

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

May 2000

Volume 6 Issue 5



MEETING/ ACTIVITY NOTES

Reported by Marv Beeferman

Based on the response at the April meeting, it appears that the club will maintain Friday evenings as our meeting date. Some requests were made to move the day to Wednesday during the summer to avoid weekend traffic, but the suggestion was not met with a positive reaction.

The club is soliciting nominations for a slate of candidates to be voted at the June meeting. Positions are open for President, Vice President, Secretary, Treasurer and Sargeant-at-Arms. Please submit your nomination no later than June 2nd to Phil Vourtsis by mail, phone or at the May meeting. The present officers have agreed to continue in their elected positions for the next cycle if no nominations are received.

The NJARC Webmaster baton has been passed from John Dilks to Dave Sica. Our thanks go out to John for all his hard work in getting the club on-line and devoting a significant amount of time in keeping up with and advertising club events. John has laid the groundwork for a major medium for maintaining our visibility and it is hoped that Dave will be supported by all our members in preserving this quality resource.

With close to 10 entries, the first NJARC Broadcast One-Tube Radio Contest was a major success and Technical Coordinator Al Klase deserves a lot of credit for organizing what appears to be an annual event. Membership voting gave top honors to Tom Provost in the Craftsmanship category, Walt Heskes took home the Technical Excellence award and Marv Beeferman's entry was voted "Most Creative." Winners received framed certificates created by Al.

MEETING NOTICE

The next meeting of the NJARC will take place on Friday, May 12th 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. A discussion and demonstration of grid dip meters will highlight this month's technical session; if you care to show any unique variations, your participation is welcome. We'll also be accepting nominations for club officers, talking about our experiences at the Trenton Computer Fest on May 6th, soliciting volunteers for our May 20th swapmeet and generally chewing the antique radio fat on latest acquisitions and disappointments.



Sal Brisindi takes a turn at Bob Dennison's MM1.

Besides the NJARC May 20th swapmeet, some upcoming local events may be of interest:

- The 2nd Annual Kutztown Meet will be held on May 13th at the Rennigers Antique and Farmers Market in Kutztown PA. The meet offers 75+ 'spaces under roof' plus 'unlimited spaces outdoors; an auction may also be included. Cost is \$15.00 a space and walk-ins are free. Contacts are Dan DeWald (610) 683-6848 or Steve Wallace (610) 944-7230 (kks@epix.net).

- The Dennis Auction Center, Highway 57W in Stewartsville, N.J. offers a Radio Auction on Friday, June 30th at 6:00 PM. Previews are Thursday, 4-8 PM and Friday after 12. The auction offers a large selection of consoles, table radios, some battery sets, ham gear, wood-cased GR lab equipment, parts and tubes. Manufacturers include Atwater Kent, Fada, Philco, Westinghouse, Columnair, Fairbanks-Morse, Zenith, Arvin, Stewart Warner, GE, RCA and others. Call (908) 859-3424 for information or contact the auction house on-line at (www.dennisauction.com). A 10% buyers premium applies.



Tom Provost's Twinplex proved very popular and took first place in the Craftsmanship category.

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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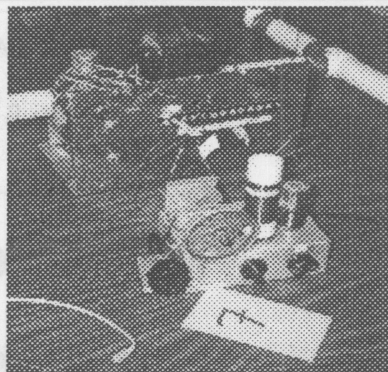
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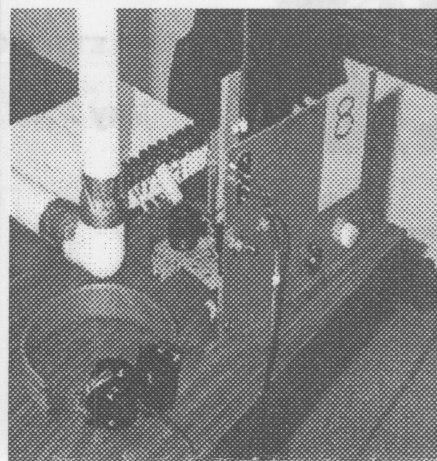
John Dilks, K2TQN
(609)-927-3873
<http://www.eht.com/oldradio>

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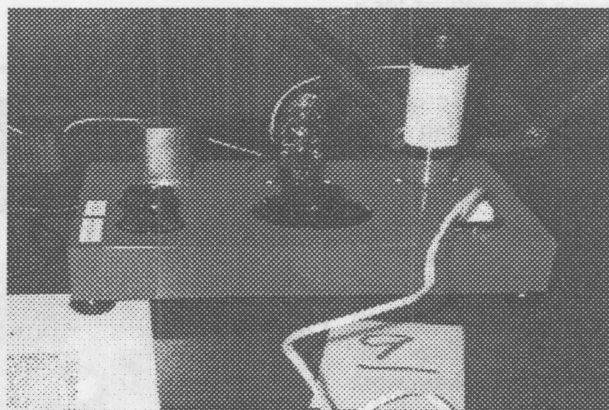
Marsha Simkin
10 Avalon Lane
Matawan, N.J. 07747
(732)-583-5196



Richard Mueller picked a 6SL7 high-mu duotriode as the basis for his entry but powered it from the power supply of a GE television set. Many listeners swore that they could clearly hear Lucy's muffled words as she stuffed herself with chocolates.

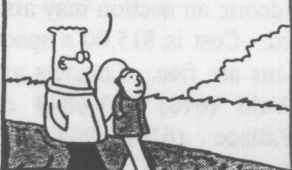


Grant Buford's entry utilizing a 1G6 twin class B power triode. Ten 9-volt batteries supplied plate voltage. We are still trying to figure out the purpose of the PVC pipe.



Marv Beeferman found the circuit for this entry in a 1935 "Radio Builders' Manual" published by *Modern Mechanix*. One-half of the 12A7 tube is equivalent to a '38 pentode used as a detector and the other half a rectifier. A table lamp with a 40-watt bulb is plugged into the receptacle on the set to drop voltage to the correct filament requirement. Named the "Red Baron," the red, plastic chassis once packaged a devastating women's cologne called "RUSH." Being a family publication, we won't expand on this any further.

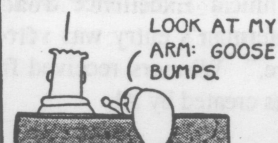
IF I LEFT ENGINEERING AND BECAME A MANAGER WOULD I BE AS SEXY AS I AM NOW, LIZ?



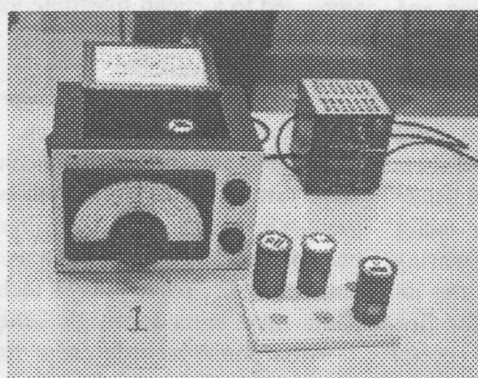
I THINK IT WOULD DECREASE YOUR SEX APPEAL BY 17%. BUT THAT'S JUST A PLANNING NUMBER.



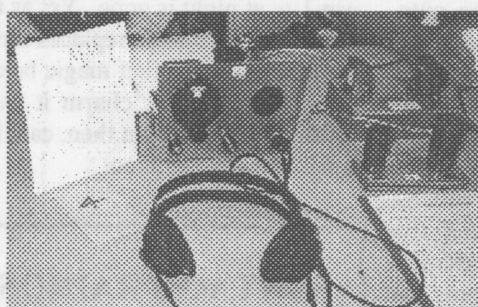
WHAT IF I GOT MY HAM RADIO LICENSE TO COMPENSATE FOR THE LOSS?



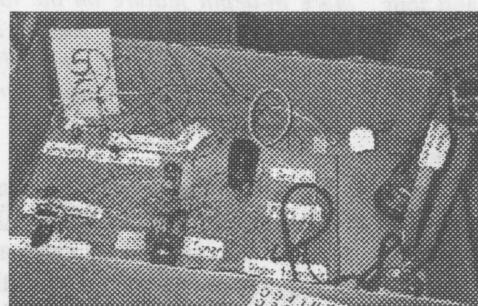
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Tom Provost's Twinplex, utilizing a twin triode, is based on a circuit from a Lindsay Publications reprint. It sports a dual illuminated dial and signal attenuator.



Bob Dennison suitably named his entry the MM1 for his first project of the new millennium. Based on a 6F7 triode-pentode and 3 interchangeable coils, Bob, who has been building radios since the 6th grade, jumped at the chance to create one more variation on a basic theme.



A father-and-son project, this simple regenerative "breadboard" from the Fiscina crew operates from a 1.5-volt and 90-volt battery.



Walt Heskes experimented with this VHF regenerative receiver, based on an adaptation of a 1940 Popular Mechanics article. Gimmick coils provide regeneration and slope detection covers the entire FM band. Brandes phones provide a good impedance match and 6-volt power is provided by four "D" cells. With a plate voltage of 140V for the 9003 VHF pentode, the receiver is described as "fairly stable."



Bill Zukowski based his entry on a circuit in "The Boys' First Book of Radio and Electronics" by Alfred Morgan. A low drain 1H4 triode drives this regenerative receiver powered by a 1.5-volt "A" battery and 45-volt "B" battery.



Martin Friedman evaluates Gary D'Amico's TRF entry which includes an RF amplifier, diode detector and reflex audio circuit.

RADIO HITS THE ROAD PART III

By Michael Lamm

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

By 1932 automakers were starting to offer radios as regular production options. In 1933 radio manufacturers sold 724,000 car receivers in the United States; in 1934 the number topped 900,000; and in 1935 it reached 1,200,000.

In 1934 General Electric developed a car radio that played equally well inside a car or house. GE's dual-purpose radio looked like a large loaf of bread. It was portable and could fit on the seat of an automobile, where it doubled as an armrest. Inside the car it was powered by 6-volt DC from the cigarette lighter. In the house it plugged into a 110-volt AC outlet.

Developments in car construction sometimes necessitated changes in radio design. In 1934 and 1935 General Motors' Fisher Body division began putting all-steel roofs - the so-called turret top - on its cars. Before the turret top, most car radios had used the wire mesh that lay under the fabric roof insert as an antenna. The turret top was more durable than fabric and gave better protection against the elements, but it knocked wire roof antennas for a loop. One solution was to retain the wire-mesh antenna but put it underneath the running board. Unfortunately, the running-board antenna was vulnerable to rocks, snow, and mud flung up by the front tires. Installers also put mesh antennas inside car doors and on the undersides of deck lids, atop the external spare tire, and as little "picket fences" that ran lengthwise along the roof.

Then someone came up with the idea of the whip antenna, which proved so simple and elegant that everyone wondered why no one had thought of it before. As early as 1937 Ford used a rotatable whip antenna mounted above the peak of the windshield.

It could be pointed up for distant stations or down for nearby ones with a knob inside the car. Buick, Hudson, Pontiac, and Cadillac soon adopted the same idea.

Speakers had usually been mounted on the firewall, which separates the engine and passenger compartments, until about 1936, when Ford and others placed them above the windshield for "ear-level listening." Before this time many car radios had their tuning knobs on the steering column and the receiver behind the instrument panel. Then in 1937 the first push-button radios appeared from several manufacturers. To set the station, you had to position a little setscrew for each button. The earliest of these push button tuners stretched lengthwise up the steering column.

Another innovation of the late 1930s was first seen in the Philco Rolo-Matic and Delco Selectronic radios: an automatic station selector that could be moved with a foot control. A toe button that looked like a second headlight dimmer switch moved the selector from one station to another. Zenith offered a similar option. For 1941 Delco came out with the Super-Sonomatic, which included five shortwave bands. Chevy also offered a shortwave set in 1941-42; it cost only five dollars more than the standard radio.

World War II advanced radio technology considerably, and some military innovations found their way into post-war car radios. FM had been around since 1933, but it wasn't introduced in car radios until 1951, when the German manufacturer Blaupunkt added an FM band to its premium AM radios. Transistor pocket radios arrived in 1954, and four years later instant-on transistors began to replace the bulky, slow-warming, and fragile tubes in car radios. The 1958 Cadillac Eldorado Brougham was the first car to include a transistor radio as standard equipment. That year, too, Pontiac and Oldsmobile offered optional transistorized pull-out radios that could use an in-car amplifier but also had a smaller amp and a separate battery pack, speaker, and antenna inside the pull-out head.

Then came the reverb, a short-lived forerunner of stereo equipment. A reverb inserted a slight acoustic delay between the front and rear speakers. This trans-

formed 1960s car interiors into echoey rolling concert halls. Reverb sound amounted to a cheap substitute for stereo, and it quickly disappeared when the real thing became available.

A short-lived innovation was the 45-rpm automotive record player. Despite their elaborate suspension mechanisms, these turntables suffered from bouncing needles on rough roads, and when drivers had to change records or reposition the tone arm, they made today's mobile cell-phone users seem downright benign.

After vinyl records came four-track and eight-track tapes, which in turn gave way to cassettes, which are now giving way to CDs. With such a wealth of user-programmed music available, as well as scanning devices to tune micro-chip-driven radios, the thrill of pulling in a distant station while racing along the highway late at night is gone. Yet as the automotive sound system replaces the humble car radio, it's still that magic box, even if it lacks the crackly charm it had in the 1930s and 1940s. But then, cars have lost some of that charm too.

VINTAGE RADIOS BY THE SCORE

By Jerry Reedy

Some members might be interested in a more in-depth feature on the late Ralph Muchow's Historical Radio Museum. This article appeared recently in the Smithsonian Magazine and is reprinted with permission...Ed

As a young boy growing up in Evanston, Illinois, in the 1920s, Ralph Muchow was hooked on a new and transfixing technological advance, the radio. Within a few years, as the golden age of early airwave programming entered its heyday, he and his siblings had become eager devotees of several serials. "My favorite," he recalls, "was The Shadow. I would listen to that whenever it was on." Gathered in an upstairs bedroom of their rambling, wood-frame house, the young-

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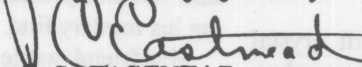
Mr. Clark C. Willever
21 West Washington Avenue,
Washington, New Jersey

Dear Mr. Willever:

In answer to the question you raised a few days ago, it is our opinion that the existence of a radio in an automobile operating at the time the car might become involved in an accident, which circumstance might have contributed to the accident in that the attention of the driver of the car was distracted, would not of itself void any of the terms and conditions of the Standard Automobile Liability and Property Damage Policy.

JCE:HC

Very truly yours,


J.C. EASTMEAD,
MANAGER.

sters followed everything from the adventures of the "All-American Boy" Jack Armstrong to the ongoing escapades of sisters Myrt and Marge.

Muchow as he enjoyed these features, though, Muchow's real love was the radios themselves - their intriguingly intricate innards, the vacuum tubes and coils and wires. Even as an 8-year-old, he was building crystal sets, advancing to one- and two-tube radios as the sets evolved. He was, already, an experimenter and an inspired tinkerer. "Every week," he remembers, "one of the Chicago newspapers, the Daily News, printed the diagram for a new circuit. It was fun to take apart the radio you had built the previous week and change it to the new one: each was supposed to be better than the last."

Muchow estimates that, over a lifetime, he has built between 200 and 300 radios. "I can," he says, "repair or build, any pre-World War II model." Those fix-it skills have certainly come in handy, for Muchow has amassed, over nearly 30 years, the largest private collection of antique radios in the world.

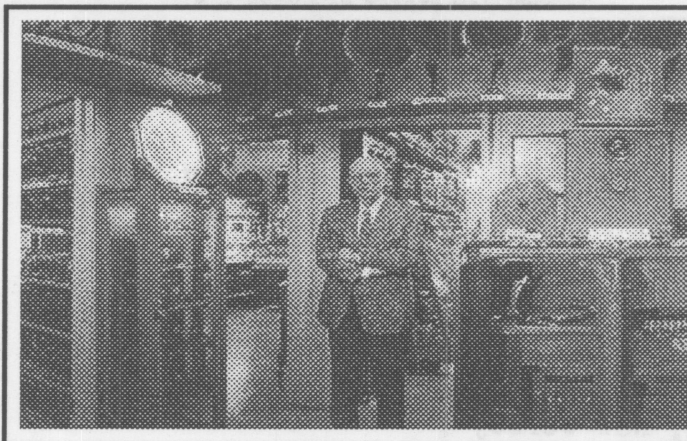
In all, the Elgin, Illinois, dentist owns more than 3,400 vintage radios. All of them are on display in his Historical Radio Museum, where treasures such as a 1902 model built by Thomas E. Clark (the oldest radio in his collection) are crammed into a converted office building. Muchow's stellar acquisitions also include the transmitter and receiver that Adm. Richard E. Byrd carried on his historic 1928 mission to the Antarctic and an ornate console custom-crafted for actor Rudolph Valentino in 1926.

Although Muchow had built crystal sets almost for as long as he can remember, he didn't start collecting radios until 1968. As he walked past an antiques store in Elgin one day, he spotted a couple of old radios in the window. They appeared to have been built in the 1920s. The shopkeeper said the models didn't work. One was an Atwater Kent model 10, mounted on a beautifully lacquered piece of walnut.

Muchow bought the two radios for about \$35, took them home and had them working within a matter of days. From that moment he was happily addicted. Ev-

ery Wednesday, his day off, he'd get into his station wagon and drove from one small town to another, looking for old radios to buy. In one of his earliest quests, he had heard about a farmer who possessed a vintage model for sale. When he arrived at the farmhouse, however, he discovered that the farmer was offering not a radio but a basket full of radio parts - plus an assortment of nuts, bolts, screws and coils of wire.

The farmer wanted \$50 for the lot. Muchow offered him \$35. As they were haggling, it started to rain. The bushel basket had no cover; Muchow winced as



he saw the raindrops splattering on the components. "Neither of us wanted to prolong the bargaining," he recalls, "so we agreed on \$40 rather quickly." Muchow hoisted his find into the station wagon and drove off.

As soon as he arrived home, he spread the parts out on the kitchen table and began fitting them together. After several days, he finished his assembly, took a Polaroid shot of the completed project and mailed the image to a fellow radio enthusiast in Pennsylvania for help in identifying his mystery find.

His friend wrote back, stunned. "It was," Muchow recalls, "an Atwater Kent model 5, one of the rarest radios ever made." (Unlike most Atwaters, this model had a defective tuning mechanism; production was suspended, Edsel-fashion, in 1923.) Originally, the AK 5 sold for \$55; today it could fetch up to \$6,000.

Muchow stashed his earliest acquisitions in his basement. But it wasn't long before the cellar was bursting at the seams. Radios began spreading to other parts of the house, stacked on stairs, piled

in the kitchen, heaped in the living room. Finally, his wife, Carole, had enough. "I knew," Muchow laughs, "I had to do something."

That was when he moved his collection to a building he had bought ten years before to house his office quarters. As the leases of tenants there expired, Muchow continued to take over space. Today, all 24 rooms, with the exception of his dental suite, are filled with old radios.

Behind each of these vintage models lies a story, a footnote to history perhaps, or a tale of how that particular piece was acquired. Take, for instance, the

Valentino radio. Actually, the RCA Radiola wasn't ever owned by the matinee idol himself. Although the star placed the order for it, the radio was not delivered to the family until November 1926, three months after Valentino's tragic death at the age of 31. The massive cabinet, containing a state-of-the-art radio and phonograph package, is embellished with an appropriately romantic image: a young couple trysting in a glade. The cabinet also is fitted with a cunning auxiliary drawer. "I like to think," muses Muchow, "that this would have held Rudy's slippers, or maybe his pipe."

The Valentino piece, and many of Muchow's other finds, came into his hands serendipitously. (Through friends, he heard that a Los Angeles art dealer was offering the radio.) The Byrd transmitter and receiver were a gift from the owner of the DuKane Corporation, an Illinois company that manufactures radios and radio parts.

Another valuable acquisition was made possible by a perfect stranger. One day, Muchow's work was interrupted by a telephone call from someone who wanted to sell an Atwater Kent model 70; the dentist told his caller that he already possessed five or six of those. But Muchow's interest was piqued when his persistent correspondent mentioned that the radio "must weigh 500 pounds"; Muchow had never heard of an AK 70 that large. Intrigued, he offered the fellow \$50 sight unseen; two friends obligingly hauled the radio to the museum. It turned out to be an AK 70 radio housed in a massive

handmade walnut cabinet: current market value is \$7,500. The piece features, among other fetching details, a retractable desk (serious listeners would use that surface for writing in a log, a book used to record the call letters of stations picked up) and a handy compartment for stashing liquor. The model had, after all, been produced in 1929, at the height of Prohibition.

Muchow also has a particular affection for the so-called novelty radios, quite the rage in the 1930s. Some of these models feature images of movie stars and celebrities, from Hopalong Cassidy to the Dionne quintuplets. Others, such as his prized Fontana, a 1932 beauty, are probably one of a kind. The Fontana's cabinet is an art-deco extravaganza, replete with fluted columns, a Greek goddess-type figurine set into a circular pool, all illuminated by a flick of the switch. "It was probably made," Muchow theorizes, "for the foyer of a theater or for a men's club. It's not likely that such a piece was created for a home."

Muchow claims that his collecting days are over, that he's no longer about to set off onto the back roads in search of treasures languishing in barns and attics. Maybe so - but his friends would be quick to point out that there is still that station wagon parked out back, ready for a foray into yesterday.

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!

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, US and Canadian receivers, 1920s to 1960s. #10 S.A.S.E. + \$2.50 for 1 to 5 pages of data per model; a copy charge of 20 cents per page is added for copies over 5 pages. (Questions/quotes answered by e-mail or a S.A.S.E.) Steve Rosenfeld, PO Box 387, Ocean Gate, NJ, 08740. Phone: 609-597-2201; srosenfeld@ems.att

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.

Howard W. Sams Photofact Service Manuals, Volumes 1 thru 26, Sets 1 thru 260. \$50 or best offer. Bill Kilmurray, 908-852-3985, kilm@goes.com

FREE but you must pick up at my residence: Dumont model 303 5" scope, 20" x 12" x 15.5", may have manual, good condition, haven't turned it on for years. AN/SGC-1 Teletype Terminal Unit by Remler Co., rack size, no cabinet, fair condition, Ham modified to change freq. shift, 7x9x15, about 40#. Pulse generator, Colonial Radio model 700-A, sophisticated unit, 30s or 40s, fair to good, good for parts, 14x19x15, about 40#. Pulse generator, AEL model 138, large and high power, 50s or 60s, fair. All of the above good for parts and tubes - if they don't go, the curb gets them. Ray Chase, 1350 Malborough Ave., Plainfield NJ, Phone: (908)757-9741 e-mail: enrpnr@erols.com

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

21" Philco Predicta table model. Wood with walnut finish. Includes functional (not original) floor stand. Works, but picture is rough - \$450. RCA Radiola 18 (wooden cabinet is about 30" x 9" x 9"). Includes stand with speaker; works: \$150. Delivery a possibility. Bruce Knapp, Rutherford, NJ; 212-337-0077 (W) 201-804-9259 (H)

Military WWII RAK-7, CND 46155 low freq., 6-band, 15kHz to 600kHz receiver with matching CND 20131 power supply and cable, all in "like new" condition; made by Andrea. \$100 Ray Chase, 1350 Malborough Ave., Plainfield, NJ 07060 (908)-757-9741 enrpnr@erols.com

WANTED

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 Bentrovato, 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