

# The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

Fall 1996

Volume 2 Issue 2



## MEETING/ ACTIVITY NOTES

Although your editor was unable to attend last month's meeting, 15 members braved the weather and were rewarded with an excellent slide presentation by Ray and Edith Chase on radio-related postcards, some going back to the early Marconi era.

From the "You Can't Hold a Good Man Down" department, you will probably note from this month's "NJARC's Tube Program" article that Lud Sibley is still hard at work supporting the club's activities from his horizontal desk...it's amazing what recuperative powers an NJARC fruit basket has! As an adjunct to Lud's article, the club would like to remind members that the work involved in this program is significant and it is offered as a benefit as part of the \$15 membership fee. Buying tubes for the sole purpose of resale is not only unfair to the people directly involved in the program but to the entire membership. 'Nuff said.

On Saturday, January 27, the following club members worked from 9:00AM to 2:00PM installing a PA system in the Grace Lutheran Church and adjacent nursery: Rick Weibezahl, Jim Amici, Phil Vourtsis, Ernie Hartman, Marty Friedman, Gary D'Amico, John Ruccolo and Tony and Kathleen Flanagan. The cordless mike system was donated by the club while Don Cruise donated a Bogen amplifier and Rick Weibezahl provided the speakers, housings and transformers. Rev. Watkins was very appreciative, especially since members had to work around church volunteers who were painting the nursery. Work on the meeting room system will be finished in the near future, using an amplifier donated by John Dilks.

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## MEETING NOTICE

The next meeting of the NJARC will take place on Friday, February 9, 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. The topic for this month will be "The Rationalized Autodyne" presented by Al Klase.

## NJARC's TUBE PROGRAM

By Ludwell Sibley

As regular meeting attenders know, NJARC has had a "tube program" going for a couple of years. Similar to programs of the Mid-Atlantic, Delaware Valley, and Ottawa clubs, this operation solicits donations of new and used tubes from members. Incoming tubes are sorted, tested, and boxed. Some receive a brief stay in the "tube hospital" to fix loose bases, missing top caps, broken pins, etc. They are then offered at club meetings at affordable prices. This makes replacements available in and out of flea-market season, and supports the club treasury.

The program tries to have one to three "copies" of all tubes used in radios available at any given meeting. We try to cover everything from "All-American Five" sets to communication and audio gear, which presently means about 800 types. These are backed-up with a stock amounting to, in total numbers, roughly 3500 tubes.

Of course, a donation-based system can't cover all possible types. We've never had an FM1000 available, and 1L6s are a sometime thing. Members ask pointedly whether the club offers WD-11s, 3LF4s, EL34s, etc. (read: "why not?"). We have done a few selective purchases of tubes at auctions and other events where the types and price seemed right. But basically the stock reflects donations. Members support the program - rather generously in some cases - with boxes and grocery bags of contributions.

Along that line, if there were awards for donors, the "Most Big-Pin Types" prize would go to Rick Weibezahl. The "Biggest Volume" certificate would belong to Bob Lynn, who has provided perhaps three cubic yards of tubes all told. And the "Most Western Electric Types" award would go to Larry Rubins. But smaller donations, which have amounted to sixty or so by now, have been very helpful too. Experience shows that even the grubbiest grocery bag of "TV pulls" contains something useful. We'll take anything from "new-in-the-box" to coated with mud and apparently unidentifiable.

(continued on page 2)

Just for fun, here's a breakdown of members' most common purchases over a recent 11-month period. Sales are naturally limited by availability (we would have loved to have a crate of Western Electric 300Bs handy), but there's a certain amount of insight to be gained here.

**NJARC TUBE SALES  
"BEST SELLERS"**

TYPE	BOUGHT
35Z5	12
6D6	8
6Q7G	8
39	8
24A	7
26	7
27	7
45 (INCL. "S")	7
5U4GB	6
6A8G	6
6C6	6
306A	6
12SA7	5
35L6	5
35W4	5
50L6	5
01A ("S" BULB)	5
1T4	4
5V4G	4

TYPE	BOUGHT	TYPE	BOUGHT
6A7	4	12SK7	3
6BE6	4	35C5	3
6J7G	4	50C5	3
6K6G	4	36	3
6K7	4	80	3
6LG6	4	1LA4	2
12BE6	4	1LB6	2
35	4	1R5	2
37	4	1S5	2
41	4	3Q5	2
43	4	5Z3	2
75	4	6AB4	2
3V4	3	6AB7	2
5Y3GT	3	6AC5G	2
6A8	3	6AU6	2
6BK7	3	6B7	2
6BQ5	3	6BA6	2
6CS6	3	6H6	2
6F6G	3	6J7	2
6J6	3	6K8	2
7G7	3	6N7	2
12AT7	3	6SG7	2
12AU7	3	6SN7	2
12AV6	3	6SS7	2
12BA6	3	ALL OTHERS	2



## WHAT'S ON

By Marty Friedman

Antenna strung, batteries all charged, headphones on...? Now that you have that prize antique radio all hooked up and ready to play, what are you likely to hear on it? News of the bombing of Pearl Harbor? Perhaps the election results of 1920? I think not. AM radio broadcasting has changed much since the days when our radios were new. With the advent of FM radio and television after World War II, the popularity of standard broadcasting has greatly diminished. Some say it may be eliminated in the foreseeable future.

The broadcast band (530 - 1600 khz) is allocated into 108 channels, each 10 khz wide. A good quality receiver will pick up a different station on each of these channels; lesser sets will lose some of these due to adjacent channel interference from a more powerful "neighbor" on the dial, or lack of sensitivity due to poor circuit design or defects.

One consideration is whether you are listening during the day or at night. In daylight, the atmosphere does not reflect radio waves of this type; stations can only reach line of sight or "ground wave" points. This distance is limited by the height of the transmitting station (or the antenna) and the power of the station. Local stations with 500 to 5,000 watts may be heard for only 10 to 25 miles. Large stations, which transmit at the legal limit of 50,000 watts, sometimes can be heard for 300 miles or more during the day. Antenna towers are positioned for some directionality of the signal which further affects this range. After dark, the

ionosphere reflects these waves and the signals bounce 4 to 8 hundred miles at a time. Weather fronts also affect these waves, so it is possible to hear a station on one frequency one night and perhaps a weaker station further away on the next.

Knowing the class of a station greatly increases your ability to locate or identify it. A Clear Channel station has a wide area of coverage. Some clear channel stations are the only stations on a particular frequency; others share a frequency only if they are very far apart; in the past, this was defined as 700 miles. In either event, no other station can interfere with its signal over this area. A Class B station must have a power output between 250 and 50,000 watts or 10,000 watts in the new 1605 to 1705 khz band. For a station to be classified as Class C, it must have a power output between 250 and 1000 watts and the area of coverage must be local. Frequencies for this class include 1230, 1240, 1340, 1400, 1450 and 1490 khz. Class D (daytime) stations are restricted to local coverage and must cease operation or reduce power to 250 watts at dusk.

The broadcast band has been recently extended on both the upper and lower ends from 510 to 1720 khz. These frequencies are used for local services such as "talking houses", a real estate service where a low power transmitter plays an endless tape extolling the virtues of a house placed for sale. Another use is for traffic reports from the highway authority.

Radio stations are required to specify a format for their programming. An example would be "All News" or "Country and Western Music." Many stations have several different formats, allotting so many hours to each one. Knowing the format of a station can help in its identification; it seems stations always fade to unintelligibility just as the call letters are stated (Murphy's

Law once again). Many stations no longer offer much live programming; an announcer with a New England accent may be heard in a transcribed broadcast from the deep South.

Much of the information presented here was obtained from the "Broadcast and Cable Yearbook" published by R.R. Bouker, New Providence NJ. It may be found at the reference desk of local public libraries and also has complete listings of radio stations by frequency, call letters, and locations.

*(meeting/activities continued)*

Reservations for the upcoming Spring swapmeet on March 16th are starting to come in so it is suggested that you get a check to me or Richard Brill as soon as possible to guarantee an indoor table. After giving it a little more thought, I decided to cancel the Old Equipment Contest; a one-day swapmeet might not be the best environment for an activity like this. However, it will probably be deferred to a future NJARC meeting in lieu of a presentation so it can be given the attention it deserves.

As you've probably noticed by now, I've included a copy of our event flyer in this month's issue. First, please note some changes: a) Vendor setup is at 7:00AM and the doors open to the public at 8:00AM. b) The Town House Motel is not offering reduced room rates, and c) There is a \$2 parking/entrance fee for buyers. Second, this is a great opportunity to participate in club activities; by making copies of the flyer (Staples charges 4 cents) and distributing them locally (keep a few in the car and post them in Food Town when you go shopping; even radio collectors must eat occasionally) our advertising is broadened significantly. Thanks, Marv

## ACROSS

## NUMBER

## CLUE

- 1 Russian radio pioneer
- 7 Transmitted electromagnetic waves through pipes
- 9 Shared Nobel Prize with Marconi
- 10 Marconi's yacht
- 12 Defunct antique radio club(init)
- 16 Electrical genius and coil inventor
- 18 Wrote "Practical Wireless Telegraphy"
- 19 Discovered current electricity created magnetic field
- 20 Italian developer of theory of animal electricity
- 21 Initials of 46 Across
- 22 Inventor of magnetic telegraph
- 23 Held patent for aerial telegraphy
- 25 Initials of 67 Across
- 26 British communications network
- 29 Canadian-born radio pioneer
- 30 Interference (Q-Signal)
- 31 Invented "audion"
- 33 Publisher of ARC
- 34 gap
- 35 British physicist and thinker
- 36 Title of 46 Across(abbr)
- 37 Developed theory of \_\_\_\_\_ -Heaviside layer
- 38 Harnessed electric arc to wireless
- 40 German contemporary of Marconi
- 42 Radio publication
- 44 Radio Corporation of America (init)
- 45 Initials of 91 Across
- 46 Founder of 44 Across
- 47 Motorola founder
- 51 Not the Blue but the \_\_\_\_\_ Network
- 52 Translated Faraday's work into math expressions
- 53 Famous for fancy tubes
- 54 Unit of electrical measurement
- 57 Chief engineer for United Wireless
- 60 WD11 is one kind \_\_\_\_\_
- 61 Italian scientist and teacher
- 62 Initials of 75 Across
- 65 Induction telegraph pioneer
- 67 RCA TV pioneer
- 68 Renown upstate NY collector(init)
- 71 Trucker's radio
- 74 Editor of radio magazines
- 75 Pittsburgh radio man
- 80 RCA engineer
- 81 Italian telephone pioneer
- 84 Initials of 88 Across
- 86 Unit of electrical measurement
- 88 Hertz's professor
- 89 Wrote "The Wireless Man"
- 91 Light bulb inventor
- 92 Wrote "Boy's First Book of Radio"
- 94 Developed first electrical motor
- 95 Distress signal
- 96 What Tesla is known for
- 97 Nickname of 57 Down
- 98 Associate of Morse
- 100 Telegraph system
- 103 Had early NJ TV lab
- 105 GE research scientist
- 108 Utilized Edison's effect in a rectifier
- 109 Marconi's assistant
- 110 German radio company
- 111 Radio manufacturer
- 112 Known for Atlantic Cable
- 113 Sear's Chicago radio station
- 114 Title of William Thomson, Lord \_\_\_\_\_

## DOWN

## NUMBER

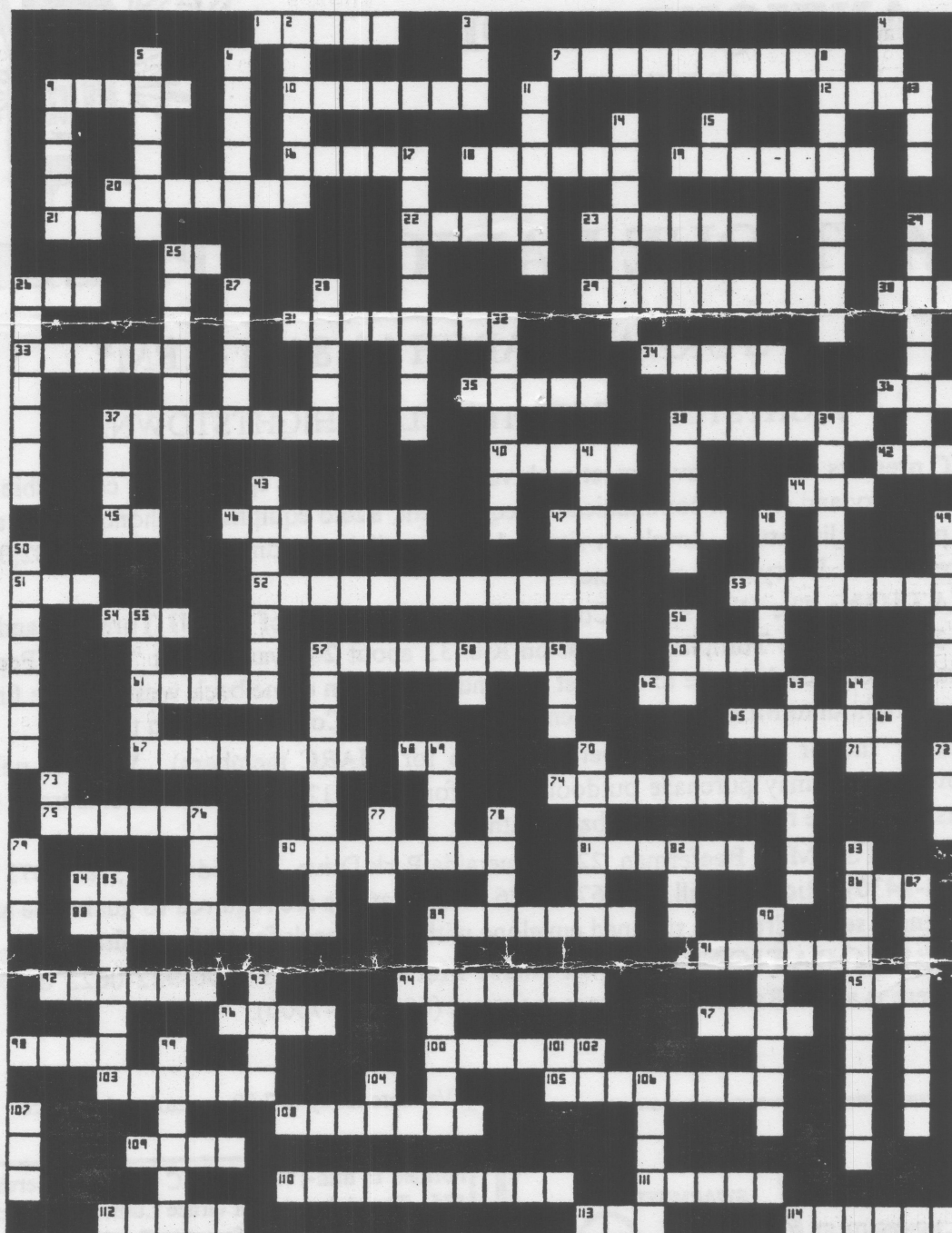
## CLUE

- 2 Italian professor who studied coherence
- 3 Initials of 17 Down
- 4 Radio network
- 5 Wrote "Radio's 100 Men of Science"
- 6 Invented the battery
- 8 Invented neodyne
- 9 Scottish TV pioneer
- 11 Author of "Big Business & Radio"
- 13 Top antique radio organization(init)
- 14 Invented cathode-ray tube
- 15 Took over RCA(init)
- 17 Inventor of FM
- 24 Old name for radio
- 25 Chief engineer for Marconi Co
- 26 Power source
- 27 Experimented with wireless tuners
- 28 Discovered self induction
- 32 Lord Kelvin
- 37 Atwater
- 38 Wrote "From Immigrant to Inventor"
- 39 British radio physicist
- 41 Invented coherer
- 43 Italian radio inventor
- 48 Radio manufacturer
- 49 Slovakian radio pioneer
- 50 Cincinnati radio mogul
- 55 Demonstrated existence of electric waves
- 56 I have a message for you ((Q-Signal)
- 57 GE electrical wizard
- 58 Alternating current(abbr)
- 59 Title of 49 Down(abbr)
- 63 American TV pioneer
- 64 Government communication agency
- 66 Initials of 41 Down
- 69 Pioneer radio station
- 70 Wrote radio engineering books
- 72 Reception acknowledgement (Q-Signal)
- 73 Direct current(abbrev)
- 76 Dot and \_\_\_\_\_
- 77 Telegraph instrument
- 78 Telephone inventor
- 79 Come, Quick, Danger"(code)
- 82 Network
- 83 TV pioneer
- 84 Initials of 55 Down
- 85 California radio pioneer
- 87 Wrote early book on electric telegraph
- 89 Wrote Radio Boys' books
- 90 Introduced crystal detectors
- 93 Electrical unit
- 99 Early pioneer in electricity & magnetism
- 101 Initials of 105 Across
- 102 Initials of FM inventor
- 104 Armstrong's invention(init)
- 106 Founded German math theory of electricity
- 107 Very High Frequency (abbr)

ANSWERS ON PAGE 7



# Radio Anniversary Puzzle



Marsha Simkin  
1995

# NEW JERSEY ANTIQUE RADIO CLUB



## ANTIQUE RADIO SWAPMEET

SATURDAY, MARCH 16, 8AM - 1PM\*

HIGHTSTOWN COUNTRY CLUB, HIGHTSTOWN, NJ

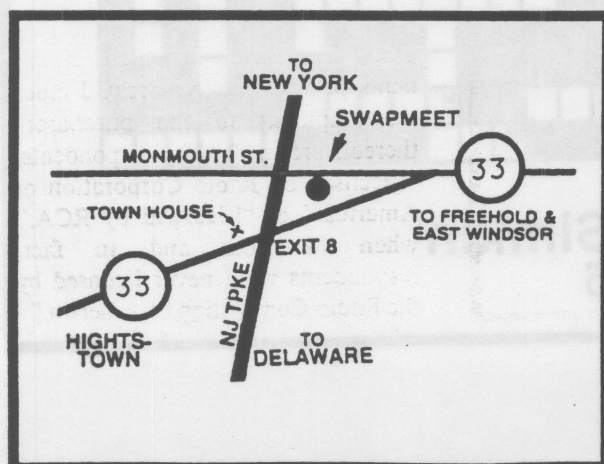
NJARC presents its Spring swapmeet with vendors displaying a spectrum of collectible old-time radios, military and civilian communication equipment, audio equipment, phonographs, and associated parts and literature. Ample on-site parking is available. Admission/parking is \$2.00 to help defer rental 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. At the first traffic light, bear right onto Monmouth St., then 300 yards to the Country Club on the left.

**RATES:** Indoor rates are \$20 per table (\$15 for NJARC members). Weather permitting, overflow vendors may purchase outdoor tables for \$15 (\$12 for NJARC members). Outdoor deposits will not be refunded due to bad weather.

**CONTACTS:** Marv Beeferman, 2265 Emerald Park Drive, Forked River, NJ 08731 (609-693-9430). Richard Brill, 908-679-8026. Reservations are required to guarantee an indoor table! Send a self-addressed, stamped envelope with your check for table confirmation.

**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.

Formed in mid-1992, NJARC has a membership above 175. 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 Tony Flanagan (908-462-6638) for additional information.



## ANSWERS

## ACROSS

## Number Answer

- 1 Popov
- 7 Southworth
- 9 Braun
- 10 Elettra
- 12 ARCA
- 16 Tesla
- 18 Bucher
- 19 Oerstad
- 20 Galvani
- 21 DS
- 22 Morse
- 23 Loomis
- 25 VZ
- 26 BBC
- 29 Fessenden
- 30 QRN
- 31 DeForest
- 33 Terrey
- 34 Spark
- 35 Lodge
- 36 Gen
- 37 Kenneily
- 38 Poulsen
- 40 Slaby
- 42 CST
- 44 RCA
- 45 TE
- 46 Samoff
- 47 Galvin
- 51 Red
- 52 ClerkMaxwell
- 53 Geissler
- 54 OHM
- 57 Shoemaker
- 60 Tube
- 61 Righi
- 62 FC
- 65 Preece
- 67 Zworykin
- 68 JK
- 71 CB
- 74 Gemsback
- 75 Conrad
- 80 Beverage
- 81 Meucci
- 84 HH
- 86 Amp
- 88 Helmholtz
- 89 Collins
- 91 Edison
- 92 Morgan
- 94 Faraday
- 95 SCS
- 96 Coil
- 97 Loh
- 98 Vail
- 100 Massie
- 103 Dumont
- 105 Langmuir
- 108 Fleming
- 109 Kemp
- 110 Telefunken
- 111 Scott
- 112 Field
- 113 WLS
- 114 Kelvin

## DOWN

## Number Answer

- 2 Onesti
- 3 EHA
- 4 NBC
- 5 Dunlap
- 6 Volta
- 8 Hazeltine
- 9 Baird
- 11 Archer
- 13 AWA
- 14 Crookes
- 15 GE
- 17 Armstrong
- 24 Wireless
- 25 Vyvyan
- 26 Battery
- 27 Stone
- 28 Henry
- 32 Thomson
- 37 Kent
- 38 Pupin
- 39 Eccles
- 41 Branly
- 43 Marconi
- 48 Grebe
- 49 Murgas
- 50 Crosley
- 55 Hertz
- 56 QTC
- 57 Sreinmetz
- 58 AC
- 59 Rev
- 63 Jenkins
- 64 FCC
- 66 EB
- 69 KDKA
- 70 Terman
- 72 CSL
- 73 DC
- 76 Dash
- 77 Key
- 78 Beil
- 79 CQD
- 82 CBS
- 83 Farnsworth
- 84 HH
- 85 Herrold
- 87 Prescott
- 89 Chapman
- 90 Pickart
- 93 Volt
- 99 Ampere
- 101 IL
- 102 EA
- 104 FM
- 106 Gauss
- 107 VHF

## WHO MADE THAT TUBE?

By Marv Beeferman

In an attempt to preserve an accurate history of radio, many collectors go to great lengths to maintain the "originality" of their restorations, sometimes spending many years of research to ensure the authenticity of their work. In general, I applaud them; but one must remember that, at times, history is not insulated from the direction in which people lead it (whether intentional or not). A case in point, and one of many, was Federal Trade Commission Docket 5725 regarding the Continental Radio Tube Company (also known as Concert Master and Premier Radio Tube Company) in 1949. As the complaint read:

"In the course and conduct of their business as aforesaid, and in promoting the sale of their products, the respondents have engaged in various deceptive and misleading practices. Among those practices, respondents purchase radio tubes from various sources, remove therefrom the identification number or symbol placed on the tubes by the manufacturer thereof, and substitute, in lieu of said number or symbol, another number or symbol signifying a more expensive tube or a tube of current manufacture. Respondents purchase war surplus tubes, buff away the service marking thereon, and substitute therefor a commercial number or symbol, and stamp thereon the legend "Made in U.S.A., CC." The carton in which respondents package their aforesaid tubes for shipment to the purchasers thereof, are marked by respondents, "Licensed by Radio Corporation of America," or "Licensed by RCA," when in truth and in fact, respondents were never licensed by the Radio Corporation of America."

## 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

Entire lot of 6,000 tubes, N.I.O.B. All must go! Call or write for list. J.J. Papovich, 53 Magnolia Ave., Pitman, NJ 08071. 609-582-8279

"Radio USA" mike style radio, 16" tall, AM/FM, \$35 ("Radio USA" lights when mike is on). Novelty radios: Red racing car, AM/FM with clock in sun roof, \$20; Simplex 1912 car, AM, \$20; 1828 locomotive, AM, \$20; Ferrari red car, AM/FM, \$25; Ferrari white or black car, \$20. Many other unusual novelty radios from 50's, 60's, etc. Prices include postage and insurance! All NIB, listed in Bunis/Breed. Richard Brill, PO Box 5367, Old Bridge, NJ. 08857. 908-679-8026; fax 908-679-8524.

RCA Radiola 18, works, \$60; Philco 40-190 console, \$100; RCA 100A speaker, cloth indented, \$20. Amy Lancaster, (215)-348-9654.

Booklet of 64 pages describes Federal Tel & Tel's radio operation from the beginning in 1921 to its demise in 1929. Over 60 illustrations, including pictures of early Federal RF and audio aps, all early radios, and many Federal parts. The article and NFWA presentation by Dick Schamberger, Federal expert, are included. All Federal models are listed with the year/month introduced, price new, and brief description. Buffalo's first

last station, Federal's WGR, is covered. This is more about Federal than exists in any other spot! Larry Babcock, 8095 Centre Ln., East Amherst NY 14051.

## WANTED

Power supply for Hammarlund "Super-Pro" military receiver BC-779-B, BC-794-B or BC-1104-C. Power supply units are identified as RA-74-C, RA-84-B or RA-94-A. Ted Soirka, 517 Baeder Rd., Jenkintown, PA 19046, (215)-886-0982

Collins R-390 parts set or parts, dust covers, rack cabinet. Pick-up within 100 miles of central New Jersey. Tom Provost, 19 Ivanhoe Drive, Robbinsville, NJ 08691. (609)-259-7634

Phonograph-related items; top dollar paid immediately for Vogue Picture Records, wax-cylinder records, needle tins, Nipper, record cleaners, puzzles, advertising, mirrors, pins, phonograph toys, posters, original advertising from Edison and Victor. Thanks! Bernie Seiberg, 714 Moredon Rd., Meadowbrook, PA 19046-1907 (215)-348-9654.

Circuit diagram and purpose (not in *Sams*) for a Knight FM monitor receiver, model KG-220, 30-50 MHz, by Allied Radio, Chicago. **MANUAL AVAILABLE:** I have a an Electronic Measurements Corp. emission-type tube tester, model 205. It has a roll chart and the operating instructions are in a four-page typewritten document that includes settings for ballast tubes and also some additional settings for newer tubes; published in April 1957 *Radio & TV News*. Please send \$1.00 for copying cost and postage if needed. Alton DuBois, Jr., 67 Peggy Ann Rd., Queensbury, NY 12804, (518)-792-3130.

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



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

