

# The Jersey Broadcaster

**NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB** 



March 1999



**MEETING NOTICE** 



#### Reported by Marsha Simkin and Marv Beeferman

A fine evening and a full menu of topics greeted over 60 antique radio buffs at our February meeting. First and foremost, March 20th brings the trumpet shrill of the merry cuckoo, messenger of Spring (apologies to Edmund Spenser) and with it our first swapmeet for '99 at the Freehold Armory. It was a pleasure to see such an immediate response to a call for volunteers to assist with traffic control, table assignment, entrance fee collection and the like; this always predicts a smoothly run and successful event. Just a few reminders: saw a little extra wood in the morning...the gates won't open for vendors until 6:30 -7:00; the food vendor usually doesn't set up until 7:30 - 8:00; a ban on sales prior to 8:00 (unless pre-arranged) will be strictly enforced; buyers will be asked for a \$2 entrance fee to defray increased rental and insurance costs; bring your own tables (there may be a limited number at the Armory for an extra \$3.00). Probably the most important item is that if you haven't reserved a space yet, do it now! As of March 5, there are only 15 remaining and the club receives a rash of interest a week before the event.

Bill Swayze's article "Old Radios are the Stuff Dreams are Made Of' in the *Star-Ledger* of February 7th sparked significant interest and speculation. It showcased Morristown councilman's William "Butch" Barber's collection of 181 clocks, 91 clock radios, 205 televisions and 1,007 radios! Cameo appearances by club members Rick Weibezahl and Joe Bentrovato were also included with Joe commenting on Mr. Barber's position in the New Jersey collector's hierarchy: The next meeting of the NJARC will take place on Friday, March 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. (March's meeting will be preceded by an Executive Board meeting starting promptly at 6:30. All Executive Board members are requested to attend.) Included in this month's agenda is Al Klase's presentation "Remedial Radio Technology for the Collector - Part 1," a mix of odds and ends from radio's historical and technological past. We're also anticipating a short video presentation on the InfoAge project and hearing the results of last month's DX contest.

"Butchy is bad. He is in the front seat of the bus." More importantly, the NJARC and InfoAge received some exposure through an interview with President Phil Vourtsis, although in some areas misquotes took their toll. Additional club exposure may be forthcoming in a proposed exhibit at the Morris County Library in Whippany so contact either Ray Chase (908-757-9741) or Joe Bentravato (973-361-7392) if you're interested in participating. The club is also seeking volunteers to participate in a presentation at the Republican's Club April meeting in Lakewood.

Ray Chase updated the club on the status of the InfoAge project based on recent conversations with its founder. Fred Carl. Plans are still focused on a turnover of the Marconi hotel site by Fall of this year, integrating the opening with a ceremony to mark the 100th anniversary of the first use of wireless for "real time" (more accurately, one minute) reporting of a major sporting event - the America's Cup race off Highlands NJ. Rav emphasized that the club's participation in the development of the InfoAge site is a once in a lifetime opportunity which many other clubs would give their collective right arms for. Fred Shea, curator of the Broadcaster's Hall of Fame (formerly located in Freehold), was also present at the meeting and talked briefly about a possible, but not yet defined,

connection with the project.

Since Ray's talk, Phil Vourtsis has been in contact with Mr. Carl and a meeting, perhaps at the hotel site (presently not opened to the public), is planned for March; all interested members are both welcome and encouraged to participate. The club also plans to host a 15 minute InfoAge video presentation at the March meeting.

Al Klase updated the club on our DX contest which ended February 28th; from the show of hands of active participants, there looks like some stiff competition. Tom Provost hopes to have the results by our upcoming meeting and a "live" demonstration of as many entries as possible is planned for April

Enthusiastic participation in our showand-tell sessions can always be anticipated and February's was no exception. Contributors included:

Marty Friedman - Marty has the unique ability to take hopeless basket cases and bring them back to their former glory...the Philco cathedral restoration that he displayed was another worthy example. Marty also filled in for Sal Brisindi, accepting the acclaim for the "Ray Chase challenge" - a GE 200 basket case that Sal brought back to life but was a little too modest to accept acknowledgment for.

#### THE JERSEY BROADCASTER.

published a minimum of ten times each year, 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 with special emphasis on contributions made by the state of New Jersey. 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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- John Dilks Among John's showpieces was a beautiful, illuminated FADA advertising sign.
- Dave Snellman Dave described a Tung-Sol 2N461 transistor encapsulated in plastic and used as a key chain ornament.
- Tom Provost With the use of 64 penlight cells and some Radio Shack battery holders, Tom showed us how he solves his battery set power supply problems. Tom also described the technique for converting low voltage pentodes (3Q4, 3V4) into 01A's and 199's. Tom says the tonal quality is a little shallow when used as a detector but the tubes make fine substitutes for RF and AF stages.

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- Mark Mittleman Mark showed us how a little detective work and research bore fruit in the restoration of an AK-20 radio where two examples with serial numbers 20,000 units apart were combined to form a single unit. Mark explained how a large demand for this model forced Atwater Kent to have some cabinets made by outside contractors and to use variations of the same part This was illustrated by subtle design differences in the cabinet, chassis locking devices and small pieces of hardware.
- Ray Chase Ray exhibited an ERLA "breadboard" type receiver using a fixed crystal detector. What was unusual about this unit was the use of sheet tin for interconnections, an early precursor of the printed circuit board.
- Dave Sica In the "don't underestimate the value of anything" department, Dave displayed a T-shirt with a microphone iron-on transfer that fetched \$37 on the Internet.
- Phil Vourtsis Phil's home-brew 45 RPM dual turntable exhibited the epitome of creativity (and workmanship) by someone who incorporated every gizmo and gadget that the wellprepared DJ might need for a smoothly run dance party.
- George Shields George provided us with his usual insight into the restoration of a 1932 Saba (German) 5-tube superhet receiver using early,

indirectly heated Telefunken tubes similar to our 226's. It's always a pleasure to listen to George as he points out the unique, individual features (both good and bad) of his seldom seen offerings...in this case a very desirable radio with a poor rejection ratio, less than outstanding performance and sound output and one in which the designers miscalculated the requirements of the power transformer. (Fortunately for George, his example came with its original, working transformer.)

- Jon Butz Fiscina Jon's aviation theme included artifacts from a WW I airplane, an early WW II oxygen mask/headset combination (modeled by Jon's son), and a Korean War headset.
- John Ruccolo John talked about his experimentation with a 1-tube regenerative receiver by using an audio pentode (3B4) in lieu of an RF pentode; with the addition of some series capacitance to the antenna, lots of gain was realized.

A final word on dues - we're at about the 70% renewal level for 1999 and at the end of this month, <u>final</u> request for payment notices will be mailed. Let's try to save Marsha some work and the club some money by taking care of this minor detail as soon as possible. You know the prompt - a 1/99 on your address label and here's the function key, a \$15 check

#### MARSHA SIMKIN 10 AVALON LANE MATAWAN, NJ 07747

to:

Richard Lee thought a small tidbit from the "Let's Look Back - 75 Years Ago" column of the *Suffolk Times* (a small weekly newspaper on the Eastern tip of Long Island) might bring a chuckle:

There are nine radios in East Marion and probably more will follow. They are giving much information and pleasure. President Coolidge's address at the Waldorf Astoria, New York, was heard with deep interest.

(Latest news from East Marion indicates the town is booming - they're up to 12; no kidding, I counted them myself!...Ed)



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Thanks to Richard Lee for this submittal which appeared in the New York Times of Sept. 10th, 1998...Ed

The nation's broadcasters use their call letters like vanity license plates. Call letters, a 19th-century invention, are still a quick way to give viewers a sense of the station's persona.

Call letters were originally created so telegraph operators could send messages to ships and other parties without having to spell out the entire name of the recipient with every communication. With the advent of radio, they became an easy way to carve out a station's identity.

The international assignment of call letters was codified in 1912 at the London International Radiotelegraphic Conference. German channels would begin with A or D (for Deutschland) or use KAA to KCZ. British stations would start with a B or M, while French channels would use the letter F. Apparently asleep at the wheel, the United States received the meaningless letters KDA to KZZ, as well as N (used for Navy and Coast Guard stations), and W. In 1929, it received the rest of the K combinations, which had originally been allocated to Germany.

With their historically small number of local television and radio stations, few nations outside the United States, Canada and Mexico bother using their assigned call letters. They identify their stations by name only, like France's TF1, Germany's ARD or Britains BBC1, BBC2 and London Weeked Television.

In this country, radio call signs were initially three letters, assigned in order on a first-come, first-served basis. By the early 1920's, three-letter codes had begun to run out, so the Government switched to four-letter signs.

A station's call sign begins with a W if it is east of the Mississippi River or with K if it is west of there. The 30 or so stations named before this rule, like KDKA and

KYW in Philadelphia, and WHO in Des Moines, were allowed to keep their call signs.

Until December 1983, the Federal Communications Commission controlled call letter assignments. Call signs, which could now be requested, nevertheless had to be in good taste, the regulations said, and "sufficiently dissimilar phonetically and rhythmically from existing call signs of stations in the same service area so that there will be no significant likelihood of public confusion."

Federal regulations originally prohibited a station from using the initials of any living President or of the United States or its agencies or departments.

By 1984, the FCC got out of the station identification censorship business. Stations could now call themselves KFBI (Wichita) or WJFK (Washington) if they wished. Matters of taste would be handled by the courts, not the Federal Government. For a number of years, one station in the West used as its call letters a four-letter profanity spelled backward.

Still, call signs technically remain the property of the Government, preventing a secondary market in call sign trading from developing. But once a station knows that another station is about to relinquish a call sign it covets, it can arrange to be tipped off so it can file an application for the sign just moments after it is turned in.

Starting in 1922, stations could request specific call letters. The first custom combination went to the Detroit Police Department, which named its station KOP. Whether a station's call letters or its meaning came first is often open to debate, and a host of amateur call letter historians have sprung up to chronicle all the permutations. Internet sites such as www.geocities.com/ResearchTriangle/ 6375/origins.html and www.ipass.net/~

whitetho/recap.htm provide comprehensive listings of all letter meanings and origins.

In New York, WABD (Channel 5) was named after a television network pioneer, Allen B. DuMont. The station's call letters were later changed to WNEW and then WNYW. WOR's initials stood for Wonders (or World) of Radio, while the Big Three networks capitalized on their own initials in naming their local outlets WABC, WCBS and WNBC. In Los Angeles, **KNX** Radio was named because its office was in the annex next to the studio's original home. **KHJ** (now **KRTH**) stood for Kindness, Hope and Joy, the names of three canaries whose chirping was used on radio broadcasts, while **KTTV**, once owned by The Los Angeles Times, stood for Times Television.

In the 1980's, an Arlington Heights, IL station used the call letters **WSEX** to attract attention, according to a broadcast engineering consultant and amateur call letter historian, Barry Mishkind, of Phoenix. New York's **WEVD** got its name from the socialist Eugene V. Debs, while Buffalo's **WKBW** picked up its name from its evangelical owner, Clinton Churchill, who liked the idea of an acronym for Well-Known Bible Witness.

In Cicero, IL, WVON, the AM station, stood for Voice of the Negro, according to Bob Nelson, the lead software developer of On Air USA and another call sign historian who lives in Dallas and runs the Geocities site listed above. The station was bought by the Harlem Globetrotters' organization and moved to Chicago and renamed WGCI for Globetrotters Communications. Similarly, WNOV in Wisconsin stands for Wisconsin's Negroes' Own Voice.

WLBB Radio in Carrollton, GA was so named because the original owner agreed that "we love butter beans." KFWB in Los Angeles was named after its original owners, the Four Warner Brothers. Its slogan, Keep Filming, Warner Brothers, was modified during World War II to Keep Fighting, Warner Brothers.

WTRC (Truth Radio Company) in Elkhart, IN metamorphosed into WTFF of Virginia, owned by the publisher of The Fellowship Forum, a Ku Klux Klan publication. The station was sold and its call letters changed in 1943 to WTOP in Washington (at 1500kHz, the top of the dial), Mr. Mishkind said.

Other unusual call signs include **KSBW** (Salad Bowl of the World) in Salinas, CA; **WTTW-**TV (Windows to the World) in Chicago; **WZPR** (the home of the inventor of the zipper) in Meadville, PA, and **KSHE** in St. Louis, which once had an all-female staff.



This article originally appeared in the Michigan Antique Phonograph Society publication "In the Groove" and is printed here with permission.

Recorded sound had its first major breakthrough in 1925 with the advent of electrical recording. Improvements followed through the thirties and the forties, consisting mainly of surface improvements and fidelity.

The 45 RPM story actually goes back to 1939. Engineers started working on the new system that year. David Sarnoff's biography tells that the 45 RPM system was completed and put on the shelf. His thinking was as long as the public was willing to buy 78 RPM records, which they were turning out in record numbers and making a profit, no need to upset the apple cart with a new system just yet.

In the summer of 1948, Columbia made big news with their 33 1/3 RPM Microgroove recording. Vinyl plastic was used for the disc. Grooves were cut for a .001 inch radius on the stylus, rather than the .003" radius of the 78 RPM styli. Stylus pressure was drastically reduced, and audio fidelity along with dynamic range was expanded farther than ever before on disc recording. These factors added up to a product that Edison and RCA both had attempted to make decades earlier. The single Columbia discs would now hold the equivalent of a multi-disc album of 78 RPM records. Columbia had invited RCA's Sarnoff and his engineers to see a demonstration of the new LP before it was introduced to the public. Sarnoff was very impressed, and told Columbia's William Paley that he should be proud of this achievement. Paley offered to RCA the right to manufacture the LP so that they could avoid any confrontation. Sarnoff said that he would think about it and left. Once back at RCA, Sarnoff lambasted his

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engineers, asking how one man (Peter Goldmark) could develop such an incredible record in less than a year with assistance from just a handful of colleagues. RCA had hundreds of engineers in a "state of the art" laboratory working on record improvements since the early thirties. Sarnoff declined Paley's offer and ordered the 45 RPM system to be introduced as soon as possible.

Late in 1948, there were rumors that RCA would be announcing their new system almost momentarily. "Teaser" information told that the records would be small, and that a changer would be part of the new system. On January 10, the announcement came. Hardware was to be in the stores by the beginning of April.

Slyly, Columbia introduced a single play 7 inch 33 1/3 RPM disc on January 9, in an attempt to offset RCA's announcement. The 7 inch "LP" was a flop however, as there were no automatic changers to play the discs.

The 45 RPM system introduced a special changer and records "Made for each other". It would offer microgroove I recording, with all selections recorded on the 7 inch diameter vinyl discs. The changer had a very rapid change cycle, which could match (or closely approach) the transition from track to track on the Columbia platters. RCA's original changer changed the record in one revolution of the turntable. The spindle hole was 1 1/2 inches in diameter, and the changer indexing operated on this part of the record. The large spindle hole also made possible the handling of a record with no need to touch the playing surface. It was always difficult to handle a 10 or 12 inch disc without getting fingerprints on the playing surfaces. The mechanics of the disc provided that playing surfaces would never contact each other, because the label area was designed thicker than the playing surfaces, protecting them from scratches.

While 45 RPM permitted a longer playing time than a 78 RPM disc, RCA's claim was that the faster (or maybe less slow?) groove speed would aid fidelity, and truly did so. The other half of the RCA promotion was that the recording was all confined to the outer area of the disc, and this became known as the "Quality zone."

These were the foundations of the new record system. It was certainly an improvement over previous recording techniques in almost every way. While you could have a full album set on 45 RPM, the small discs allowed the customer to purchase a single record for slightly more than a 78, without having to buy an assemblage of selections that he didn't want, or care to pay for. RCA pointed out in their promotions that storage space was greatly reduced over the 78 RPM records and album sets, along with an appreciable reduction in weight. To add to the glamour of these new recordings, the program material was provided in different color codes, which would denote what kind of music was carried on the recording. The discs were pressed in transparent vinyl, tinted with the color. The colors were:

Black:	Popular
Green:	Country & Western
Yellow:	Children's
Light Blue:	Pop Classics
Cerise:	Blues & Rhythm
Deep blue:	International
Red:	Classical

It was easy to speculate that as time progressed, the colors would disappear, partially or completely. Many collectors made a point of securing at least one disc of each color. Within two years, all colors except red disappeared! The labels remained "color coded" (not very different than all of Victor's previous years!).

Album sets were packaged in neat little boxes, which made handling easy when removing and stacking on a changer. Sets with two discs were supplied in an envelope carrying the discs.

Initially, for the buyer of this new system, a player attachment was offered for \$24.95, along with a self-contained unit with amplifier and speaker for \$49.95. Several radio-phonograph combinations (some with television) appeared in the RCA line with 45 RPM changers, and a separate 78-only RPM changer. It was not difficult to deduce that RCA was not supporting the Columbia system!

While the 45 RPM system was well received by the public, it failed to get off the ground quickly, and remedial measures had to be taken in mid-1949. A huge advertising blitz was initiated in September of the year covering hundreds

of newspapers and magazines. The player attachment was reduced to \$12.95, with volume control and pickup rest eliminated. The self-contained unit was also reduced in price. The public began to buy. More and more 45 records appeared in homes, and the system turned out to be extremely popular in the college dorms, and to such an extent that 78 RPM discs were virtually absent in the students' quarters.

Late in 1949, other companies began to offer the new records, Capitol being the first. Other labels on 45 RPM sprang up rapidly, and the 45 system had full coverage. Columbia followed quickly with 45 RPM discs, and that was pretty much...that! And of course, RCA announced their 33 1/3 RPM Microgroove records, and the 33 1/3 speed finally appeared in RCA Victrola players and combinations.

The Juke box manufacturers were quick to design new changers for the 45 RPM system. Less cabinet space was needed for a grouping of records. The lower stylus pressure and the quiet vinyl surface made the sound quality of coin operated machines far better than ever before, and for many more plays than were ever before possible.

It was fifty years ago this year that this chapter in history began. For those of us who saw it happen, it all happened so fast. The compact disc has now replaced the LP vinyl records, as well as the 45 RPM. In recent years, companies attempted to discontinue production of the 45 RPM records, but were met with a strong protest from the Juke box operators. Their equipment would be trashed! With that, 45 RPM record production was resumed, for how long, it is not known. Even the 33 1/3 RPM LP vinyl records are being manufactured again. They are available in stereophile catalogues for about \$33.00, and are selling quite well!

When the 45 RPM system was first released, RCA produced a 20 minute film for dealer viewing, showing how to sell the new system. It is a bit amusing in this day of highly sophisticated advertising, but a very enjoyable look at history. There are a limited number of video reproductions available; to inquire about availability, contact Phil Vourtsis.

# DXING THE PARAGON RA-10

#### By James P. Mckinnon (Adapted by M. Beeferman)

This article appeared in The Antique Radio Gazette, Vol. 14, No. 4. It illustrates how expanding collecting beyond the restoration stage is like a time machine to the 20's. Not many hobbies can claim this reward...Ed

The RA-10 is a three circuit regenerative tuner. This circuit was much used by the radio amateur but most broadcast manufacturers used simpler circuits. If you open up an RA-10, it looks almost empty. Starting at left side of the radio, the "primary inductive switch" (tap switches) is connected to the "antenna load coil and the inductive coupler." Antenna circuits tuning is varied by the tap switches; top taps vary the antenna circuit by 12 turns and the bottom ones fine tune it by a single turn. The optional antenna tuning condenser allowed further fine tuning. A small dial controls the "inductive coupling" between the antenna and vacuum tube circuits changing sensitivity and selectivity. Turning the dial to the left made the tuner more sensitive and less selective; turning the dial to the right had the opposite effect.

There are two tuning ranges controlled by cutting load coils in and out of circuit. With the wave-length switch in the left position, on the two contacts, tuning is from 160 to 475 meters (1875-630 kHz). When the switch is in the right position (no contact) tuning is from 390 to 1000 meters (300-769 kHz). To the right of the wave-length switch is a large dial. This is the "secondary (grid) tuning condenser", the main tuning dial on the receiver. The condenser is of the straight line frequency type. Regeneration is controlled with the large dial on the right side of the set ("plate tuning inductance"), using a standard variometer.

Connecting the vacuum tube control is fairly easy, only two wires connect the tuner to the unit. B- is connected to the W

binding post on the tuner. A-, A+, and B+ are tied in at the marked posts on the tube unit. If the antenna tuning condenser is used, it is connected in series with the antenna. Ground connection is made thru the E post on the RA-10, while the headphones are connected to the TEL terminals on the tuner.

Although a Morehead detector tube was tried, the RCA UV-200 tube worked better and was used for dxing. The A voltage was supplied by a large 6 volt gel cell. Instead of the usual 22.5 volts, a B voltage of 28.5 volts was supplied by a number of AA cells connected in series. This was done to ensure the best reception as the 1 amp 200 tubes need to be tried at different B voltages for best results.

Although Paragons instructions are not very complete, this radio setup was one of the hardest to operate I have used. Even with a copy of the operating directions, several hours were spent learning how to get the most out of the radio before the dx work was started. Around 1500 kHz and up, regeneration was mostly controlled with the tube rheostat, as the plate variometer read near 0. One winding on the rheostat either direction and a station could be lost thru lack of signal strength or oscillation. Performance of the RA-10 was helped considerably by the antenna tuning condenser. Several of the stations, especially at the upper end, would not have been heard without it.

To tune the RA-10, first set the variometer at 0, the secondary tuning condenser at 100, and adjust A and B voltages to obtain a slight hiss in the headphones. Reduce A or B voltages just under this point. Coupling should be set near 50; this may change depending on the antenna and local interference. Regeneration should be increased until a slight click is heard in the headphones, indicating the oscillation point. The tap switches and antenna tuning condenser are adjusted until oscillation stops. The coupling may need to be further adjusted to obtain this effect. The receiver is now at its most sensitive state and ready to tune in stations. All of the controls have a slight effect on the settings of the other controls. I found setting the secondary tuning dial and then checking all other controls brought the best results.

# 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.

Old radios and 78 RPM records from an estate. Includes Zenith #5614, Silvertone radio/disk recorder and RCA ACR175 communications receiver. George Rottina, 17A Lumberjack Cir., Horsham, Pa., 19044. (215)-675-9055

Amplifiers - One by Precision Electronics, Inc., Model "Music Lovers High Fidelity Amplifier," one by Challenger Amplifier Co., Model CC18 - 80W. \$40.00 each (plus). Beitman's "Most Often Needed Servicing Information for F.M. and Television," 1947...also for Television, 1951. Both books, \$25 (plus). Elwood Hunt, 308 Georgetown Rd., Carneys Point, NJ, 08069. (609)-299-5259

Communications, military and test equipment. Send long SASE for revised list and lots of new items. Also: Zenith oval shaped console 9-S-263, 9-tube RobotDial w/motor tuning. In original showroom condition - \$995 - or best offer. Eveready battery set (uses type 240 tubes), good condition - \$100 -. Pair of ElectroVoice Aristocrat corner enclosures with University 312, 8-ohm, 25 watt triax speakers...sound is great, condition is good - \$300 -. Ray Chase, 1350 Marlborough Ave., Plainfield, N.J. 07060. (908)-757-9741. (12/98)

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The ever-handy 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 Mc-Donough Road, Gold Hill, OR 19725-9626 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.

Parted out Stromberg Carlson 19-20 (AC). Power transformer appearsOK; IF's are O.K. Electrodynamic speaker is electrically OK (needs cone repair). Make offer. Alton Dubois, Jr., 67 Peggy Ann Road, Queensbury, NY 12804. (518)-792-3130.

## 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.

Looking for accessories for AN/GRC-9 field radio, especially front cover, whip antenna and power cord for DY-88 power supply. Al Klase, (908)-782-4829, skywaves@bw.webex.net

WWII Military Television - Army/Navy Glide Bomb TV receiver CRV-46, BC-1213, cameras, trans. tuning meter, ATK/ATJ technical manual. 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 Howard Sams book "From CB to Ham Beginner" by J.A. Stanley. Richard C. Yingling, 2 S. Locke Ave., Yeagertown, Pa. 17099. (717)-242-1882

Need someone to repair a Philco 4654 Predicta TV. Ray Casper (609)-695-8312



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 Emmanual 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

Buying European Radios! Grundig, Telefunken, Saba, Normende, Blaupunkt, Phillips, Goplana, etc. Must be in good to fair condition. Richard Brill, P.O. Box 5367, Old Bridge, N.J. 08857. (732)-607-0299. Fax: (908)-679-8524 or rgbent@aol.com

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