



A careless restorer named Cy
While checking a power supply
Put his hand on a spot
Where the B plus was hot
And discovered that E causes I.

OSCILLATOR

DELAWARE VALLEY HISTORIC RADIO CLUB

The Official Newsletter of the DVHRC

Vol. 4 No. 11, November 1996

MEETINGS - UPCOMING AND JUST PAST

At DVHRC's October meeting, Lewie Newhard delivered the first of a series of talks on '20s home radios. His presentation was well received. Our next meeting is scheduled for Nov. 12. (DVHRC members planning to attend the next NJARC meeting are reminded that it has been deferred to Nov. 15.)

TIME CAPSULE OPENED AT ATWATER KENT PLANT

Ludwell (Scoop) Sibley

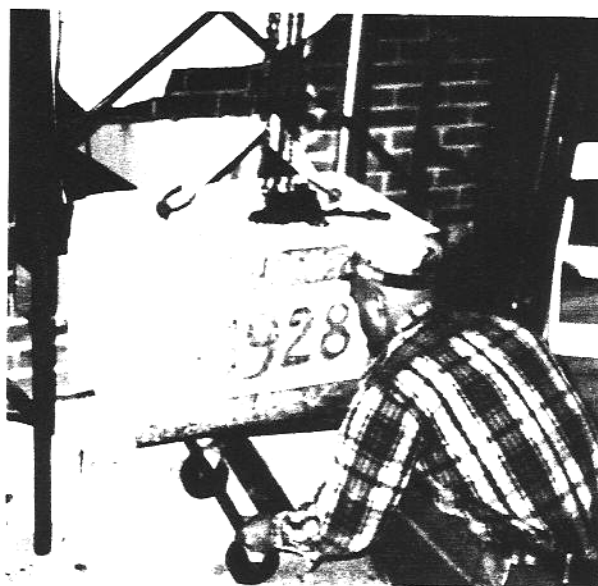
On October 25, the General Services Administration hosted a ceremony at the one-time Atwater Kent Manufacturing Co. factory at 5000 Wissahickon Ave. in Philadelphia. With the aid of members of the Kent family and AK radio enthusiasts, the 1929 time capsule from the building's cornerstone was extracted and opened. Inside were Kent's speech notes from the original dedication ceremony, the local newspapers of the day, and an AK 55 table-model radio.

The building, begun in 1928 and dedicated in May, 1929, is scheduled for teardown. The AK company used it until liquidating in 1937. The Federal Government bought it in 1941 to establish the Army's Philadelphia Signal Depot. After dissolution of the Depot in 1949, other Government agencies used the building: the National Archives, the Treasury Department, and the Veterans Administration. The VA - the final tenant - has moved to a new facility nearby. By contrast, the *original* AK buildings in the adjacent block are registered historic properties and are being preserved.

The capsule-opening event was attended by members of the Kent family, notably A. Atwater Kent III of Newtown Square and Peter Kent of Media, plus local dignitaries. Bill Overbeck, Jim Whartenby, and Bill Fizette - presidents respectively of DVHRC, NJARC, and AWA - were present, with other area collector-historians. Introductory speakers were Paul Chistolini, GSA regional administrator; Melvin Wilson, VA chaplain; Gerald Murphy, deputy mayor for labor representing Mayor Rendell; Thomas Lastowska, VA regional director; A. Atwater Kent III, representing the family; and Jeffrey Ray, collections curator of the AK Museum in Philadelphia. At unveiling time, Ralph Williams - DVHRC member and widely published AK historian/collector - wielded a large soldering iron to open the copper time capsule.

The opened capsule revealed A. Atwater Kent's dedication speech, typed on index cards and marked-up for emphasis, plus the five newspapers, in "remarkably good" condition. (For nostalgia purposes, the papers were the *Daily News*, *Evening Bulletin*, *Inquirer*, *Public Ledger*, and *Record*.) The AK 55 radio, complete with instruction book, is in good shape externally. Internally, it has some corrosion and spots of rust. The day the capsule was sealed is known to have been unusually damp, so perhaps moisture in the newspapers got to the set over the course of 67 years.

Appropriate for a "radio" event, this ceremony took place under the eyes of ten video cameras, including those of the four commercial network TV stations in town. It appeared on the news programs of at least three of them. (One time-pressed cameraman expressed impatience at 11:45 AM to get the capsule open in time to go on the noon news!) Inside the building, the GSA played a silent movie of the original



Hoisting the cornerstone from its resting place.

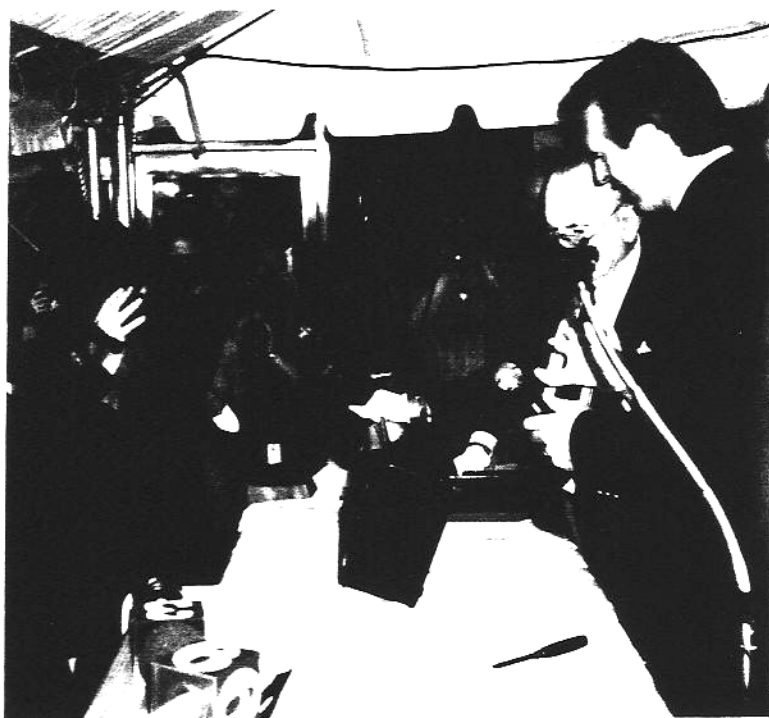
dedication ceremony, starring a confident-looking A. Atwater Kent and his supporting cast.

After the ceremony, DVHRC presented A. Atwater Kent III with a special engraved nametag in commemoration of the event.

The structure was something of a marvel of plant design at the time of its construction, using long-span roof trusses giving an unusually great distance (60 feet) between support pillars. The sawtooth roof with north-facing windows gave natural lighting and ventilation. As a mass-production facility, the whole AK complex featured some six miles of conveyor belts.

Visiting the building was a sort of homecoming for DVHRCer Paul Bohlander, who had worked in one of the early AK buildings nearby when Philco occupied it.

The capsule contents are to go on display in the new VA building, then to be received by the Atwater Kent Museum - a fitting repository. The GSA's handling of the decommissioning of this building seems to have been a respectful and appropriate treatment of a semi-historic but obsolete facility. It is particularly appropriate that the central artifacts from it appear destined for preservation.



Ralph Williams (behind mike) tilts the AK 55 up for the cameras, under the proud eye of A. Atwater Kent III (right).

A BACKGROUNDER: AK's EXPANDED FACTORY

Bill Overbeck

On November 2, 1928, Arthur Atwater Kent broke ground for a 16-½ acre addition to his radio plant, located at 4700 Wissahickon Ave. in the Germantown section of Philadelphia. The building was rushed through to completion in six months.

Dedication of the new facility started at noon on Tuesday, May 21 of the following year. Following an inspection tour of the huge plant which brought total space occupied to more than 32 acres, ceremonies were held in which the latest receiver produced at the moment was placed in a copper box. The lid was sealed up by Kent, then-Mayor Mackey, and E. T. Stotesbury, after a copy of the day's issue of each of the Philadelphia newspapers was included. The plant was actually in production when the "1928" cornerstone was laid.

Mayor Mackey spoke at a luncheon preceding the dedication, accompanied by City Solicitor Augustus T. Ashton and Recorder of Deeds James M. Hazlett. The mayor praised Philadelphia's leadership in industry and cited Mr Kent as a man of vision bringing great enterprise to the city.

Principal speaker was U. S. Senator Clarence C. Dill of Washington. He was known as "the father of radio legislation" from his Dill Bill (later, the Dill-White Radio Act of 1927) establishing the Federal Radio Commission. He cited the United States as the only country where radio programs were "free" to the public, whereas other nations taxed their radio listeners. "Congress is beginning to wake up," he said. "The individual members are beginning to study radio because they want the people in their respective sections to get the best reception from radio programs . . . The United States has six percent of the world's population . . . and owns 70 percent of the world's radio sets, as well as 78 percent of the world's broadcasting stations."

"Such men as A. Atwater Kent have made America the greatest industrial and commercial nation in the world. Only a man with vision and daring would ever construct such a marvelous plant as this to build radio sets by so many thousands. The world has always honored the man with a vision and the daring to make that vision a reality."

Kent offered his "feelings about the present and future of radio": . . . "Presented to you in the form of this big new factory. Great as the radio industry has been in the past, I feel that more confident than ever today that the greatest development still lies in the future."

"In order to succeed in the radio business, you must keep doing something new because radio itself produces a new problem almost every day. You can't go stale in the radio business without going bankrupt, because the other fellow will pass you."

Others present at the ceremonies were Judge J. Warren Davis of the U. S. Circuit Court; John C. Jones, chief of the

THE OSCILLATOR

Newsletter of the Delaware Valley Historic Radio Club
Post Office Box 41031, Philadelphia, PA 19127

The *Oscillator* is published monthly by members of the non-profit DVHRC. Its purpose is to provide a forum to educate, inform, entertain, and communicate with collectors and preservers of vintage radio technology.

We welcome and solicit information relating to radio history or collecting. Submissions should be carefully researched, typed and accompanied with clear photographs or diagrams. Material on-disc (3-1/2" or 5-1/4" DOS) is particularly welcome.

Unless indicated otherwise, attributed reproduction for nonprofit purposes of any material in this publication is welcome. (Contact the editor to obtain copy on-disc.)

Personal views, opinions and technical advice offered in this newsletter do not necessarily reflect those of the members, officers or Board of Directors of the DVHRC, nor is the organization responsible for any buying or selling transaction incurred.

DVHRC BOARD OF DIRECTORS

Pete Grave Mike Koste Tony Molettiere
Bill Overbeck Ludwell Sibley

FOUNDING PRESIDENT

Jay Daveler

1996 DVHRC OFFICERS

President Bill Overbeck (610) 789-8199
Vice-President Tony Molettiere (215) 723-7459
Treasurer John Kern (215) 538-2128
Secretary Mike Koste (215) 646-6488

OSCILLATOR EDITOR

Ludwell Sibley

OSCILLATOR CONTRIBUTORS

Alan Douglas

Alton DuBois, Jr. Mike Koste
Bob Thomas, W3QZO Ted Sowirka

DVHRC TECHNICAL COMMITTEE

Jim Amici Ned Borger
Lewis Newhard Ted Sowirka

FLEA MARKET & AUCTION COMMITTEE

Pete Grave Dave Abramson

LIBRARIAN & TUBE PROGRAM

Charlie Class

MEMBERSHIPS

Mike Koste

ARTICLES & MEMBER ADS

may be sent to the editor at 44 E. Main St, Flemington,
NJ 08822, (908) 782-4894.

COPY DEADLINE: The 20th of each month.

NEXT MEETINGS: Nov. 12, Dec. 10.

Philadelphia Ordnance Board; Captain F. C. Shaffer of the U. S. Army; and William Steele, who presented Kent with the key to the factory. The owner's family was present too: Mrs. Kent, son A. Atwater Kent Jr., and daughters Elizabeth and Virginia.

During the dedication, a special train of Pullman cars was backed onto the factory siding. It carried several hundred radio distributors, Mr. Kent, and his company department heads to the sixth annual convention of the distributors and sales organization of the Atwater Kent Manufacturing Company. The event, at the Ambassador Hotel in Atlantic City, lasted three days.

THE AK SITE AS SIGNAL DEPOT

The Philadelphia Signal Depot was established during the pre-WW II military buildup, to move Signal procurement people out of the Brooklyn Army Base. The entire AK site was bought after condemnation proceedings, squeezing Sears, Roebuck and Co. out of the place. The Army got 800,000 square feet of floor space, plus 25 acres of extra land, for \$2,000,000 (1941 dollars). The facilities were good, but the depot got off to a rough start. As the official Signal Corps WW II history* puts it:

A power plant was available for emergency use, although ordinarily power would be supplied by the Philadelphia Electric Company. The land sloped sharply from east to west, which gave each floor of the buildings access to street levels, the top floor extending over the total size of the building and the floors below shrinking to conform to the . . . land. Because they were supported on separate pillars, the floors were independent of the walls, wherefore expansion and contraction caused by heat and cold would have little effect. On the whole, the plant provided excellent depot facilities, although that part occupied as office space was cold and drafty; the roof leaked when it rained; sun glared through the glass-enclosed spaces by day, and the two night shifts shivered beneath the irritating glare of 500-watt unfrosted lamps fixed to the girders overhead. There was only a makeshift food service in the building and practically no restaurants nearby. The transplanted Brooklyn personnel viewed the site with disfavor, and quit in large numbers.

The building held Army ground radios, radar items, photographic equipment, dry batteries, and wireline comm gear. The first gear moved into the depot was the trucks and trailers comprising ten SCR-197 mobile stations, then-aging predecessors of the SCR-299/399 station. The facility also housed contract administrators, explaining why so much WW II gear bears order numbers like "7527-PHILA-45-07." The place was responsible for nearly 100,000 items of procurement, and employed about 1100 people. It was also the home office for quality inspectors with the job of keeping local suppliers like Philco and RCA Victor on the ball. The first of all the WW II signal depots (Chicago, Dayton, Lexington, New Cumberland, Ogden, Sacramento, etc.), it was also the busiest. It later housed a depot-level equipment-rebuild shop run by a combination of civilians and German POWs (!).

Every old building has its secrets. When they knock the place down, surely behind some forgotten partition there will be a crate of 1945-vintage handie-talkies or field phones! - LAS

* D. Terrett, *The United States Army in World War II - The Technical Services - The Signal Corps: The Emergency* (Washington: Center of Military History, U. S. Army, 1986), p. 294.

NJARC MEET-AUCTION, HIGHTSTOWN

The New Jersey club carried off a cheerful swapmeet and auction on Oct. 5 at Hightstown. The flea market was sold-out, in beautiful weather. The auction, conducted by Col. Sam Cannan of MAARC fame, was a fast-moving, move-'em-out sale unencumbered by requirements for reserve prices. About half the 500 lots were catalogued in advance, the rest bring-ins. There was a substantial volume of club donation material. Despite a scarcity of super-

glamorous material, sales grossed about \$4200 from 85 bidders. Internet users can reach the full auction results on the club home page at <http://www.globalent.net/oldradio>. Some of the "hotter" items were:

Fisher 500C tuner, exc.	60	Philco 90 cathedral, works.....	110
Philco 37-84.....	65	Philco 70 cathedral.....	125
Panasonic VHS VCR w/ book.....	65	Audio triodes: two ST-bulb 50s, lightly blackened; one newish 10Y; tested OK.....	130
Drake 2-B rcvr, w/ 1-B speaker and book, VG.....	75	Coulamrie Jr. Deco WR-1Z.....	215
Admiral 10" TV console, all-bakelite, 1946.....	83	Radio-phono: Sonoradio by Sonora - crank phono w/ radio panel.....	475
BC-474 (SCR-288) transceiver, VG cond.....	85		
Majestic grandfather clock, 1937.....	100		

CENTRAL PA RADIO COLLECTORS MEET, DANVILLE

Oct. 5 was also the date for a Central Pennsylvania Radio collectors meet at Danville (I-80, east of Williamsport). The event drew 14 vendors amid fine weather and good feelings. Goods on sale ranged from battery sets through comm gear. Organizers Frank Hagenbuch and Mike Heffner are planning another Danville event for next May.

WANT ADS

Free exposure for your desired or excess stuff! Unless requested otherwise, we'll run each ad for two months, and will send ads to NJARC's *Jersey Broadcaster* for double coverage.

FOR SALE: Motorola 8" round-screen wood TV, \$110. Hallicrafters SX-62, works good, \$250. National NC-183D, works good, \$250. **WANTED:** Communications gear, ham gear, any and all types - especially, Harris RF591 pres-selector. Pete Grave, (610) 847-2214 eves. (11-12/96)

WANTED: Large type 14-pin CRT socket for tubes like 7JP4. Need socket to modify my N. R. I. model 66 tube tester. Already have newer tube test socket. Got any hook-up advice? **FOR SALE:** Doesn't anyone want an RCA 7" scope, model WO-56A? The power transformer has a shorted turn and starts to cook after about 5 minutes. All tubes are good, manual included. Make an offer, plus shipping. Alton A. DuBois, Jr., 67 Peggy Ann Rd., Queensbury, NY 12804, (518) 792-3130. (10-11/96)

ESTATE SALE: At November 15 NJARC meeting (for collectors only - no dealers!): early used tubes, untested, like 45s (ST and globe), 199, 26, 27, 8, etc. Priced at about half of A. E. S. retail or their buying price, whichever is lower. Prices marked on boxes are firm. Freed-Eisemann NR-12, in near-perfect condition, no tubes (takes four), \$125. Atwater Kent #10 breadboard kit (sort of) - all components to build one after you refurbish the metal bottoms of individual units; probably was a #10 in a prior life, \$300. Early AK horn speaker to match the AK 10, broken housing and element is loose, \$40. Perhaps some additional radios and parts if time permits. Radio/parts sale at meeting only - no calls please. Sale will commence at the end of the meeting. If two or more attendees want the same item, they will be given the opportunity to bid the price. Tubes will be sold before and after the meeting, first-come-first-served. Please remember, these are estate items, not mine. Prices were set by the family. John Dilks.

NJARC always welcomes guests at its meetings - held at 7:30 PM at Grace Lutheran Church on Main St. (Business Rte. 33) in Freehold, NJ.

WANTED: 27 down and three to go: Air Patrol (Breckinridge), To the Rescue (Chapman) and Under the Sea (Duffield) will complete my Radio Boys collection. Dust jackets not required. Mike Koste, 57 Tennis Ave., Ambler, PA 19002, (215) 646-6488. (11-12/96)

INVITATION: Browse our Web page, www.volcenet.com/~k2bn. A. G. Tannenbaum, PO Box 386, Ambler, PA 19002, (215) 540-8055. (11-12/96)

FOR SALE: Clear repro dial windows, from stock, for 200+ radio models - Admiral AM-7 through Wells-Gardner 6A26, \$15 each (six for the price of five in quantity). Doyle Roberts, HC-63, Box 236-1, Clinton, AR 72031, (501) 745-6690. (Nonmember ad; please contact originator for list of models.) (10-11/96)

WANTED: Radio chassis and speaker for Crosley grandfather cloc, Model 59. Also information on the original finish of the cabinet. Ralph Fenimore, 396 Misty Vale Dr., Middletown, DE 19709, (302) 378-0185. (11-12/96)

FOR SALE: Tubes, schematics, service notes, Rider's, Sams Photofact folders, transistor books, etc., for early radios. Send LSASE for price list. Sam Faust, PO Box 94, Changewater, NJ 07831. (10-11/96)

WANTED: Chassis for Philco 37-116. Lewie Newhard, (610) 262-3255. (10-11/96)

WANTED: 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 Seinberg, 714 Moredon Rd., Meadowbrook, PA 19046-1907, (215) 886-6124. (11-12/96)

FOR SALE: Novelty items - RCA, Victor, Edison, Splitdorf, and others. Send LSASE (55 cents postage). Sams Photofacts No. 500 up to 1000 - you pick up - 50 cents each. Over 300 books - send LSASE (55 cents postage) for list. J. J. Papovich, 53 Magnolia Ave, Pitman, NJ 08071, (609) 582-8279. (10-11/96)

WANTED: AC Dayton Model XL-60 chassis. Can be a junker but speaker and cabinet must be in better shape. A picture would be helpful. Stanley Thompson, 43 Cozy Corner, Avenel, NJ 0701-1122, (908) 636-3630. (10-11/96)

FOR SALE: Collection of the late John Kara (NJARC member), consisting of: AK 188, early battery set, hi-fi equipment, ham receivers, consoles, wood and plastic table-tops, transistor radios, test equipment, crystal sets, 2000 to 3000 radio-TV tubes, etc. Elsie Kara, Whiting, NJ (908) 849-4318. (10-11/96)

WANTED: For Philco Model 21 - speaker, escutcheon, and dial. Aaron Hunter, 23 Lenape, Trail, Southampton, NJ 08088, (609) 267-3065. (10-11/96)

FOR SALE: Ware cathedral model B-1 "Bantam" (Bunis 1 & 2), made by the Ware Mfg. Corp., Trenton, NJ, all original, \$200. Freed-Eisemann NR-5 battery set (Bunis 2, p. 81), all original, no tubes, nice, \$90. Crosley XJ battery set (Bunis 1 & 2), all original, no tubes, \$175. Freshman Masterpiece, slanted front, table model, no tubes, all original, \$75. Elwood F. Hunt, 308 Georgetown Rd., Carney's Point, NJ 08069, (609) 299-5259. (10-11/96)

WANTED: EV 666 mic w/ cord and correct connector; Emerson 790B in blue, black, or red; National NTS-2 loudspeaker for NC-303 receiver; Hitachi TH-660A 6-transistor radio (black); Polyrad "Capri" 6-xstr in blue; Shalco 3-xstr in black; Shure M63 Audiomaster. Frank Feczko, 37 E. 36th St., Bayonne, NJ 07002, (201) 437-6895. (10-11/96)

CHICKENS AND EGGS EARLY TELEVISION IN PHILADELPHIA Bob Thomas, W3QZO

The hackneyed question, "Which came first, the chicken or the egg?" is often applied to analysis of market conditions that seem to accompany the success or failure of a new product or service. In effect, the question asks whether manufacturers must have guaranteed assurance of consumer demand before they begin development of a new technology or, conversely, "must a new product or service be firmly established on the market at a reasonable price before consumers will consider its purchase?" As in all questions of its kind, there is no definite answer; it all depends!

Perhaps the most important factor in the success of any new technology is the incremental improvement it offers over the current one. For example, radio was an instant success simply because nothing like it had previously existed - there truly was nothing like it! Industry's investment in new radio apparatus and program development grew hand-in-hand with sponsor support and consumer demand, resulting in fantastic growth. In contrast, following an optimistic introduction, color television languished in sales limbo for years, under-financed by industry and rejected by viewers who were justifiably critical of early color quality and unable to perceive sufficient production value in color-enhanced programs to justify the considerable expense of a new color set. Those negative factors were eventually overcome by skillful marketing, such as the "Color Specials" on NBC, by engineering effort to reduce technical defects and, not insignificantly, by an aging population of post-war monochrome receivers which had become ripe for replacement. As an aside, it's worth noting that before the culmination of those developments, David Sarnoff was on the brink of losing the confidence of his Board of Directors as they began to question the wisdom of throwing yet another twenty million dollars at a new business that had already failed to respond to RCA's initial forty-million investment. Fortunately, the General prevailed, but the color TV scenario demonstrated dramatically the crucial

balance of industrial and consumer market forces necessary for the successful launch of a new technology.

The ending of WW II left an American electronics industry with a tremendous reservoir of diverse engineering talent and gigantic manufacturing capacity that lent itself to rapid conversion to mass production of new civilian products. Those circumstances were fortunate, for when commercial television was emerging in the months immediately following the war, there were no receivers available at affordable prices and even if there had been, there would have been few customers for them because there were no regular programs to watch. Compounding the problem, potential sponsors were not interested in funding shows that had no viewers. This was indeed the classic "chicken and egg" effect, so just how (to cling unashamedly to the chicken metaphor) did the fledgling television industry get off the ground?

Industry confidence forced the issue. The impetus to design economical television receivers, assemble an entirely new broadcasting infrastructure, and develop innovative programming, came from CBS, Du Mont, GE, Hazeltine, Philco, RCA, Western Electric and common carriers, Zenith, and other far-sighted companies, who made massive commitments to the ultimate success of the emerging television industry. As dedicated as those industrial giants were, however, it was impossible for them to complete their massive tasks overnight, so the chicken-and-egg standoff previously mentioned continued through 1945-46. It is ironic that during this brief period of stagnation, some of the most interesting, albeit low-key, events in the history of U.S. television occurred. I was fortunate not only to have witnessed them, but to have been a minor participant.

Television was first enjoyed, one might even say "popularized," by that small group of technically-oriented individuals who just *have* to be personally involved in the forefront of every new development. These "Techies" (as we now know them) were the type who later had their

own Magnecord tape recorders before the public ever heard of high fidelity, and who built MITS computer kits before the "PC" was invented. In the early days of television in Philadelphia, Techies cobbled together their TV receivers in a variety of ways. The simplest was a single-channel TRF tuned to the one and only station in the area - Philco's W3XE, located in Wyndmoor, just above the northern edge of the city. More adventurous builders constructed superhets from scratch or by rebuilding an old pre-war set. The most deluxe receivers used the latest model tuners and IF strips "liberated" from one of the local manufacturers. Due to their experimental nature, those receivers were almost never enclosed in cabinets; they were generally an assemblage of individual chasses, haywired everywhere, with the Kinescope (picture tube to non-RCA folk) lashed with string to a wood support or cardboard box. The Kinescopes used then were a motley lot, usually only 5" in diameter, sometimes 3", and seldom larger than 7". Phosphors were typically P1 (green) or P4 (white), with an occasional P7 surplus radar tube, which had a blue short persistence and orange long persistence, the latter filtered out with a blue filter to give a barely acceptable television display. Except within the laboratories of the great receiver manufacturers, not much was known about sync separation or noise immunity, so the early amateur sets suffered from frequent picture rolling and complete loss of horizontal sync for no apparent reason.

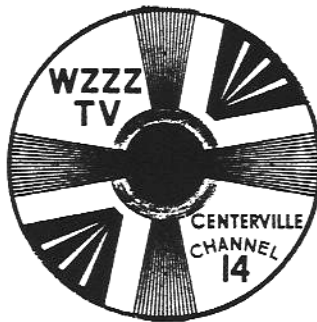
The first television picture I remember seeing, except for the RCA display at the 1939 New York World's Fair, was in, of all places, a Texaco gas station on Lancaster Avenue in Wayne or Haverford. One of my high school pals had use of the family car, and we would drive to the gas station to watch what little television was broadcast in late 1945. The owner didn't seem to mind that we would watch his set by the hour, and we would often be joined by customers who would come and go while the owner was outside pumping gas. This gentleman had an enthusiastic, if not completely accurate, view of television's future, which he thought would enable him to attract travelers by providing a lounge with comfortable chairs and a *television* receiver ("TV" was not yet in common use) to entertain customers while their autos were being serviced.

The very first show we saw at the gas station was a cowboy movie from W3XE. In the middle of the film the projector stopped, a callsign ID slide came up, and the station went off the air for the night. That's the way it was in those times, but the thrill of watching *anything* on television more than compensated for the total absence of "production value;" after all, I remember the details after these many years, so it must have been impressive! Friday night was a good time to go to the service station

because there was no school the next day and W3XE (later to become WPTZ, WRCV and finally KYW) broadcast boxing matches from New York. At that time even live cameras used Iconoscope tubes, known for low sensitivity and a tendency for the edges of the picture to become washed-out due to leakage of the stored charge from the photosensitive surface. Poor camera sensitivity necessitated intense lighting on the boxing ring. Nothing was visible outside the ring, but we didn't care - this was live television! One Friday night, though, we were astonished to see spectators beyond the fifth row, and realized we were watching one of the first broadcasts using the new Image Orthicon, destined to be the pickup tube of choice for live programs for the next 20 years.

I don't remember how we learned about television at the gas station, but there was a network of Techie wannabees (well versed in the science but lacking the wherewithal to acquire a receiver) that passed around word of where operating television sets could be seen. In suburban Philadelphia at least, people who owned receivers didn't seem to mind if a stranger knocked on the door and asked permission to watch. It was not uncommon during a viewing evening for visitors to come in, watch for a while, thank the host, and quietly depart. If you stayed until the station went off the air, you often got to see the workings of the set accompanied by an enthusiastic explanation of the tribulations encountered in getting it working.

Eventually commercial receivers from several manufacturers began to appear, notably the now-classic RCA 630-TS (1946, 30 tubes, Table model). This set sported a 10-inch kinescope, a 4-MHz video band-



A staple of early programming: the test pattern.

width, and weighed in at an impressive 85 pounds. Several companies were licensed to manufacture the chassis of this receiver, either from production drawings or with various levels of kits of parts supplied by RCA. [A very good example of a surviving '630 equipped with a 13-channel tuner (with Channel 1 as subsequently re-allocated to other uses) was offered for sale at the AWA Conference this fall for \$350.] Chicken-and-egg distinctions became blurred as television networks were formed, programs got better, and receivers rolled off the production lines as fast as they could be stamped out. In Philadelphia, WCAU and WFIL joined WPTZ on the air with regularly scheduled evening programs. Audiences swelled, and the quality of programs - which originated on film or went live to air - rose to tremendous heights as quality production personnel and seasoned stage and screen talent, joined by a new generation of exceptional young actors, flocked to the new medium. What followed for the next few years was an extraordinary era in show business and most certainly the heyday of television. But that's another story!

BOOK REVIEW

Mike Koste

The Collector's Guide to Antique Radios, 4th Ed., by Marty and Sue Bunis (Collector Books, 1996, \$18.95)

1. Refer to *Oscillator* Vol. 2 No. 10 (Nov. 1994), covering the third edition.
2. The cover is purple.
3. If you bought the first three editions, you'll probably buy this one too.

End of review.

(For those who aren't File Fanatics, here's a replay of Mike's original view. - Ed.)

The vintage-radio collectors of the world have fallen victim to supply and demand. No one can deny that our hobby is booming, but let's face fact: as more and more people get into the act, choice pieces become fewer and farther between.

Perhaps that's what Marty and Sue Bunis realized when they began to prepare the new edition of The Collector's Guide to Antique Radios, choosing to include a multitude of listings for fairly plain and uninteresting mass-produced radios of the 1950s and 1960s. Take, for instance, the white plastic Westinghouse clock radio pictured on p. 249. Most purists and old-time collectors would never give that set a second look and it will probably never be worth more than the \$15 the book calls for. Yet, to the novice collector on a small budget, radios such as this are about the only ones you'll find at yard sales and flea markets these days.

In the introduction to TCGTAR3, the Bunises make some worthwhile, though somewhat painful, observations on the Economic State of the Hobby. Many prime items, particularly cathedrals from the '30s, are either the same or have gone down in value in the past couple of years. But price guides can be dangerous. Books like this in the hands of the uneducated and unscrupulous tend to drive pricetags skyward, benefitting only the profiteers. Marty and Sue would be wise to consider a scarcity or rarity scale in future books, similar to the one in Ron Ramirez' fine volume on Philco radios (*Oscillator*, 2-94).

The authors have maintained the familiar design and formula of the earlier editions and have taken steps to fatten-up the third. The 1987 debut (now out of print) checked in with 174 pages, as compared with 276 in the new one, despite elimination of all listings for transistor radios. (Obviously they're working on a follow-up to their popular guide to the three-legged creatures.)

Though far from being the 100% complete encyclopedia that's measured in pounds instead of pages that we all dream of, Bunises' latest is as close to being the standard reference as we can expect, at least for now. And at \$18.95, it's not just a bargain - it's essential.

READERS' COMMENTS

NOVEL '20s HOMEBUILT

Here is a half-toned photo of a "homebrew" that was wired with cable pulled out of BX. The varicoupler is a Wirco and the tuning capacitor is a Pilot. The first audio is an Acme A-2; the second audio, a Kelford. The varicoupler and the tuning capacitor are operated by Apex Company dials.

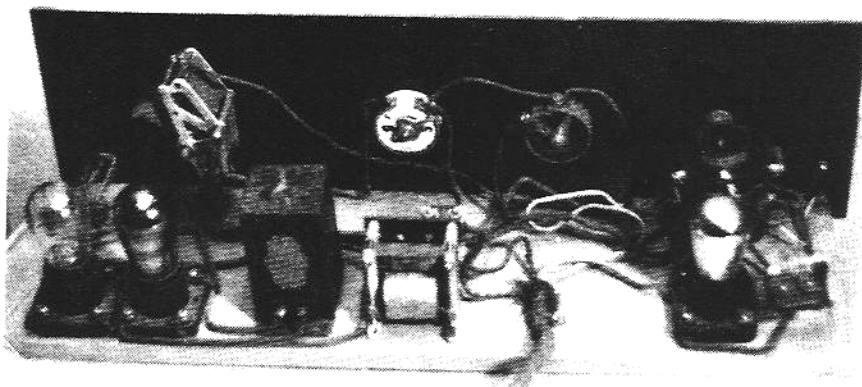
The detector and amplifier have separate rheostats. The guy who wired it sure didn't know much about controlling regeneration, with the tuning capacitor so far away from the detector circuit.

Incidentally, the set does not work. -

Alton Du Bois

On the ex-BX wire: I repaired a home-built carrier-current transmitter long ago - 807s modulated by 6L6s. After it was

working, it was a surprise to see that its heater wiring used Army field telephone wire, good ol' WD-1/TT. That's the stuff with four strands of steel wire and three of copper, good for guying tents, garrotting enemy sentries, etc. Suspicions of unsuitability were unfounded: despite carrying almost four amps, the wire delivered normal heater voltage. But the wireman must have really had to fight to get the unruly steel wire to stay put on the socket terminals before soldering! - LAS



BABY BOOM REPRICED

Howard W. Sams & Co. introduced its six-volume series Radios of the Baby Boom Era a few years ago. Assembled from Sams' photo archives, the main content is, for each model, a photo, thumbnail description, year of introduction, and the Photofact set that covers that model. There are about 500 models per volume, arranged alphabetically by brand. The original price was \$96.95 for the six, which seemed a bit steep. However, the company has just put the series on sale for \$49.95, with free shipping and handling (which naturally sounds like a closeout). The set carries order number 61009, and is orderable with the usual credit cards from Sams at 800-428-7267. The individual volumes are \$8.47 plus \$3 S&H. About 17 other Sams titles are being discounted similarly - The Video Book, Electrical Wiring, The Phone Book, etc.

Sams also offers the current edition of their classic Tube Substitution Handbook at \$16.95; a more reliable proposition than some of the wacky substitution proposals that have turned up in the tube-audio world. - LAS

READER's COMMENTS

TV DIAGNOSIS BY EAR

I wonder how many people read the fine print over the masthead of the *Oscillator* [last month]. The transmitter story reminded me of the way I used to analyze a TV in trouble. I would pull the AC plug and turn on the power switch. When the room was completely quiet, I got my head near the back of the chassis and listened, and when I plugged-in the AC cord, I would hear the power transformer go "whump." Then I would hear the vertical oscillator take off, then, if it was really quiet, I would hear the horizontal oscillator and, finally, the hiss of the high voltage. From that, I knew the power supply and oscillators were more or less OK, and would search elsewhere. Customers were rarely any help, unless you interrogated them like a D. A., asking them simple questions. Many times, just listening was a way to solve problems. - Alton Du Bois.

OPEN LETTER

THE JENKINTOWN FLOOD

To my friends, the members of the DVHRC:

This letter is to thank you for the generous gift that you sent to the Sowirka family. The storm of Sept. 8 dumped 10 inches of rain in less than two hours into our area. The entire neighborhood was flooded. Our home, a split-level type, had 38 inches of water in the garage, 30 inches in the family room, and my radio room, and 5-½ feet in the basement. The radio room, garage, and basement were crammed with my accumulated treasures. We did not have flood insurance and the homeowner's policy covered nothing. The walls in the family room buckled and broke. They had to be jacked back into position with new insulation and drywall installed. Most of the contents of the flooded areas, furniture, TV, VCR, washer, dryer, heater, appliances, and a collection acquired over more than half a century were covered with slimy brown silt and had to be thrown away. During the weeks following the flood, as I sorted and handled the items that were damaged, I was very depressed about the losses, as some were irreplaceable, while others had monetary or sentimental value. When I received the card from the DVHRC with the check for \$500, my family and I were overwhelmed. My spirits rose. I no longer felt alone, and realized that you were with me.

Two of our cars were under water. One was insured. The other, my older car, was not. We were able to get it running, but there was a heavy-current short in the wiring which drained the battery in a few hours. Jim Amici made two trips from Allentown (over 50 miles each way) bringing tools, test equipment, parts, and a hard-to-obtain wiring diagram. He located the short, made other repairs, and was able to get me back on the road. The other car has an odor but is still serviceable.

Bill Overbeck and Mike Koste devoted the best part of a Sunday carrying wet cartons of magazines to the curb for trash pickup, and using their vehicles to carry electronic gear to my storage facility. Chuck Azar called me with an offer of free storage space in a barn on his farm.

Again, many thanks to you, my friends, for your concern and help in my time of need.

Gratefully yours, **Ted Sowirka** and family

ANOTHER SOURCE FOR MANUALS

Modern times have brought us a whole new industry: the sellers of manuals for comm gear and other radios. Around here, Pete Markavage in Sayreville and DVHRC's inimitable Team Tannenbaum in Ambler are well known. Here's another source: W7FG Vintage Manuals. This source offers a catalog full of instruction books on communications equipment and related stuff, amounting to about 1800 (!) titles. There're manuals on 34 Collins items, 101 Hallicrafters sets, 300+ Heathkits, 36 Johnsons, 100 or so Kenwoods, 85 classic military sets, 48 Nationals, etc. Orders can be called in on [get this!] 800-807-6146. The mailing address is 3300 Wayside Dr., Bartlesville, OK 74006. Webheads can check their home page at <http://elgen.net/w7fg>.

The place also offers selected communications-related books, telephone-interference filters, etc. The catalog's definitely worth checking out. - LAS

SMITH AUCTION COMPANY

Semiannual Vintage Radio & Electronics Auction

Saturday, Nov. 23, 1996, 3:00 PM.

Downingtown Market Place
Business Route 30, Downingtown, PA.
10 min. from Exit 23, PA turnpike.
Close to Philadelphia and Wilmington.

Preview times:

Fri., Nov. 22, 11 AM - 10 PM

Sat., Nov. 23, 10 AM until start of auction

Vintage radios, 1920s thru 1950s - floor models, wood table models, battery sets, crystal sets, plastic horns, horn speakers and drivers and other speakers; tubes, test equipment, transistor radios, literature, amps, turntables, parts, etc.

Approximately 500 lots.

Terms: cash or local check; out-of-state checks with prior approval unless known to Smith Auction Co.

10% buyer's premium.

For more information, phone
(610) 269-1036.

Harold Smith

AU-002163-L

Annette Smith

AU-002706-L

Dennis Childers

AA-002303-L

TRANSMITTERS Exciters & Power Amplifiers

Raymond S. Moore, Author and Publisher

Reviewed by Bob Thomas, W3QZO

Most communications-equipment collectors are familiar with Ray Moore's Communications Receivers, now in its third edition. The \$21.95 book reviewed here complements that earlier work, covering many amateur HF transmitters made in the U. S. between 1930 and 1980. Each transmitter listed is accompanied with an illustration; incidental historical information; and technical data, including a brief circuit description with tube line-up and input/output power ratings. Material is based on advertisements from contemporary publications and brochures, covering manufacturers ranging from such well known giants as Collins and Johnson to some (but by no means all) esoteric brands of yesteryear.

Ray Moore has compiled a valuable reference for denizens of auctions and hamfests in search of antique rigs worthy of restoration as well as for oldtimers who like to simply re-visit the past from their armchairs. The former group will especially benefit from the book's comprehensive listings of tube-types; a "bargain" antique transmitter that uses 841 or 860 tubes, or a vintage linear amplifier that employs several \$30 sweep tubes, may not be a bargain after all! A further benefit will be realized from Moore's descriptions of minor, though important, differences between versions of a basic model as, for example, the Harvey-Wells TBS-50, -A, -B, -C, -D series.

Many aspects of Transmitters are commendable, but a book is more than raw content; presentation of that content should use pleasing typography and clear illustrations. Moore's book is disappointing on both counts. Text is printed in an ungraceful, pedestrian typeface with clumsy letter spacing, all unnecessary in this era of inexpensive word processors and variety of type fonts. However, a lax publisher's attitude is most evident in the illustrations. Allowances must surely be made for the quality of reproduced illustrations that were deficient when published 60 years ago, but that does not excuse the graininess, terrible gray-scale rendition and halftone moiré on the numerous photos derived from manufacturers' literature or high-quality magazine ads, e. g., the Johnson Thunderbolt, with panel detail submerged in murky blackness. Other lapses too profuse to enumerate give an overall shabbiness in graphics that we can only hope will be corrected in future editions. Finally, Mr. Moore, among many technical writers and publishers, habitually uses "mHz" (millihertz) rather than the correct "MHz" when referring to frequency in megahertz.

Looking beyond the aesthetics of publishing quality, Moore's latest book will be a valuable addition to the collector's library, and will be very useful to those who carry it as they tramp through field and parking lot looking for another "must have" restoration challenge.

TUBE TYPE TRANSMITTER GUIDE

Eugene Rippen, Author

Reviewed by Bob Thomas, W3QZO

Published by Sound Values, P. O. Box 9, Auburn, CA 95604. 146 pp., soft cover

Shortly writing up Ray Moore's new book, Transmitters, Exciters and Power Amplifiers, I acquired another book covering nearly the same topics by Eugene Rippen. A review of the that book and a comparison of the two publications are presented here.

There are more similarities than differences between the Moore and Rippen books. Moore restricted his coverage to HF transmitters manufactured in the U. S. between 1930 and 1980, whereas Rippen's work includes VHF as well as HF rigs and accessories of both domestic and (some) foreign manufacture in the somewhat more interesting period of 1922 to 1970. Both books have essentially identical formats, which consist of a photograph and a fairly complete description of each model, and both are reasonably comprehensive within their respective boundaries of coverage. However, Rippen does a vastly better job from the viewpoint of the vintage transmitter enthusiast simply because he begins at the very dawn of tube-type transmitters and cuts off at 1970, which defines the end of the "vintage" era. Furthermore, Rippen's inclusion of VHF equipment makes for more complete coverage of several manufacturers' product lines; Gonset, Johnson, and WRL in particular.

Anyone desiring to build a transmitter representative of a period covered by Rippen will find numerous examples to emulate, from a cute 1929 Leeds 7-1/4-watt Hartley, through beautiful meter-laden rack-and-panel rigs of the Thirties by Collins or Gross, and into the post-war era when tubes still survived and slick packaging reined supreme. The book also has an undeniable value as a swapmeet companion. Armchair enthusiasts will experience warm satisfaction from leafing through pages rich in memories for oldtimers and perhaps, for newcomers to the hobby, a bittersweet regret for having missed something good, reactions sure to be enhanced by old advertisements that have been interspersed throughout the book. Three cross-referenced indices should assist in quickly locating any specific rig on the basis of manufacturer, model number, or final-amplifier tube type.

Mr. Rippen's book exhibits some publication gaffes, not the least of which is the horrible reproduction of photographs. Every photo illustration in the book is a 40-line halftone (comparable to the lowest quality newspaper picture) which appears to have been made with a nylon stocking, producing mottled pictures devoid of detail. However, at least the photos are uniformly bad, which might be preferable to the wild quality swings in Moore's book. Typos are one thing, but when an author lists contributors to his book he should at least ensure their names are spelled correctly! The author has a compul-

sion to list the manufacturer's address for every entry, but we didn't really have to be told 28 times that Collins Radio Company is (was) located in Cedar Rapids, Iowa! There are a few technical errors; a McMurdo Silver Model 701 transmitter is erroneously listed as a B & W 701, and there is a listing for a Heathkit Q-Multiplier, which has nothing to do with transmitters. Those things do happen, but they are certainly not reasons to reject a book that rises above its production glitches with the comprehensive, thoughtful coverage of Mr. Rippen's labor of

love. It is a valuable reference for all who share his interest in vintage amateur transmitters.

How does one narrow a purchase decision when, on balance, the books are so similar? One reviewer has suggested that the answer is to buy both. I don't necessarily agree with that. If the choice were limited to either Moore's book or Rippen's, I would choose the latter on the basis of its more meaningful period of coverage, greater scope of equipment covered, and 20% lower cost. Of course if you're a nut like me, you'll buy both!

AIRWAVES TIMELINE

Mike Koste

1906, Dec. 25 Reginald Aubrey Fessenden at Brant Rock, MA sends human voice by wireless; is heard by ships at sea.

1923, Dec. 4 "The Eveready Hour," the first major radio variety show, premieres on New York's WEA.

1923, Dec. 6 WEA, New York; WCAP, Washington DC; and WJAR, Providence, RI are linked by wire forming the first radio "network."

1928, Dec. 23 NBC Blue network inaugurated.

1931, Dec. 1 According to a recent survey, 2 out of every 5 American homes now have radio.

1931, Dec. 5 Internal Revenue service reports that over half of the nation's radio stations are operating without profit.

1933, Dec. 2 Washington, DC newspapers finally agree to publish daily radio program listings, but only as paid ads.

1937, Dec. 12 The FCC begins its first foray into banning indecent programming following a provocative on-air exchange

between Mae West and Charlie McCarthy.

1941, Dec. 22 The radio industry's first war casualty: Ensign Tom McClelland, Chief Engineer at KLZ in Denver, dies of injuries sustained at Pearl Harbor.

1941, Dec. 7 Kato, the Green Hornet's "faithful Japanese valet" suddenly turns Filipino.

1947, Dec. 27 "Puppet Playhouse" opens on WNBT-TV, New York; introducing new generation of vidiots to Howdy Doody.

1955, Dec. 5 Combined radio and television revenues surpass \$1 billion for the first time.

1957, Dec. 1 Zenith introduces the Royal 1000, the first transistorized Transoceanic.

1957, Dec. 23 CBS pays a record \$20 million for Philadelphia's WCAU-AM, -FM, and -TV.

1968, Dec. 30 For the first time, sales of American-made color televisions top those of black-and-white sets.

FIRST CLASS MAIL

DVHRC

Box 41031

Philadelphia, PA 19127-0031

**ATWATER KENT
TIME CAPSULE
OPENED!**

See p. 1.

