

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

December 2000

Volume 6 Issue 12



MEETING/ ACTIVITY NOTES

Reported by Marv Beeferman

NJARC's annual holiday party is on schedule for December 8th and, as usual, promises to offer lots of food, friendship and fun. Please try to avoid arriving prior to 7:00 PM to allow our organizers to set up without interference. The club will provide the basics, although to a more limited extent than in the past, where leftovers were abundant. Members are only asked to supply a hearty appetite and a sweet or desert (cake, cookies, fruit, nuts, or favorite holiday creation).

Two events are planned for the evening's entertainment:

MYSTERY GRAB BAG - Wrap a radio-related item to conceal its actual shape (the sneakier, the better) that's worth a minimum of \$15 to \$20 (although a few higher priced items are encouraged to make the game a little more interesting). Your package is your ticket to join the fun. Each participant's name will be placed in a hat. The first person whose name is drawn will select the item of his choice and reveal it to all players. The second person whose name is drawn selects an item but does not open it until the decision is made to either exchange it with the first player's item or keep it. If the item is kept, it is then unwrapped and the game continues with a third player. Play progresses with each new player having the opportunity to "steal" any unwrapped item in the "pot" in exchange for his wrapped choice. Spite, malice, ill-will, malignity, retaliation, revenge and reprisal are all encouraged.



MEETING NOTICE

The next meeting of the NJARC will take place on Friday, December 8th at the Grace Lutheran Church, corner of Route 33 and Main Street in Freehold. Our annual holiday party will get underway slightly earlier, at 7:00 PM, but please plan to arrive no sooner so we can get things organized. Ensure you read this month's MEETING/ACTIVITY NOTES so you can fully participate in all the activities that are planned.

RADIO SCAVENGER HUNT - Ten categories are offered but we're asking members to compete in no more than two. Describe your entry, write its category number on the front of a 3 X 5 card (also available during the contest) and print your name on the back of the card. Win-

4. Most unusual radio that doesn't look like a radio.
5. Most unusual holiday-related (all holidays included) radio item.
6. Strangest looking tube.
7. Most unusual radio-related children's item.
8. Most unusual radio service item or test equipment.
9. Ugliest commercial radio.
10. Open category (advertising, record players, microphones, books, magazines, televisions, transmitters, etc.).



Jon Butz Fiscina lectures on Philco capacitor restoration.

ners will be chosen by our expert panel of judges. Here's the list so let the scavenging begin!

1. Smallest transistor radio.
2. Most unusual item that looks like a radio but isn't.
3. Most unusual speaker.

Our November meeting was highlighted by a hands-on presentation by Jon Butz Fiscina and son on restoring Philco block capacitors. Jon relied on a heat gun to remove the old tar-like filler and showed that a slow and careful application of heat will avoid the usual splatter and blistering of the Bakelite shell. Once the block was brought up to temperature, tar and capacitors were easily scraped out with a pocket knife and soldering tool. Jon recommended a copy of Ray Bintliff's "Philco Condensers and More" as an essential reference for capacitor restoration. The book provides a cross-reference between the block's part number and a figure illustrating internal and external connections and component values. It also

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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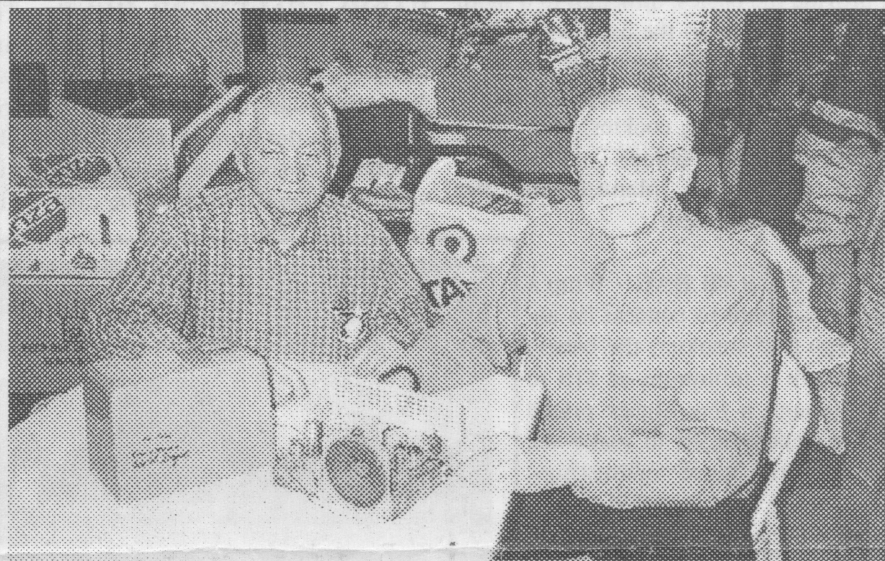
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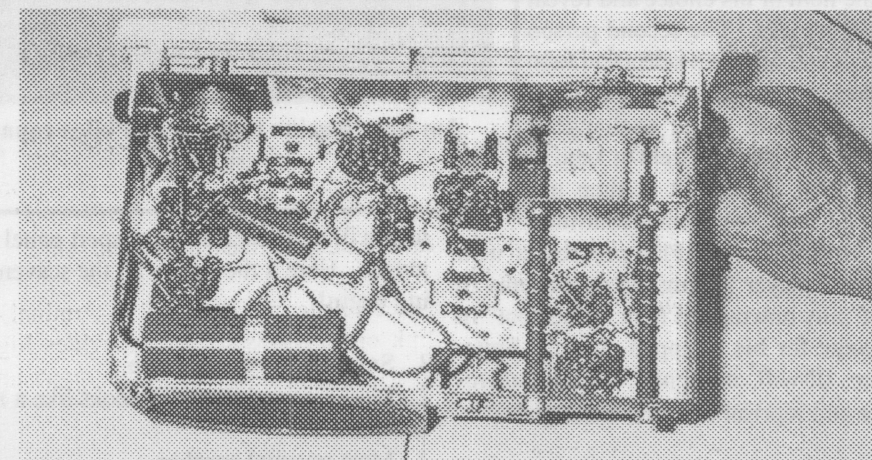
provides data for Philco metal-cased capacitors and tone controls.

Baseball trading cards, first editions and playbills are but a few of the items that collectors enhance with signatures. John Ruccolo felt that there is no reason why radios shouldn't fit into the same category and Ben Tongue and Issac Blonder were ready to oblige by signing John's recently obtained Blonder-Tongue R-20 High Fidelity FM radio. Considering that most signatures are forgeries, it looks like John may have created a new collecting "opportunity." But at least for this one, we have the pictures to prove it.

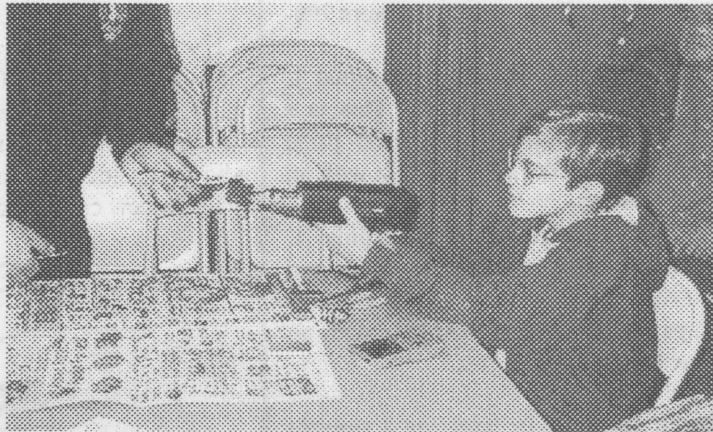
I'd like to sign off for this month with another example of how some of our members go beyond the call of duty to help out the club. We recently obtained a 25" TV to show videos to supplement our technical sessions which the Church cordially allowed us to keep in their meeting room. We were in the process of buying a roll-around cart for neater storage; a decent one runs about \$250. Enter Richard Lee...Richard was passing by the rear of a building where he saw some workers loading a perfect specimen into the dumpster. From here, the story enters the "you had to be there to appreciate stage" but bottom line is that Richard's "suit and tie" presence was enough to convince the workers that this valuable item was not intended for oblivion. Picture Richard rolling our new cart down the streets of New York City to the safe haven of his vehicle so it could ultimately rest safely in its new home at Grace Lutheran Church. And what have you done for the club lately?



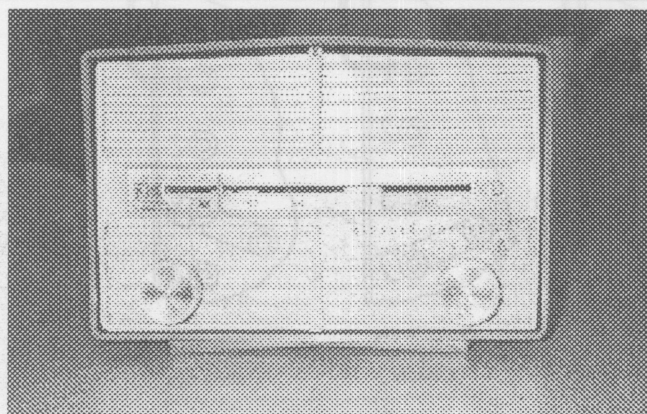
The Blonder-Tongue team.



Anybody ever hear of permeability tuning?



With the Fiscina's, radio restoration is a family affair.



The Blonder-Tongue R-20 High-Fidelity FM radio.



This novel Wollensak recorder uses tape cartridges instead of the standard reel.

RADIOLA DX'IN

By Marv Beeferman

Some of the following article is based on material found in Jim McKinnon's article "Dxing the Radiola IIIA" from Volume 13, No.4 of the ARCA Gazette...Ed.

Now that you've got your Radiola III or Radiola IIIA ready to explore the airways, you may find the following tips useful for successful Dxing; operation is a little more complex than most three-dialers of the era.

Depending on the instruction booklet that was being used, a Radiola operator had a choice of 6 or 7 antenna hookups, with two additional alternatives for a total of 9. Choice basically corresponded to the length of the antenna being used and the sensitivity ("straight single tuning") or selectivity ("coupled circuit") desired. You may want to refer to the schematics provided in last month's "Broadcaster" to follow along with each possible setup:

No. 1 - Antenna connected to terminal 4, link open. This hookup provides high sensitivity from an average antenna and covers 1500-830 kHz.

No. 2 - Antenna connected to terminal 3, link open. This hookup provides high sensitivity from an average antenna and

covers 1200-625 kHz.

No. 3 - Antenna connected to terminal 2, link open. This hookup provides high sensitivity from an average antenna and covers 810 -400 kHz.

No. 4 - Antenna connected to terminal 2 and 3, link open. This hookup provides high sensitivity from an average antenna and covers 950-535 kHz.

No. 5 - Antenna connected to terminal 2 and 3, link on terminal 4. This hookup is provided for a very small antenna such as an indoor one and is effective over a range of 1070-520 kHz.

No. 6 - Antenna connected to terminal 3, link on terminal 4. This hookup is for a very large antenna and covers 1070-520 kHz.

No. 7 - Antenna connected to terminal 2,

link connected to terminal 3. This hookup is for a very small antenna and covers 790-525 kHz.

No. 8 - Antenna connected to terminal 1, link connected to terminal 4. This is a "selective" alternative to the first three hookups and covers 1540-800 kHz with an average antenna.

No. 9 - Antenna connected to terminal 1, link connected to terminal 3. This is a "selective" alternative to the first three hookups and covers 970-470 kHz with an average antenna.

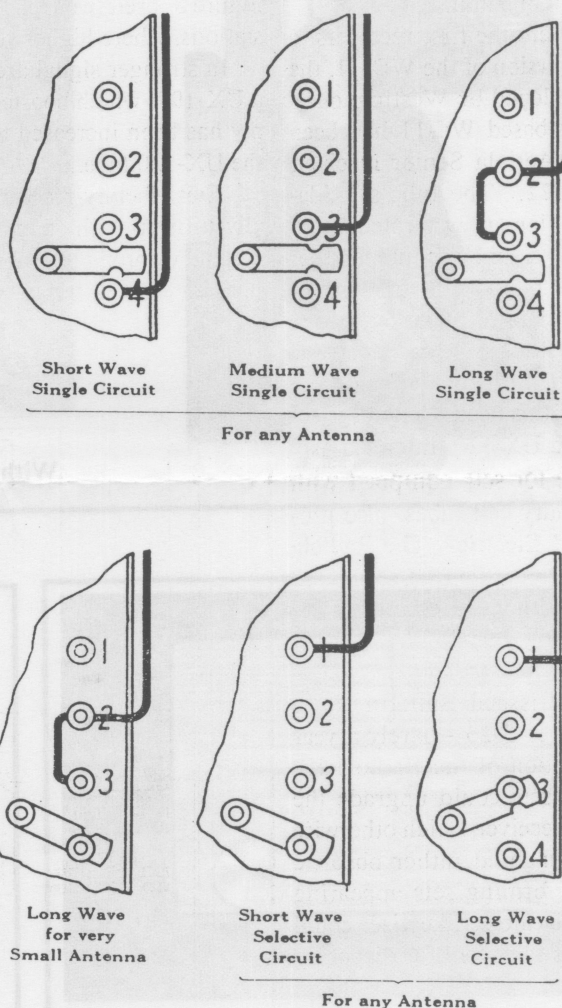
Begin operation by selecting a suitable antenna connection. Start with No. 8 or 9 if selectivity is desired although volume will be low. The other antenna combinations will give good volume on local stations but separation of distant stations may be difficult.

Rotate the BATTERY SETTING filament rheostat (or rheostats, if a IIIA is being adjusted) to the right until filaments glow a dull cherry red. (In these sets, this control also acts as the on-off switch.) With fresh "A" cells, this should happen prior to reaching the "Y" in BATTERY.

From here, tuning in a station will be a matter of personal preference. The instructions say to set AMPLIFICATION at "3" and locate a station with the STATION SELECTOR. However, some collectors prefer to turn the AMPLIFICATION control to the point of oscillation and back it up, operating just under the point at which the radio oscillates. Once a station is found, the battery rheostat(s) should be adjusted for peak performance. For best reception, the AMPLIFICATION and the STATION SELECTOR controls must be carefully adjusted as changing one may affect the other.

Remember that the maximum sensitivity of a regenerative receiver is obtained when the set is just ready to oscillate. The ease with which oscillation occurs depends upon the antenna and the condition of the detector. Therefore, some antenna combinations may require a detector voltage of 45 volts for oscillation to occur.

In general, don't expect great volume and sound quality from these sets, but distance reception will equal or exceed the capabilities of many of comparable three-dialers of the period.



Six of the nine recommended Radiola III/IIIA antenna hookups.

RADIOLA III/IIIA MODIFICATION

By Richard Ransley
WA2TLR

The following article by Richard Ransley (WA2TLR) first appeared in Volume 22 of "The Old Timer's Bulletin" As a follow-up to our restoration series for the Radiola III and IIIA which appeared in the November "Broadcaster," it offers yet another possibility for bringing these "neglected" radios back to life without sacrificing originality with replacement WD-11's...Ed.

Most present day owners of the popular Radiola III or IIIA assume that the only "correct" type of tube to be used is the WD-11. Not necessarily so! In 1925, the sales department of RCA issued a bulletin describing how the efficiency of the Radiola III family could be improved by the use of the Radiotron UX120. The bulletin detailed how the receiver could be modified to accommodate this newly introduced output amplifier tube.

Sales of the Radiola III began in mid 1924. This widely advertised set was no doubt one of the most popular of the Radiola series. Its affordable price of \$24.50 brought radio into the homes of thousands of families. An optional balanced amplifier was available if the owner wished to obtain loudspeaker volume. Also marketed at the same time was the Radiola

IIIA, which combined the III and balanced amplifier in one unit.

The III/IIIA were the first receivers to use the bakelite version of the WD-11, the dry cell tube developed by Westinghouse. The earlier brass-based Wd-11 had been first used in the Aeriola Senior receiver, introduced in 1922. The tube's oxide-coated platinum filament was rated at .25 amperes at 1.1 volts, and was intended for use primarily as a detector.

Not long after the introduction of the Radiola III, an increased emphasis was being placed on higher audio output power. To satisfy this need, General Electric developed the UX-120, intended as a final audio stage for sets equipped with UV-199/UX-199 dry cell tubes, also produced by General Electric. The Radiola 25 and 28 were among the first sets to use the UX-120. The improved output power was substantial.

It was for this reason that the RCA Sales Department issued Bulletin No. 6 dated December 11, 1925 - barely a year after the introduction of the Radiola III. Owners of these sets could upgrade the performance of a receiver which otherwise would soon be rendered rather obsolete with superior performing sets appearing on the market. Dealers, likewise, could use the bulletin as sales tool for disposing of unsold Radiola III/IIIA inventory, which was still considered a most economical set.

The eight page bulletin offered two methods of modifying the sets.

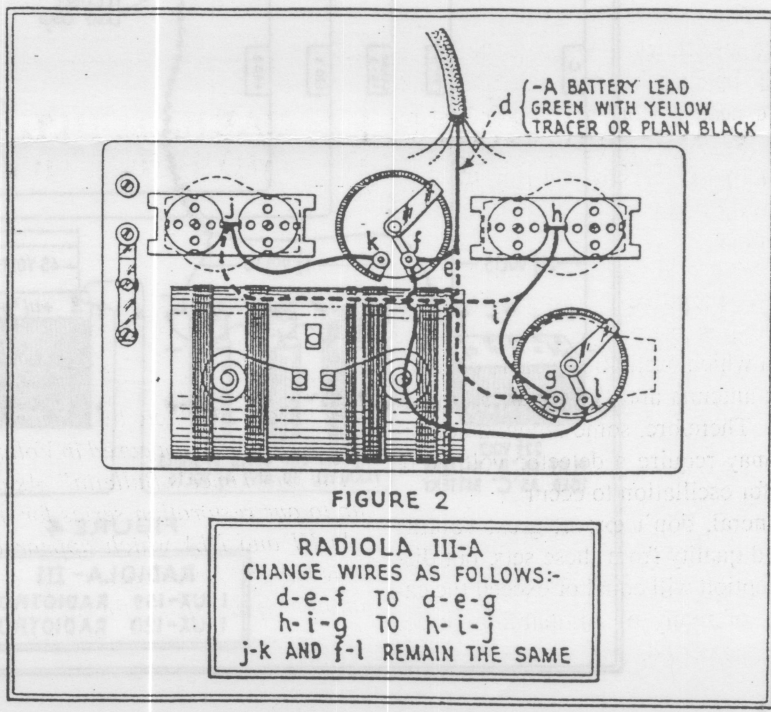
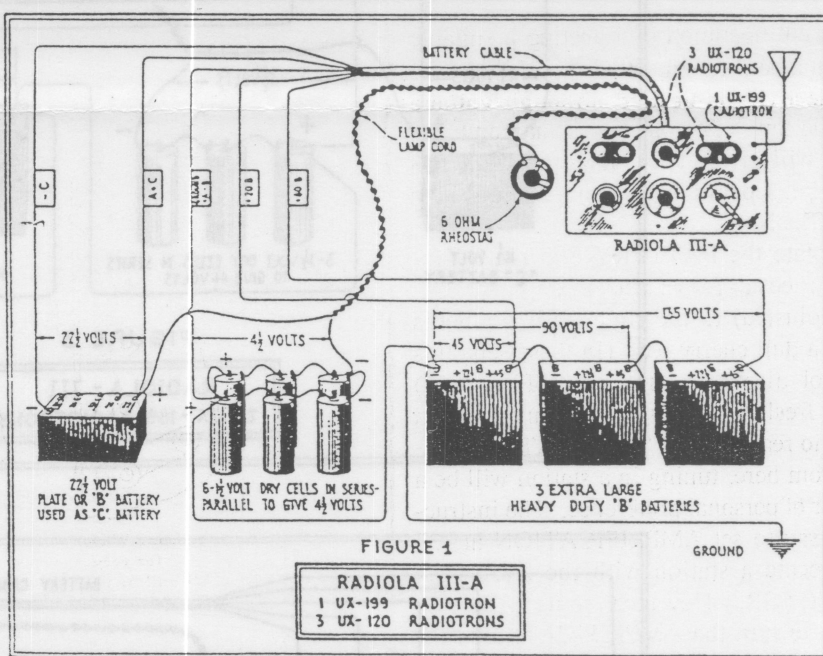
Method I, shown in Figure 1, required no internal wiring changes, but rather the addition of a 6 ohm rheostat in the filament circuit. Battery setting controls would be kept fully 'on' and the filament voltage was subsequently controlled with the external rheostat. The detector stage used a UX-199 which was the same 3.3 volt filament rating as the UX-120. Note the higher battery voltages required for the filament and plate supply.

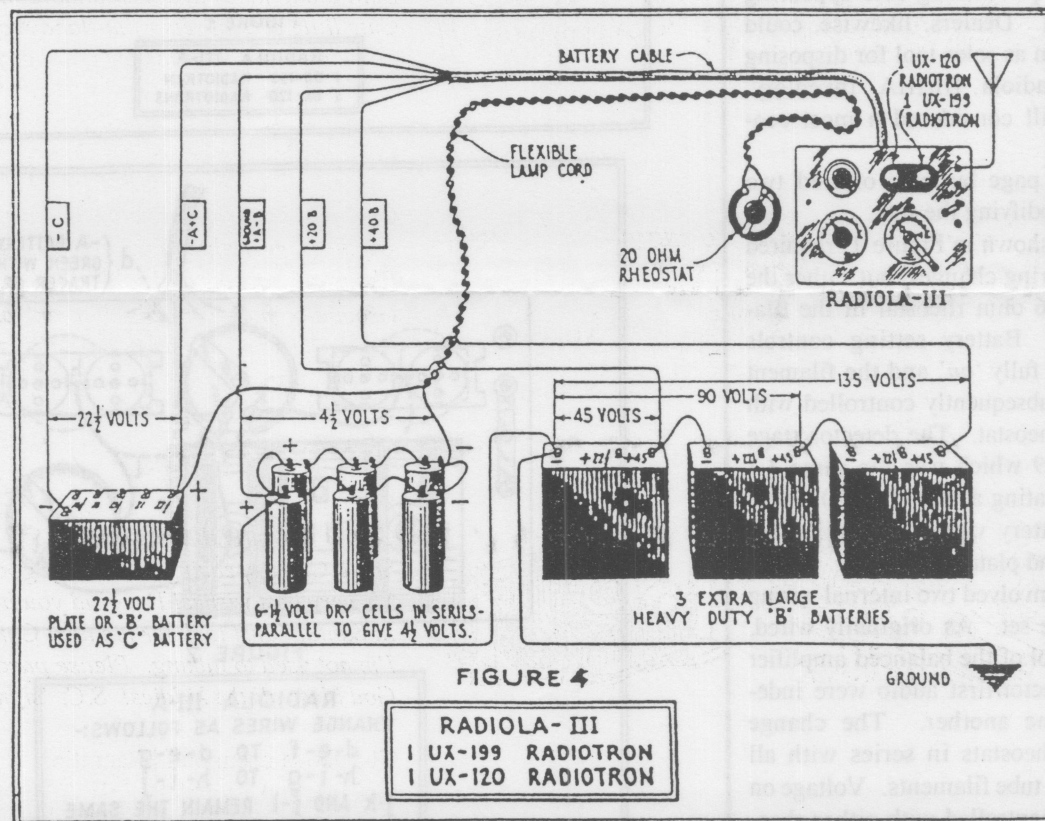
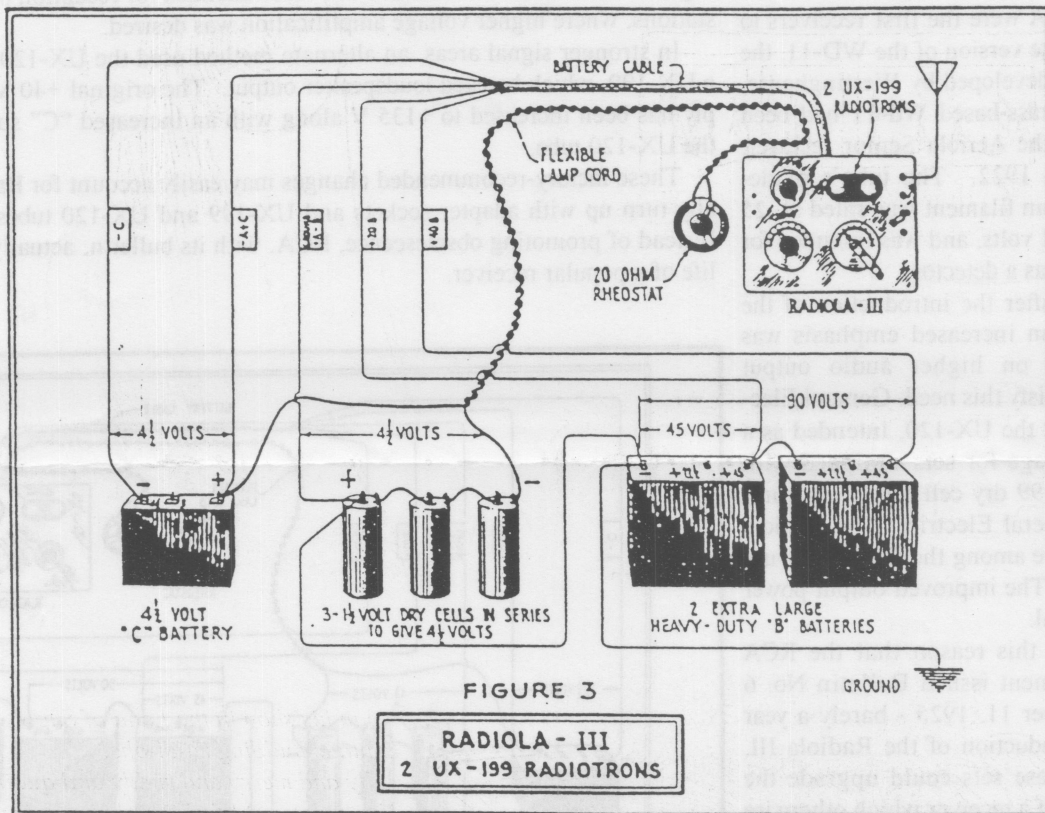
Method II involved two internal wiring changes in the set. As originally wired, filament control of the balanced amplifier tubes and detector/first audio were independent of one another. The change placed both rheostats in series with all four paralleled tube filaments. Voltage on all tubes was controlled with either rheostat.

Radiola III sets likewise could be modified in either of two ways. The first method, Figure 3, used two UX-199s and was recommended for reception of signals from distant stations, where higher voltage amplification was desired.

In stronger signal areas, an alternate method used the UX-120 in combination with a UX-199, which boosted loudspeaker output. The original +40 V amplifier plate supply has been increased to +135 V along with an increased "C" supply to properly bias the UX-120 tube.

These factory-recommended changes may easily account for Radiolas that occasionally turn up with adapter sockets and UX-199 and UX-120 tubes instead of WD-11s. Instead of promoting obsolescence, RCA, with its bulletin, actually extended the useful life of a popular receiver.







CHRISTMAS, 1924

By Charles H. Van Housen

Up in his shop in the Land of Snows
 Santa is building ra-di-ohs!
 Jolly and merry and ruddy and quaint -
 Up-to-date, old-fashioned, modernized Saint!
 Thousands of "plexes" and "flexes" and "dynes"
 Built along fancy and fashionable lines!
 Cute little crystal sets - jim-dandy toys
 Made by Saint Nich 'las for good girls and boys!
 Sets by the dozen and sets by the score -
 Ten tubes and one tube and three tubes and four!
 Piled in his store-room in gala array,
 Tagged: "Do Not Open Before Christmas Day!"
 Cabinets, batteries, panels and wire -
 Anything, everything fans could desire!
 Rheostats, sockets and soldering-lugs,
 Ground-clamps, condensers, transformers and plugs!
 Wave-traps and meters and toolchests and books
 Tucked away safe in the corners and nooks
 Of that jolly big workshop 'way up in the snows
 Where Santa is building our ra-di-ohs!
 Tune up your hearts, folks, 'most any night -
 Sweet from his mansion so glist'ning and white
 Comes the announcement; "Station North Pole!
 Santa Claus speaking! To every good soul
 My very best wishes! I'm glad you believe
 In Santa! Just look for me next Christmas Eve!
 I'm not used to talking. Please pardon this cough!
 God bless all the kiddies! S.C. 'signing off!"

The above poem and illustration is courtesy of "The Radio" section Philadelphia's *Evening Public Ledger* for Saturday, November 29, 1924...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

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.

Zenith TransOceanic H500; working. Would like my Philco 40-215 repaired. Larry Hellebrandt, (908)-232-1213

Radio schematics and service data, US, Australian and Canadian receivers. #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, P.O. Box 418, Manahawkin, N.J. 08050 Phone: 609-597-2201; 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.

Heathkit model XR-1L transistor radio. Working and in good condition. Call Clifford, (201)-641-3968

Andrea console entertainment center (1950), very nice condition. "I'll take almost anything for it." Douglas Eldridge, (973)-674-8194

Atwater Kent 60 with F-4A speaker; Emerson B5 wooden table model. Gary Gadec, (908)-654-6109

Emerson catalin model BT245 (green); no cracks, works. Nick, (973)-305-4861

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.

Zenith console radio/phono, chassis # 11-C-21, black dial, circa 1946-1948. Right front tilt out tuner (BC/SW/2 FM bands). Left front pull out twin arm phonograph. Set is complete and "plays" but dial cord needs re-stringing. \$150 Located in Lebanon, PA. JPG files available from owner Greg Keiper "seadog@lmf.net"

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)

FOR SALE: Advertising Space

COST: \$0.00 for club members.

RADIOS: Regal 747 4-tube portable, Fisher FM-80 tuner, Philco "Tropic" portable, Zenith 10S549 console, Atwater Kent Model 40, others. **PARTS:** Big-pin tubes, vintage semiconductors, geiger-counter parts. **PAPER:** Vintage Allied, Lafayette, etc. catalogs, service notes and vintage manuals - list available. John Rohr, 348 Farm Lane, North Wales, Pa., (215)-661-1134. FAX-(215)-661-2910. jaxrohr@netreach.net

Lyric model 60-66 by All-American Mohawk, 3-gang TRF uses 120 VAC. Works fine. With 7 tubes: 2-226, 1-326, 2-227, 1-71A and 1-80. Has face panel to fit into a cabinet. Asking \$50. Large 40 amp variac, G.R. Type 50A, 115 VAC in, 0-135 VAC out, 13" dia. with 7" handwheel, 85 lbs., asking \$25. Both items pickup only. Harry Kundrat, (908)-665-1873.

WANTED

Crystals for my Viking II transmitter. Not sure of style, but pin diameter is about 0.093" and spacing just under 1/2 inch. Looking for 1800-1850 and 3500-3550. Rob Flory, 609-466-4217.

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

Information, circuit diagram, and purpose of the following set: 30-50 MC FM monitor, Knight model KG-220 by Allied Radio, Chicago, service number 8343111-610003-6N. Alton A. Dubois Jr., Peggy Ann Rd., Queensbury, NY 12804

AM-FM-PHONO-AUX selector switch for a Sherwood Model S-7650CP stereo receiver. Alton A. Dubois, Jr., 67 Peggy Ann Rd., Queensbury, NY 12804

For RCA TK-11 camera restoration: oak field tripod (Mitchell?), chrome script "television." chrome 1.1" RCA logos, viewfinder hood and old network logo panels. Dave Abramson, (610)-827-9757, dtatv@worldnet.att.com.