



When in trouble or in doubt
Run in circles, scream and shout.
- from The Caine Mutiny, as reminded by Alan Douglas

OSCILLATOR

DELAWARE VALLEY HISTORIC RADIO CLUB

The Official Newsletter of the DVHRC

Vol. 5 No. 6, June 1997

PICNIC TIME!

The big news this month is the upcoming DVHRC-NJARC picnic on the 14th - a combined breakfast - lunch - flea market - auction - equipment contest. Details are given on page 3. The auction includes a varied selection of books/tubes/testgear/parts from an estate (see the catalog on p. 4), plus club stuff and bring-ins.

For those coming from Pennsylvania, the simplest approach is to use I-95 into New Jersey, then take NJ 31 to north of Flemington. NJ 31 connects with I-78 westbound south of Clinton. Then follow the directions on p. 3. The site is on Rte. 617 (Sidney Rd.) on the left.

This is a "members only" event; however, both clubs invite radio collector-historians to join. For DVHRC membership, see the masthead on the next page.

As a small entertainment (?) and/or service, NJARC Tube Chaplain Ludwell Sibley proposes the following: everybody has a box of unidentifiable tubes, especially big-pin types from the early '30s. He offers to use the techniques in his recent *Radio Age* article to figure out the identities of mystery tubes. So bring that tattered grocery bag of unknowns to the picnic and get 'em identified; no charge, no risk, no obligation, etc. Or, heh, heh, see if you can stump the "expert."

"WESTERN ELECTRIC" CELEBRATES 50th AT ALLENTOWN

"Scoop"

Our Lewie Newhard proudly points out that Lucent Technologies, né AT&T Technologies, pre-né Western Electric, is celebrating 1997 as its 50th year at the Allentown Works. The facility, built to make electron tubes and related products (quartz crystals, thermistors, etc.), opened in November 1947, a month ahead of the invention of the transistor (or at least its modern incarnation). The plant has been modernized and re-modernized over the years - began making transistors in 1951 - and probably contains the oldest building making integrated circuits *anywhere*.

Like the rest of the world, the company is hardly recognizable today compared to its 1947 form: back then, WE made "Audiphone" hearing aids, broadcast equipment (transmitters, antennas, mikes, consoles); theater and PA sound systems (amps, speakers), small marine radar sets, two-way radios and mobile phones, radar direction systems for military gunnery, aircraft radios, and similar items. All this was in addition to its primary business of supplying the then-Bell System. Tubes and other parts from Allentown went into all these products. Business was booming - AT&T was struggling to meet the pent-up demand for telephone service that resulted from WW II - and WE soon dropped many of these product lines to concentrate on supplying its main customer. Yet the demand for Allentown products continued to grow.

For other details on Allentown, see the Dec. 1994 *Oscillator*. For now, congratulations to Lewie and his company!

THE TOP 10 QUESTIONS ASKED OF DVHRC MEMBERS

Bill Overbeck

Visitors tend to ask a fixed set of questions on viewing the typical DVHRC member's radio collection. Here are the "top ten" inquiries:

10. How many radios do you have?
9. Do all these radios work?
8. Can you still get the tubes?
7. What is the oldest radio you have?
6. Do you have enough insurance?
5. What does your wife think of this?
4. What did your ex-wife think of this?
3. How many radio shirts does your family have?
2. May I set my beer on this?
1. Where do you sleep?

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 copyrighted by the author or indicated otherwise, material in this publication is available for attributed reproduction for nonprofit purposes. (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.

To join: DVHRC dues is \$10 per year. The membership year runs January-through-December. Please mail to the club PO box above.

DVHRC BOARD OF DIRECTORS

Pete Grave Mike Koste Tony Molettiere
Bill Overbeck Ludwell Sibley

FOUNDING PRESIDENT

Jay Daveler

1997 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 ("Scoop") Sibley

OSCILLATOR CONTRIBUTORS

John Dilks, K2TQN	Alan Douglas
Alton DuBois, Jr	Mike Koste
Bob Thomas, W3NE	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: June 10, July 8.

ON THE HORIZON

- June 12-14 MAARC "RADIOACTIVITY," Best Western Maryland Inn, Laurel, MD.
June 14 DVHRC-NJARC joint picnic/swapmeet/auction, Clinton, NJ.
June 21 W2QW Hamfest, Columbia Park (off Washington Ave.), Dunellen, NJ; 7 AM - 2 PM.
July 11-13 MARC "Extravaganza," Holiday Inn South Convention Center, Lansing, MI.
August 6-9 ARCI "Radiofest," Holiday Inn, Elgin, IL

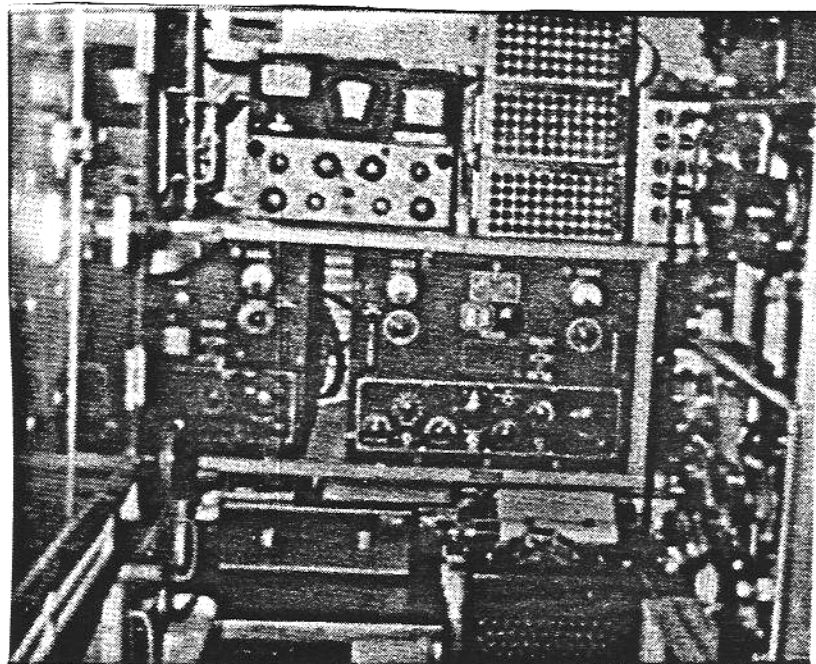
SUBMARINE RADIO ROOM

Alton DuBois

While visiting Cleveland, I had the opportunity to tour the U. S. S. *Cod*, a WW II fleet submarine now permanently moored at the Navy establishment on the lakefront. I was impressed with the tiny closet the ship's radio op had to work in. It was packed with equipment, including a chair and typewriter. He barely had elbow room to work in. I guess all submariners learned to keep their elbows tight to their sides because of the narrow passageways and compartments.

The *Cod* was the one that rescued George Bush after he had been shot down by the Japanese.

They also had a brig for Japanese prisoners in the sub's bilge area.



Recognizable in the photo are an RBM receiver (top) and an RAK or RAL (bottom, with power unit at left). The unit on the right may be a TBK transmitter. - Ed.

**Delaware Valley Historical Radio Club
and New Jersey Antique Radio Club
Joint Picnic, Flea-market and Auction
Elks Lodge 2434
Clinton, New Jersey
14 June 97
Rain or Shine**

Take exit 15 of I-78 / US 22
South 1/2 mile on RT. 513.
Left on RT. 617 go 1.3 mile to Elks

All you can eat Picnic

Hot Dogs, Hamburgers, Salads, Sodas and *more*

Scheduled Events

Rest and Relaxation and Radios (the 3 R's) all day!

Continental breakfast 9:00 to 10:00 AM

Tail gating from 9:00 to 12:00 AM

Picnic from 11:30 AM to 1:00 PM

Auction from 1:00 PM to 5:00 PM

Equipment Contest with Prizes

50-50 raffle

Three Cake Raffles

Absolute Cost

Individual club member:	\$15
Club member and immediate family:	\$25
Individual non-club member:	\$25
Non-club member and immediate family:	\$35

Fee in hand deadline: 1 June 97

No additional cost to tail gate. There will be a 10% sellers fee at the auction.

Contact

DVHRC
Bill Overbeck
(610) 789-8199

NJARC
Jim Whartenby
(908) 271-7701

Mike Koste
(215) 646-6488

Marv Beeferman
(609) 693-9430

ESTATE AUCTION MATERIAL FOR CLUB PICNIC

This is in addition to pending club material (especially tubes) and other contributions.

- | | |
|--|---|
| 100 H-P 200B audio oscillator, w/ book, VG cond. | 121 Weston antique ammeter, impressive 8" dia. cast-iron, 0-600 scale. |
| 101 Heathkit IT-28 capacitor checker. | 122 Heathkit AA-1 audio analyzer (intermodulation meter). |
| 102 Measurements Model 80 HF-VHF-UHF signal generator; paint flaking but good otherwise. | 123 General Radio 726A VTVM; has interesting RF probe and schematic inside. |
| 103 Heathkit TC-2 tube checker. | 124 Tubes: octal and big-pin, a 906 CRT, other specials; another canful. |
| 104 Heathkit RS-1 resistor substitution boxes (3). | 125 Fisher 50-C "master audio control" mono pre-amp. |
| 105 Small parts, six large cans: coax fittings, Jones and AN connectors, GR plugs, phone jacks, crystals (incl. antique and amateur-band). | 126 Knobs, a canful, mostly for test and comm gear. |
| 106 Eico 360 TV-FM signal generator; needs dial pointer. | 127 Tubes, a 7EP4 and a 7JP4, for your 1949 Admiral TV, etc. |
| 107 Dressen-Barnes 3-150L regulated lab power supply; puts out 0-300 V and 6.3 V. | 128 Daven switch-type audio and RF attenuators, and misc. connectors; a canful. |
| 108 Eico 460 scope, less one knob, VG otherwise, w/ book. | 129 Mica wireless condensers, "wireless" vintage, a canful. |
| 109 Avometer Model D, British Air Ministry version. (Why "Avo"? - well, it measures <u>a</u> mps, <u>v</u> olts, and <u>o</u> hms!) | 130 Monarch 12N AF-RF signal generator. |
| 110 Wilcox & Gibbs antique table-top sewing machine, black enameled base w/ fancy striping, nicked bedplate, and Westinghouse motor. Latest patent date, 1894. Also see Lot 145. | 131 Industrial Instruments wood-cased decade capacitor. |
| 110A Tubes, '20s flashback: 01As, S-bulb (3), 71A, ST-bulb, Daven Mu-20, Marathon AC-608R. Emission good on first five; emission unknown on Marathon (how do you test it?) but heater good. | 132 IF transformers, a canful. |
| 111 Kodak folding camera, '20s style. | 133 Heathkit GD-1 grid dipper w/ coils; less the 100-250 MHz coil. |
| 112 Heathkit AV-2 AC VTVM. | 134 "Morning-glory" horn, apparently from W. E. 4A microphone (good), and unident. driver assembly (rusty). |
| 113 Muzak amp, steel-cased, uses P-P 6L6Gs. | 135 Variable capacitors, a canful. |
| 114 Gestetner 120 multilith machine, hand-cranked, made in England, w/ spare ink and stencils. | 136 Engineer stuff: slide rules (incl. round, regular, and a Navy circular radar-null calculator), and drafting tools; a canful. |
| 115 RCA Volt-Ohmyst Jr. meter. | 137 Millen 90651 grid dipper w/ coils. |
| 116 Keystone slide projector, near-new in box, w/ spare carousel. | 138 Heathkit audio generator, tube-type, switch-selected frequency. |
| 117 Tubes: octal and big-pin, a canful. (Don't laugh at the new boxed 866As until you look at what A. E. S. has been paying for 'em lately!) | 139 Variacs, three handy small (1-amp size). |
| 118 RCA 153 test oscillator, w/ book. | 140 Weston 547 bakelite-cased set & tube tester. |
| 119 Tubes: min., octal, double-ended acorn (954s), and nuvistors; a canful. | 141 Ford spark coil w/ novel slow-speed metal-ball interrupter. |
| 120 Tube sockets, ten 4-pin xmtg., mostly Johnson. | 142 Western Electric 48-type five-bar telephone magneto. |
| | 143 Industrial Instruments wood-cased decade resistor. |

- 144 Shure 55S Unidyne microphone, looks sharp.
- 145 Wilcox & Gibbs antique table-top sewing machine, hand-cranked version of Lot 110.
- 146 Western Electric 633A microphone head, nice cond.
- 147 Spark coil, impressive lab-style on wood base.
- 148 Chicago BO-11 output transformer, w/ instruction sheet.
- 149 Acrosound TO-300 output transformer, w/ instruction sheet.
- 150 NRI R-C tester.
- 151 Measurements 59 grid-dipper, head only, w/ coils.
- 152 Simpson 260 VOM.
- 153 Heathkit V-6 VTVM.
- 154 General Radio 604-Px four-terminal lab doojiggers (bandpass couplers?), a set.
- 155 RCA WV-97A Volt-Ohmyst.
- 156 Precision "Tube Master" meter (meter-only), huge impressive display item.
- 157 General Radio 200C lab Variac.
- 158 Millen wavemeter set, includes 90605, -5, -6, -7, and -8.
- 159 '50s solid-state stuff: solar-cell experimenter kits and related material, a canful.
- 160 Short-wave plug-in coils, a canful; contains 15 ceramic coils that look like Hammarlund Comet Pro types; plus a lovely green-silk set of five from a late-'20s receiver; and four National 5-, 10, 20-, and 40-meter coils of SRR style; plus various misc. types.
- 161 Magnet wire, multiple spools including some cotton-covered.
- 162 IRC resistor kit, containing antique-style resistors for exact restoration use.
- 163 Box lot: AK breadboard tuning capacitor, Ford coil, General Radio lab cap, "wireless" vintage tuning cap.
- 164 Oldie dials and butterfly tuners; a canful.
- 165 Lafayette VTVM.
- 166 Westinghouse portable wattmeter.
- 167 Variac box, lab-style, metered, homebuilt.
- 168 Audio output meter: VU meter and precision step attenuator, home-assembled.
- 169 W. E. and Baldwin phones; one pair each; cords scruffy.
- 170 Lafayette field-strength meter.
- 171 Miniature light bulbs, a canful.
- 172 Capacitors, 0.5 uF 600 V, epoxy-molded style, a small canful.
- 173 AC isolation transformer, bench-style, 50-watt.
- 174 Tube sockets, a boxful including ceramic octals, xmtg., acorn, etc.
- 175 Binding posts, a canful.
- 176 Abbott TR-4B transceiver, postwar model for 2 meters; has acorn-tube receiver and HY-75 transmitter.
- 177 Books: RCA Victor Service Notes for 1933-34-35, fair-good cond.
- 178 Books: RCA HB-3 tube manual, three binders (Vols. 1-6), late-'40s vintage, good cond.
- 179 Book: Radiotron Designer's Handbook, 4th ed., cover lightly faded and cracked but good otherwise.
- 180 Books: Proceedings of the IRE, 24 issues 1930-36, fair cond. (a couple of covers absent; water staining, etc., but pages are not stuck and condition is usable/restorable).
- 181 Books: RCA solid-state pubs: Transistor Manual (1964, two copies); RF & Microwave Devices, Linear ICs, Linear ICs and DMOS Devices; good cond.
- 182 Books - tube texts: Theory & Application of Electron Tubes (Reich), 1939; Vacuum Tubes (Spangenberg), 1948; Thermionic Tubes - Theory & Design (Beck), 1953; Mercury Arc Rectifiers (Martin & Winograd), 1930; Klystron Technical Manual (Sperry Gyroscope Co.), 1944; Physics of Electron Tubes (Kollar), 1937; all good/VG cond.
- 183 Books: Radio's Master catalog, 1968, and Electronics Buyer's Guide, 1969, both VG.
- 184 Books - ARRL: Radio Amateur's Handbook 1959, 63, 68 (less covers), 80; plus smaller pubs.; fair cond.
- 185 Tubes, xmtg.: 807, 809, 1625, 6146 (4), 3E22 (3); emission good. Plus an 852 and a VT-2 (fil. good) for display.
- 186 Books: Reference Data for Radio Engineers, 1st (!), 3rd, and 4th eds., good cond.

- 187 Books: RCA HB-3 tube manual, two binders, late-'40s vintage, covers off one binder but OK otherwise. Covers receiving and CRT/photo-special types.
- 188 Book: Gernsback Official Radio Service Manual, 1930; missing index pages, OK otherwise, in orig. binder.
- 189 Books: Philco factory service booklets, 1928-37 radios, good cond.
- 190 Tubes, big-pin (14): 10, 36, 39, 43, 57, 76, 78, UX-281, 5Z3 (3), 6A7, 6C6, 6D6; emission good.
- 191 Books, a boxlot: Radiotron Designer's Handbook, 3rd. ed.; Radio Handbook (Orr), 22nd. ed.; FM Atlas; Principles of Radio Eng., etc.
- 192 Books, a boxlot: 630-Type TV Receivers; Reference Data for Radio Engineers, 4th ed.; The Oscilloscope at Work, etc.
- 193 Books, a boxlot: SSB Communication Handbook; Electronic Instruments (MIT Radiation Lab series, Vol. 21); Electronic Design Handbook, etc.
- 194 Books, a boxlot: Tung-Sol Tubes, Microwave Engineer's Handbook; Amateur SSB (Collins Radio Co.); Radio Engineering (Terman), Sams Tube Substitution Handbook, etc.
- 195 Books, a boxlot including instruction manuals: Hallicrafters S-20R, Williamson Amplifier (Wireless World articles, original British reprint); Dynaco FM-1, Ferris 18C Microvolter; Rider's indexes for Vols. 1-7 and 1-10 (less covers). RCA Tubes, Westinghouse Industrial & Military Tubes, etc.
- 196 Books: Tung-Sol tube manual on receiving and CRT types, mid-'50s vintage, three-binder set. (The mid-size Tung-Sol binders are easier to use than the cramped RCA HB-3 or the big-format GE binders; plus they look sharp!)
- 197 Microphone: Shure 55S Unidyne w/ cord, nice looking.

Tube-test results reported here are as obtained by one skilled user on equipment in good condition; "your results may vary." As with any auction, this equipment is as-is, where-is.

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: Micro Design Model 925 microfiche reader, reconditioned and working, \$50. About 45 35-mm slide magazines; two metal storage containers for the magazines. Donald Rector, 443 Beaver St., North Wales, PA 19454, (215) 699-8050. (5/6-97)

WANTED: Want ads. Things are awful slow this month.

FOR SALE: Philco TV service cables (1948-53). Philco Model 630 chassis with tubes. Philco Model 38-B console. Majestic Model 90B console. Price is negotiable and local pickup only. H. P. Bohlander, 2731 Hawthorne Rd., Glenside, PA 19038, (215) 886-8666. (5/6-97)

FOR SALE: The DVHRC tube program offers clean, tested, boxed tubes at very reasonable prices with availability at any club meeting. Proceeds go to the club. About 300 types are currently in stock. Of course, donations of radio-type tubes in any condition are welcome. See Charlie Class at any monthly meeting to obtain or donate tubes.

FOOD & DRINK: a good place to join fellow collectors for dinner before meetings is the Hillside Tavern, half a block uphill from the meeting site.

INDUSTRY NEWS

MANY WAYS TO RUN A CLUB

The following appears on the membership application form of the Golden Radio Buffs of Maryland, Inc.

Because we are a non-profit organization devoted to the preservation of [Old-Time Radio] on disc and tape for **COLLECTORS ONLY** [emphasis in original], our membership is **CLOSED TO DEALERS AND COMMERCIAL DISTRIBUTORS OF OTR BROADCASTS**. We, therefore, accept an application in good faith from you as a collector. If through the screening of an application by the membership committee, it is discovered that a **COMMERCIAL NON-HOBBY DEALER/DISTRIBUTOR** has applied for membership, the application will be rejected. If discovered at a later date . . . membership will be **IMMEDIATELY TERMINATED WITH NO REFUNDS**.

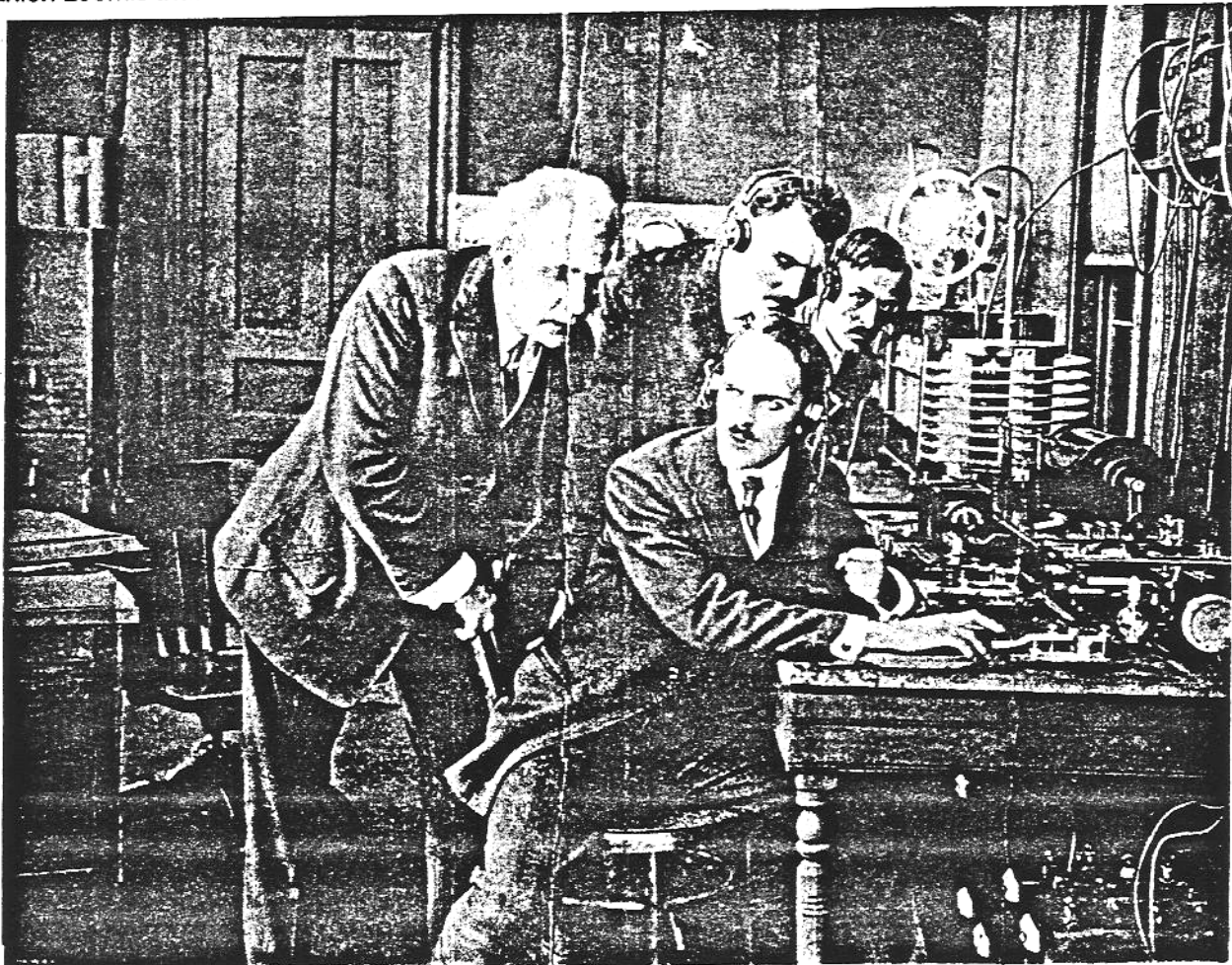
This is reminiscent of the debate that raged through one Midwestern club a couple of years ago, as to whether "dealers" should be allowed to participate in club auctions. (After the arm-waving died down, the resolution was "yes.") They must have realized that one would need the wisdom of Solomon to decide who is or is not a "dealer." The same club, as I remember it, had an internal rhubarb over the allegedly outrageous prices being charged for radios, with a proposal to establish a council of wise elders to decide what a "fair" price should be! - LAS

WIRELESS IN THE SILENT FLICKS

The photo below depicts a heroic wireless operator in action, working out with a rotary spark gap at upper right, a spark coil - possibly a Marconi 10-inch - at right center, and a De Forest RJ-4 audion detector at lower right. It was shot right here on DVHRC turf, starring Thomas Appleby, W3AX. Here's how he described the scene:

Probably in the next issue of *Spark-Gap Times* [the Society of Wireless Pioneers journal, in this case for April 1963] they will include the above which is a proof copy of a photo I sent them together with a hastily written account of my experience in setting up what I believe was the first commercial wireless station scene for a movie. It was in about 1914 or 1915 on Lubin's lot in Phila. I am the fellow nearest the rotary spark gap. I furnished all of the equipment and hooked it up, the sparks were really flying at that rotary and the noise was terrific. They were afraid of it, that's the reason they wanted me in the picture, in case anything went wrong. It's supposed to be an enemy spy station in the woods of Maine. The U. S. Secret Service break in the back door and handcuff us four enemy spies. It was produced with government assistance, the Army, Navy, and Marines, with a big portion of the Atlantic Fleet in the picture, to warn the public of the possibility of war at that time. World War I was already on abroad . . . They had to hack-saw my handcuffs off after the picture was taken.

A real "wireless pioneer," Appleby claimed to have built his first radio station (a 1/4" Ruhmkorff spark coil and coherer detector) in 1899 (!) and communicated over several hundred feet. He was a clerk in the J. Elliott Shaw electrical store in Philadelphia in 1900. Appleby was involved in early commercial wireless development, including station "AX" at Atlantic City. In WW I he was commissioned in the Navy, and directed installation of the first 33 of the Navy's direction-finder stations on the Atlantic coast. He later became owner of the Radio Apparatus Company and the Appleby Radio Corporation. Appleby was known for his association with the Horace Beale radio laboratory at Parkesburg (WQAA, 3ZO, 3XW) and the Philadelphia School of Wireless Telegraphy. In the late '20s he became a patent attorney with offices in Philadelphia and Washington, with the Atwater Kent Manufacturing Co. as one of his clients. He returned to duty with the Navy in WW II, retiring as a lieutenant commander. During the '60s he wrote the biography of Mahlon Loomis that has returned to sale in recent months. He died in Washington at age 85 in 1971.



THE CONSPIRATORS AT WORK



"THE NATION'S PERIL"

THE TOPIC OF THE HOUR



THEY WERE TOUGHER THEN . . .

The following was a winning entry in an odd sort of contest, "Six 'Shock of the Month Club' Members Selected," in the *RCA Radio Service News* for Nov.-Dec. 1948. Read 'n cringe . . .

Editor,

I was working on some bench jobs and had a small radio playing near one end of the bench. I reached for a steel rule, which had slid under the radio and which touched the under-chassis screws and also a heater pipe directly behind the radio. My hand was on the rule and the other on a grounded test lead on the bench.

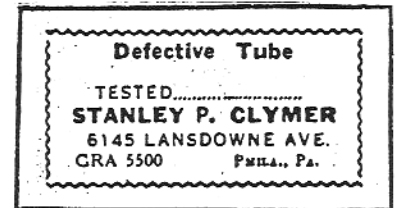
The resulting flash set fire to some gasoline-soaked waste nearby which in turn touched off a can of lacquer. In the meantime I was quite busy dropping the rule and getting away from the grounded lead. When I finally regained composure, my immediate job was to start pumping the pyrene that was needed by that time.

Believe me, the mental shock was more severe than the electrical shock I got in the process.

J. W. Eckenrode
338 E. Chapel St.
Hazleton, Pa.

Tube Salesman

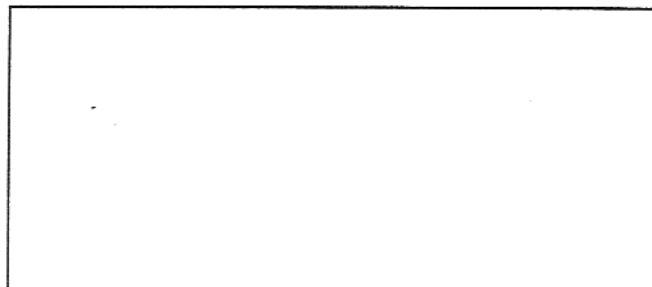
Let Stanley Clymer of Philadelphia tell you about a little scheme he uses to sell his customers radio tubes. "The little tube sticker (shown here) is cheap and a good merchandiser. All tubes in our shop that are in any way defective are marked 'low,' 'bad,' 'shorted,' etc. in the blank space. This prevents mix-up on the bench or with the rest of the tubes checked. The



customer may not wish to replace all his defective tubes at once, but the little sticker will have a moral effect in the fact that he may not be getting the best out of his radio with bad tubes in it. The fact that the tube sticker is so plain and to the point does the trick."

Sylvania News

FIRST CLASS MAIL



CLUB PICNIC, JUNE 14 (P. 3)!