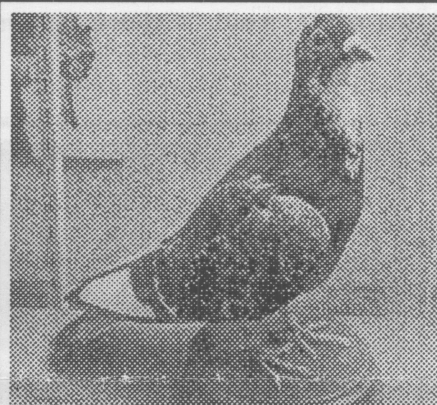
Among the prize exhibits are original notes, handwritten on graph paper, of radio pioneer Major Edwin H. Armstrong and several of his original handcrafted radios. Also housed in the museum are:

- A 5-foot tall radio direction finder developed by the Signal Corps Radio Laboratories to determine the source of radio waves and an old photograph showing the apparatus in use in Slotberg, Germany, in October 1944.
- A model of an SCR radar unit, one of

two in the world, is sitting in one of the museum's two storage warehouses, waiting to be restored. When completed, the radar tower will stand 60 feet tall on its 29-foot-long carrier.

- Artifacts recovered from the 1881 expedition to North Greenland led by Major Gen. Adolphus Washington Greely including several of the pressed arctic plants collected and preserved by Greely.
- A camera display including a lead-cased shoulder-mounted 35mm Cunningham Combat Cambera and a spy camera, developed at Fort Monmouth, hidden inside a fake Lucky Strike cigarette package. By pushing down an exposed cigarette in the pack, one could take a picture discreetly and silently.

And then there is the pigeon exhibit, a favorite of visiting school children – and many adults – that includes a drum-shaped canvas-and-wire pigeon basket, leg bands and a bird-sized cotton



G.I. Joe, the pigeon credited with saving 1,000 British lives, stands at attention for a photo-op. Being stuffed, he probably has no other choice.

parachute. The Army ran its pigeon breeding and training program here for 40 years, from 1917 through 1957, Rosewitz says. Staring serenely from his case is G.I. Joe, a "hero pigeon" credited with saving the lives of 1,000 British troops in Italy by carrying a crucial message "20 miles in 20 minutes." G.I. Joe was hatched on March 24th, 1943 and died on June 3rd, 1961 and received a medal from the British government for his feat.

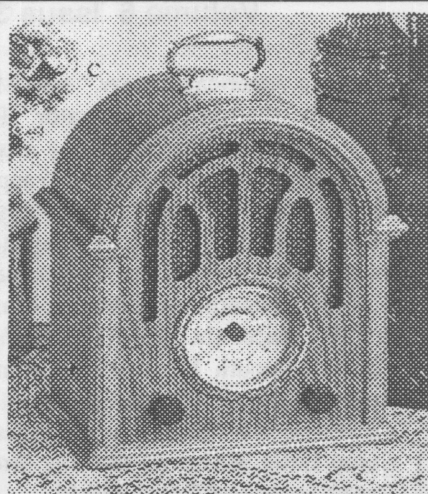
CLASSIC CLONES

By Marv Beeferman

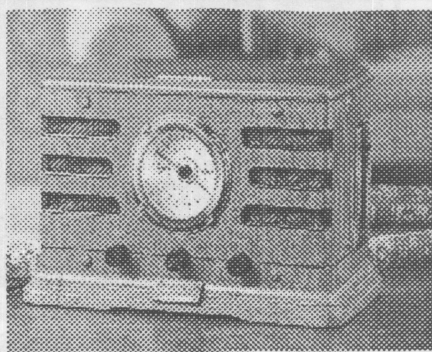
Reproductions of some of the more classic radios show up from time-to-time, each claiming to be true to "original styling" and usually updated with modern features like an AM/FM radio and cassette player. Some are relatively realistic like the Spar-ton mirror spinoffs. Others are made to represent a particular style of radio, like a tombstone or cathedral, but bear no resemblance to a specific model from the past. Some however are billed as replicas of radios that never came close to seeing history's light of day but still are enjoyed by those who aren't sticklers for authenticity. I thought it would be fun to show a few and add parts of the advertising descriptions so you might try to guess at what the creator had in mind. Some are pretty easy but others might be stumpers. Drop me a line or e-mail and I'll award a prize to the one who comes up with the closest answers.



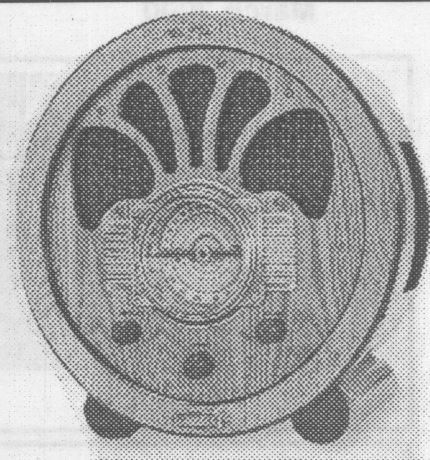
When *The Green Hornet* came on, millions of listeners swarmed around radios like this rounded-corner tombstone. A large illuminated airplane dial dominates the handcrafted cabinet of hardwoods and veneers styled with carved grille openings, authentic woven grille cloth, and es-cutcheon plate.



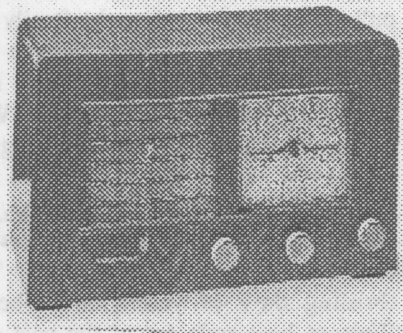
A revolutionary departure from the larger cabinet radios, the cathedral made radio more affordable for more Americans. This classic design is reinterpreted in handcrafted wood and veneers.



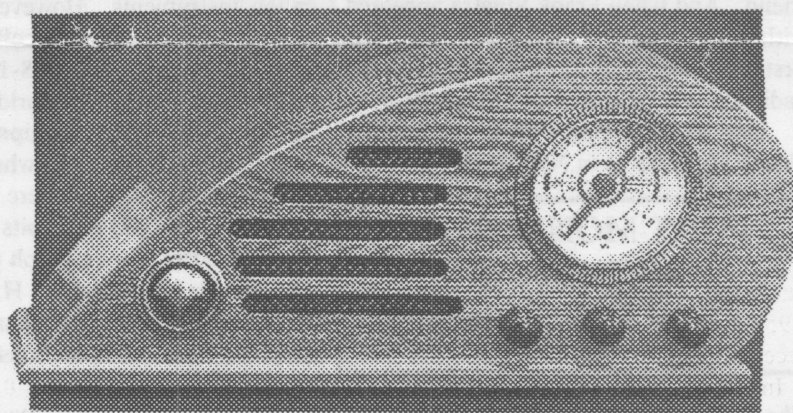
Authoritative and distinctive, this is the radio on which you'd expect to hear Lowell Thomas broadcasting the news of King Edward VIII's abdication.



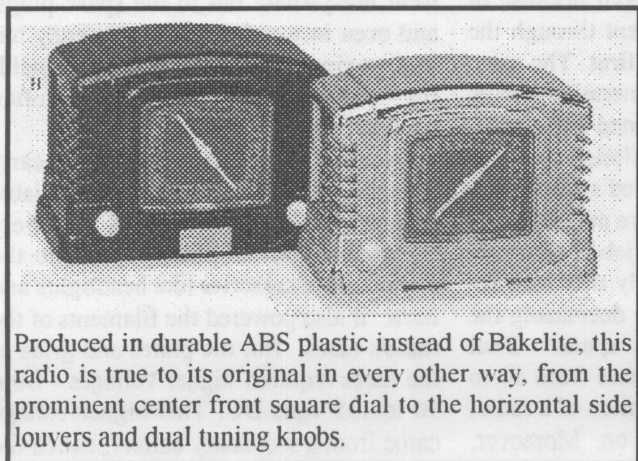
More subdued in style than its spectacular cousin, this limited-edition replica is no less superb in sound quality. The focal point is a fully illuminated dial with heavy diecast frame.



During WWII, German citizens were prohibited from owning radios, but after the allied victory all that changed with the "Heinzelmann."



This replica is inspired by an extremely rare, 1937 model, noteworthy for its teardrop shape seldom used in Art Deco Design and red tuning eye instead of green. Its echoes carry from the guns of Normandy to the halls of Radio City. And the only radio with the famous ruby eye that allowed for razor-sharp tuning



Produced in durable ABS plastic instead of Bakelite, this radio is true to its original in every other way, from the prominent center front square dial to the horizontal side louvers and dual tuning knobs.



Satisfy your wanderlust by dialing in faraway places with strange-sounding names on our handsome short-wave radio. Modeled after a 1920's model, it receives SW1 and SW2 bands as well as AM and FM stations.



For millions of Americans, the devastating news of Pearl Harbor came over a radio like this limited-edition replica. The distinctive skyscraper design features a fully illuminated dial scale, heavy diecast frame, and authentic woven grille cloth.



Extra! Extra! Lindbergh flies NY to Paris in 33 hours! Crowds roar! Own the radio that guided a true hero on his record-breaking solo flight. Flip the toggle switches...tubes come to life with an amber glow. Turn off your room lights and tune in your favorite music or news on the lighted main dial.

RADIO HITS THE ROAD - PART 1

By Michael Lamm

*This article starts a three-part series. It originally appeared in the Spring 2000 (Vol. 15/No. 4) issue of **Invention & Technology** and is being reprinted with permission...Ed*

You had to be rich to own a car radio in the late 1920s and early 1930s. Installed, a decent set might cost you \$175. Since you could buy a new 1930 Chevrolet sedan for \$695, a radio represented a pretty hefty piece of change.

Installing the radio was no easy task either. It required tearing a car apart - removing the dashboard and parts of the roof, and drilling holes in the cowl, floor, and toeboard - and then somehow putting it all back together again. A slap-dash installation could leave a car crippled for life.

Earl ("Madman") Muntz, the legendary

Los Angeles auto dealer, began his career in Chicago in 1928 as a radio installer. He told me in 1972 that it once took him seven solid days to put a radio into an uncooperative Cord L-29. Two days, he said, was normal for a Chevy. And Muntz was one of the best and fastest in the business.

A radio put a major strain on a car's electrical system, even though it came with a battery of its own. Then there was the fire hazard. Paul Galvin, the founder of Motorola, once recalled the time in 1930 when he went to a banker in Chicago to get a loan for his struggling radio business. To show how great car radios were, Galvin installed a new Motorola free of charge in the banker's Packard. It worked fine, and the banker drove away all smiles.

A block down the street, though, the car started to smoke. Within two blocks flames from a short circuit had singed the paint on his hood. Despite the banker's toasted Packard, Galvin got his loan. When he told the story later, Galvin usually added that his own Studebaker, which his engineers used for research, caught fire dozens of times.

Car radios were also deemed haz-

ardous in the way that cell phones are today. In early 1930 the Massachusetts registrar of motor vehicles proposed a regulation to prohibit drivers from playing radios while a car was in motion. (The city of St. Louis introduced similar legislation.) It all came to a head on February 26, 1930, when the Massachusetts Public Works Commission held a hearing on the question. Opponents of car radios argued that they distracted drivers and caused accidents, that tuning them took a driver's attention away from the road, that music could lull a driver to sleep, and that with open cars still common, radios distracted the drivers of other vehicles too.

The Radio Manufacturers Association, established to fight just such regulation, countered that the commission was wrong on each point and that radios actually prevented accidents by keeping drivers awake and alert. Of some 200 people who attended the hearing, only 5 were strongly anti-radio, so the Massachusetts proposal died.

The earliest car radios were simply home sets that drivers lugged out of the house, complete with batteries, and perched in or on their cars. These sets

couldn't be played with the engine running because the unshielded ignition caused all sorts of noise and static. You could, however, put a radio into a car, drive out to the country, shut off the engine, set up an antenna, and get pretty decent reception - sometimes. But until at least the mid-1920s, there wasn't much to listen to.

Around 1922, a very few enterprising motorists began to install radios permanently inside their cars. No special automotive sets were available yet, so they used household models. They still had to shut the engine off to listen.

The first man to go into car radios commercially seems to have been William M. Heina, who founded the Heina-phone Corporation around 1926. Heinaphone was soon taken over by a group called the Automobile Radio Corporation (ARC), which made Transitone sets, and Philco bought the entire operation in 1930. Just before the buy-out A. A. Leonard, the chief engineer for ARC, hit on a practical way to eliminate ignition interference. This was such a basic and important development that it's still used today in modified form.

Leonard started by investigating the source of the interference. He discovered that an engine's high-tension ignition wires act as miniature antennas broadcasting at frequencies that vary with their length.

This oscillation comes about because of the abrupt change in current through the wire when the spark plug fires. The same type of high-frequency generation occurs when any switch is opened or closed. Leonard damped the oscillation by placing screw-in resistors, called suppressors, between the spark-plug wire and the plug.

Suppressors did a good job of eliminating noise, but unfortunately they also reduced engine efficiency by decreasing the intensity of the ignition spark. Fuel mileage could drop anywhere from 10 to 50 percent with the installation of a radio, even when it wasn't turned on. Moreover, when Leonard's suppressors reduced the high-tension interference, they brought out low-tension static, which had been there all along but hadn't been noticeable before. The nation's radio installers began a long battle against a bewildering variety of odd noises produced by an automobile's generator, ignition breaker points, and other electrical sources.

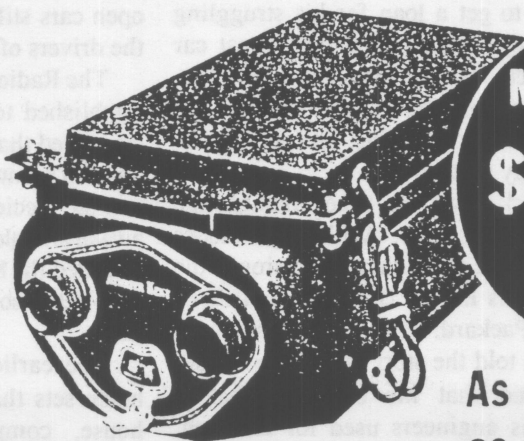
Some of these noises were taken out with additional suppression devices and others with shielding - a copper box around the receiver. Yet each solution to a source of interference created new problems of its own. Pity the poor driver of a radio-equipped car in fog or rain, for example. Moisture-induced ignition leaks

went everywhere but to the spark plugs, and even in weather that was merely humid, engines with massive copper shielding and ignition suppressors often wouldn't start.

Another troublesome feature of early car radios was the dreaded and unreliable B battery. The car's normal A battery supplied 6 volts of direct current to the starter and accessories like headlights and horn. It also powered the filaments of the radio's tubes. But the plates and grids of the tubes required higher voltages - from 90 to 135 volts DC. This higher voltage came from a secondary battery, called the B battery. (Home radios also had separate A and B batteries until the late 1920s, when sets were built to run on household alternating current.) As radios became more complex, a C battery was sometimes required to power multi-element tubes that needed several different voltages.

Sometimes the B and C batteries were combined in one large case. Big, bulky radio batteries became so common that by 1929 many high-end car bodies came from the factory with battery-box cutouts in the floorboards. But that was just a stopgap; the ultimate solution lay in finding a way to power the radio with only the A battery.

A new
ATWATER KENT
Motor Car **RADIO**



MODEL 424

\$37⁹⁰

**As easy to install
as a spark plug!**

NEW JERSEY ANTIQUE RADIO CLUB



ANTIQUE RADIO SWAPMEET

SATURDAY, MAY 20, 8:00AM - 3:00PM*

HIGHTSTOWN COUNTRY CLUB, HIGHTSTOWN, NJ

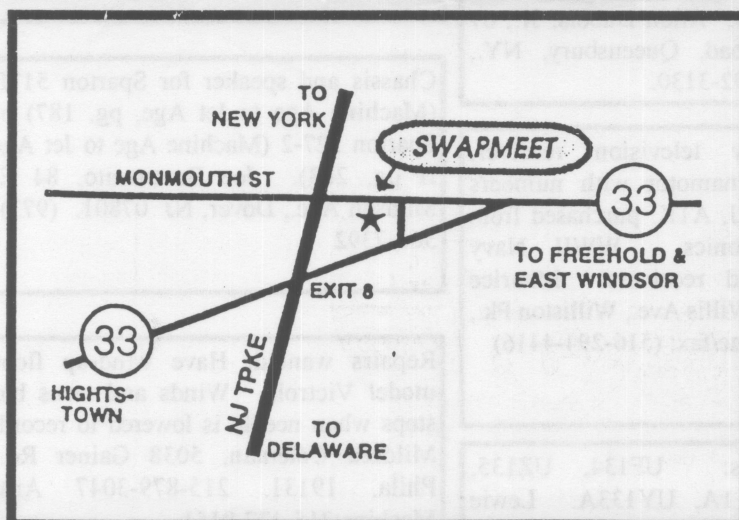
NJARC presents its Spring outdoor (rain or shine) swapmeet with vendors displaying a spectrum of collectible old-time radios, military and civilian communication equipment, audio equipment, phonographs, and associated parts and literature. A \$2.00 club donation is suggested to help defer rental fee. Tables are guaranteed to the first 50 reservations.

LOCATION: From NJ Turnpike Exit 8, go east on Route 33 about 200 yards. Stay to the left and turn left at the first traffic light on the center divider, crossing Route 33 west. Continue to the end of the block to Monmouth Street and turn left. The Country Club is on the left with a Ramada Inn across the street.

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

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

*Vendors set up at 7:00; no early admittance!



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 Phil Vourtsis (732-446-2427) for additional information.

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.

7JP4 CRT, good filament, screen looks OK, make offer. Alton Dubois Jr., 67 Peggy Ann Road, Queensbury, NY 12804 (518)-792-3130.

Radio schematics and service data, \$2.50 plus #10 SASE (price is for 1 to 5 pages of data per model; over 5 pages, copy charge is 20 cents per page). US & Canadian models 1920s to 1960s. Questions/quotes answered with a SASE. Steve Rosenfeld, PO Box 387, Ocean Gate, NJ, 08740. Phone (732) 269-2022 Fax (732)-269-2897. srosenfeld@ems.att.com

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.

The ever-handly reference *Tube Lore* gives 186 pages of insightful scoop on about every North American tube there is. Reviewed by Eric Barbour in *Vacuum Tube Valley* as "an instant classic." Available from Ludwell Sibley, 102 McDonough Road, Gold Hill, OR 9725-9626 for \$19.95 postpaid in the U. S. and Canada, \$24.95 by air overseas. Clubs get a discount on multiple copies.

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.

Rider's Perpetual Troubleshooter's Manuals: Vol. 1-5 (2 each), Vol. 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22 (1 each). 18 volumes plus Master Rider Indexes. \$650 cash, no shipping (pick up only). Contact Bob at (732)-671-2809

WANTED

Cast aluminum lid for Eveready #2 radio, circa 1928. Good photo would help if lid is not available. Need two, four-inch black No. 488 dial knobs for Fried Eisemann NR-6. Alton Dubois, Jr., 67 Peggy Ann Road, Queensbury, NY., 12804. (518)-792-3130.

WWII military television receiver, camera and dynamotor with numbers CRV, AXT, ATJ, ATK, purchased from Denson Electronics. WWII Navy transmitters and receivers. Maurice Schechter, 590 Willis Ave., Williston Pk., NY 11596 Phone/fax: (516-294-4416)

Japanese tubes: UF134, UZ135, UF109A, UF111A, UY133A. Lewie Newhard (610)-262-3255

The May 1966 issue of *Electronics Illustrated*. Richard C. Yingling, 2 S. Locke Ave., Yeagertown, Pa. 17099 (717)-242-1882

Information on "Lang" radios: literature, pictures, pricing, etc. Charles J Dreitleio, 515 Elizabeth St., New Milford, NJ 07646 (201)-384-3862

Gernsback's Official Radio Service Manuals: 5,7,8. RCA Victor Service Data: '47, '48, '49, '51. Mike Tannenbaum, PO Box 386, Ambler PA 19002. (215)-540-8055 Fax (215)-540-8327 or k2bn@agtannenbaum.com

Emerson AU-190 chassis; FADA 659 dial glass; Chelsea ZR-4 audio transformer; Sentinel 400 Television; Plastic CRT cover (front) for 17" Philco Predicta; Pilot TV-37 tuning knob (wood). Frank Johnson, 530 Elford Rd., Fairless Hills, PA 19030-3624. (215)-943-8295

Sales literature, service manuals, and equipment for theatre sound/broadcast use by RCA Photophone, Century Sound, Motiograph, Altec, Western Electric, etc. Theatre catalogs by Jay Emmanuel Publications, Philadelphia. Scott Stillwell, 2328 Cambridge Circle, Hatfield, PA 19440. (215)-393-1833 Pager: (800)-717-9306

Chassis and speaker for Sparton 517B (Machine Age to Jet Age, pg. 187) or Sparton 527-2 (Machine Age to Jet Age II pg. 283). Joe Bentravato, 84 E. Munson Ave., Dover, NJ 07801. (973)-361-7392

Repairs wanted: Have wind-up floor model Victrola. Winds and turns but stops when needle is lowered to record. Mildred Coleman, 5038 Gainer Rd., Phila. 19131. 215-879-3047 Ans. Machine:215-477-8151