

The Official Newsletter of the DVHRC

Vol. 5 No. 7, July 1997

## PICNIC A SUCCESS!

The DVHRC-NJARC picnic on June 14 was a real success - a combined breakfast - lunch - flea market - auction. The weather was excellent, and the outdoor setting, the Elks Lodge at Clinton, NJ, represented Hunterdon County at its green best. (The site is reminiscent of the pleasant park location used by the Niagara Frontier club for its annual midsummer meet.) The lunch - burgers, hot dogs, corn on the cob, potato salad, etc. - was simple but tasty in the *al fresco* setting. About 60 club and family members attended, roughly equally from the two clubs, with about 20 tailgate vendors. The general mood was relaxed and jolly. As a charismatic touch, Alan Klase and Ben Tongue put up a wire antenna in the trees and proudly demonstrated their highest-performing crystal sets - even in this rural setting, half a dozen stations could be heard. The auction, vigorously conducted by Col. Mike Koste, included material from an estate, plus club donations and bring-ins. Most of the estate material drew brisk attention (total sales a bit above \$1000), and the donated gear yielded another \$400 for the clubs.

This event was organized principally by Ruth and Jim Whartenby of NJARC, with major DVHRC representation by Bill Overbeck. Ruth, a professional caterer, donated three custom-decorated cakes to be raffled off for the clubs' benefit. Auction prep-n'-schlep was by Jim Whartenby for the club-donation gear and by editor "Scoop" for the estate material.

#### UPCOMING MEETINGS

Per DVHRC tradition, there will be no meeting in July. August is expected to feature a good-sized tailgate auction. There is a strong possibility that this sale will include catalogued material from another estate; watch your home-town *Oscillator* for details.

FLASH!

## MUSEUM DEACCESSION SALE PLANNED FOR ROCHESTER

We have late word that a major technology museum (no, not Ford/Dearborn) plans to auction duplicate/surplus material from its collection via September's AWA auction at Rochester. For starters, it appears that there will be a Poulsen Telegraphone (pre-'20s wire recorder), possibly a Western Television scanning-disc TV set, probably a Lowenstein rotary spark gap, telegraph gear including "wireless" keys, and a variety of spark-vintage transmitter parts. This is tentative at the moment, but we should have much fuller details next month.

# SYLVIA MOLETTIERE

#### Bill Overbeck

On Friday, June 13, Sylvia Molettiere, wife of DVHRC co-founder Tony Moliettiere, suddenly departed this life. She is survived by Tony and her daughter Renai.

A lady is "a woman who is looked up to because she has good taste and pleasant manners." Sylvia certainly fitted this definition, always friendly and helpful. She was always willing to help the club with ticket sales, cashiering, book sales, etc. - whatever we asked, she did the job willingly and with style.

DVHRC will sincerely miss Sylvia. We offer Tony our support and condolences in this most trying time.

In her honor, the DVHRC board of directors is pleased to announce institution of the Sylvia Award, for contributions made by an individual to DVHRC. Our club has a great volunteer base. This plaque, to be awarded at the June meeting each year, will help us thank an outstanding member for his/her efforts. The recipient may receive the award only once. It will honor Sylvia Molettiere and those who emulate her spirit of volunteerism.

#### 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.

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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.

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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: August 12, Sept. 9.



KOSTE SCORES AGAIN . .

## POWER 99 FM WINS (1997) MERCURY AWARD

(From a press release): Evergreen Media Corp. radio station POWER 99 FM (WUSL-FM) . . . has won the prestigious Mercury Gold Award for best radio Public Service Announcement for the second year in a row. The award winning PSA was "Wadiya Jamal - Stop the Violence / Increase the Peace." The spot featured an impassioned anti-violence message from Philadelphia resident Wadiya Jamal, who lost her nephew to violence . . . The PSA was produced by . . . production director Mike Koste from an interview with Jamal conducted by . . . news and Public Affairs director Lorraine Ballard Morrill . . . Koste accepted the award on behalf of the station during a ceremony at New York's Waldorf-Astoria on June 11. There were 40 finalists in the 1997 awards, selected from . . . over a thousand entries; eight awards besides the Mercury Gold Award were presented. Sponsor of the Mercury Awards, The Radio Creative Fund, was formed in 1991 to strengthen the bond between the radio and advertising communities and to promote excellence in radio advertising.

A nice honor for our president-emeritus/secretary. The trophy, like last year's, is a burly 833A tube on a marble base.

ON THE HORIZON				
July 6	Murgas ARC Hamfest, Luzerne Co. Fairgrounds,			
	Rte. 118, Lehman, PA (N. of Wilkes-Barre)			
July 11-13	MARC "Extravaganza," Holiday Inn South Con-			
	vention Center, Lansing, MI			
July 13	Valley Forge Hamfest, Kimberton Fire. Co., PA			
	113 S. of PA 23, inside/outside			
July 20	Sussex Co. Hamfest, Sussex Co. Fairgrounds, off			
	US 206 N. of Newton, NJ			
August 6-9	ARCI "Radiofest," Holiday Inn, Elgin, IL			
August 9	Juniata Valley Hamfest, Lewistown, PA			
August 23	SCARS hamfest, Bridgewater, NJ			
Sept. 3-6	AWA conference, Rochester, NY			

# SCENES FROM THE PICNIC

Photos: Marv Beeferman



Alan Klase (seated) demonstrates crystal technology to Gary D'Amico.



Flea-marketing in a sylvan setting



The Kostes and Overbecks chow-down.



John Kern does a little tailgating.

ESTATE-AUCTION HIGHLIGHTS FROM CLUB PICNIC Mike Koste, auctioneer; Jim Whartenby, Bill Overbeck, and Scoop, handlers; Pat Koste, cashier.

Abbott TR-4B transceiver, postwar, 2 meters17	(home-made fence charger?)12
Acrosound TO-300 Ultra-Linear output transformer	General Radio 200C lab Variac
Avormeter Model D, British Air Ministry version2	Heathkit AA-1 intermodulation meter
Binding posts, a canful11	Heathkit GD-1 grid dipper w/ coils; less the 100-250 MHz coil
Book: Gernsback Official Radio Service Manual, 1930; missing	Heathkit IT-28 capacitor checker
index pages, OK otherwise, in orig. binder21	Heathkit TC-2 tube checker
Book: Radiotron Designer's Handbook, 4th ed., cover lightly	IRC resistor kit, prewar-style resistors for antique-restoration
faded and cracked but good otherwise35	use15
Books - ARRL: Radio Amateur's Handbook '59, '63, '68 (less	Isolation transformer, bench-style, 50-watt15
covers), '80; plus smaller pubs.; fair cond10	Knobs, a canful, mostly for test and comm gear
Books - tube texts: Theory & Application of Electron Tubes	Kodak folding-bellows camera, '20s style
(Reich), 1939; Vacuum Tubes (Spangenberg), 1948; Therm-	Magnet wire, multiple spools including some cotton-covered.15
ionic Tubes - Theory & Design (Beck), 1953; Mercury Arc	Measurements 59 grid-dipper, head only, w/ coils
Rectifiers (Martin & Winograd), 1930; Klystron Technical Man-	Mica wireless condensers, "wireless" vintage, a canful
ual (Sperry Gyroscope Co.), 1944; Physics of Electron Tubes	Microphone: Shure 55S Unidyne w/ cord, nice looking37
(Kollar), 1937; all good/VG cond40	Microphone: Shure 55S Unidyne less cord, looks sharp1
Books, a boxlot including instruction manuals: Hallicrafters S-	Microphone: WE 633A head-only, nice1
20R, Williamson Amplifier (Wireless World articles, original	Millen 90651 grid dipper w/ coils.
British reprint); Dynaco FM-1, Ferris 18C Microvolter; Rider's	Light bulbs, miniature, a canful
indexes for Vols. 1-7 and 1-10 (less covers); RCA Tubes,	"Morning-glory" horn, apparently WE 4A (good), and unident
Westinghouse Industrial & Military Tubes, etc35	(unrelated) driver (rusty)20
Books, a boxlot: 630-Type TV Receivers; Reference Data for	Short-wave plug-in coils, a canful; contains 15 ceramic coils
Radio Engineers, 4th ed.; The Oscilloscope at Work, etc7	looking like Hammarlund Comet Pro types; plus a lovely
Books, a boxlot: Radiotron Designer's Handbook, 3rd. ed.; Ra-	green-silk set of five from a late-'20s receiver; and four Na
dio Handbook (Orr), 22nd. ed.; FM Atlas; Principles of Radio	tional 5-, 10, 20-, and 40-meter coils of SRR style; plus misc
<u>Eng.</u> , etc32	types10
Books, a boxlot: SSB Communication Handbook; Electronic	Simpson 260 VOM
Instruments (MIT Rad Lab, Vol. 21); Electronic Design Hand-	Slide rules (incl. round, regular, and a Navy circular radar-nu
book, etc	calculator), and drafting tools; a boxlot30
Books, a boxlot: Tung-Sol Tubes, Microwave Engineer's	Small parts, six large cans: coax fittings, Jones and AN con
Handbook; Amateur SSB (Collins Radio Co.); Radio Engi-	nectors, GR plugs, phone jacks, crystals (incl. antique and
neering (Terman), Sams Tube Substitution Handbook, etc30	amateur-band)1
Books: Philco factory service booklets, 1928-37 sets, good24	Spark coil, impressive lab-style on wood base150
Books: Proceedings of the IRE, 24 issues 1930-36, fair6	Tube sockets, a boxful incl. ceramic octals, xmtg., acorn, etc
Books: Radio's Master catalog, 1968, and Electronics Buyer's	Tube sockets, ten 4-pin xmtg., mostly Johnson1
Guide, 1969, both VG11	Tubes, '20s flashback: S-bulb 01As (3), ST-bulb 71A, Daver
Books: RCA HB-3 tube manual, three binders (Vols. 1-6, i. e.,	MU-20, Marathon AC-608R; emission good on first five20
complete), late-'40s, good cond30	Tubes, picture, a 7EP4 and a 7JP4
Books: RCA HB-3 tube manual, two binders, late-'40s, covers	Tubes, big-pin (14): 10, 36, 39, 43, 57, 76, 78, UX-281, 5Z3 (3)
off one binder but OK otherwise11	6A7, 6C6, 6D6; emission good2
Books: RCA Victor Service Notes for 1933-34-35, fair-good	Tubes, xmtg.: 807, 809, 1625, 6146 (4), 3E22 (3); emission
cond50	good. Plus an 852 and a VT-2 (fil. good) for display2
Books: Reference Data for Radio Engineers, 1st, 3rd, and 4th	Tubes: min., octal, double-ended acorn (954s), and nuvistors
eds., good cond12	a canful
Books: Tung-Sol three-binder tube manual on receiving and	Tubes: octal and big-pin, a canful.
CRT types, mid-'50s44	WE and Baldwin phones; one pair each; cords scruffy
Box lot: AK breadboard tuning cap, Ford coil, General Radio	WE 48-type five-bar telephone magneto
lab cap, "wireless" vintage tuning cap30	Weston 547 bakelite-cased set & tube tester1
Capacitors, 0.5 uF 600 V, epoxy-molded style, small canful6	Weston antique ammeter, 8" dia. cast-iron, 0-600 scale
Chicago BO-11 output transformer12	Wilcox & Gibbs antique table-top sewing machine, black enam
Dials and butterfly UHF tuners, oldie; a canful11	eled base w/ fancy striping, nickeled bedplate, and Westing
Fisher 50-C mono preamp4	house motor
Ford spark coil w/ novel slow-speed metal-ball interrupter	Wilcox & Gibbs sewing machine, as above but hand-cranked.5

## 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: Tektronix oscilloscopes 535 and 547 with extra plug-in units and Scopemobile. Tektronix 575 transistor curve tracer. General Radio 805B RF generator, 1021P2 UHF generator. GE TV alignment sweep and marker generator set. Manuals for all. Other test gear and surplus equipment coming up for sale - stay tuned. Mark W. Hilliard, N3NBL, 921 S. Edward St., Allentown, PA 18103, (610) 432-8089. (7/8-97)

FOR SALE: The ever-handy reference <u>Tube Lore</u> 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." The book's available from the following hip sources: (A) the DVHRC book program; (B) our own A. G. Tannenbaum, (215) 540-8055; (C) W7FG Vintage Manuals, (800) 807-6146; (D) Antique Radio Classified, (508) 371-0512; (E) Antique Electronic Supply, (602) 820-5411; (F) Fair Radio Sales (419-223-2156), (G) Angela Instruments, (301) 725-8823, (H) Antique Radio Components, (916) 878-1780, (I) Paul Washa, (612) 472-3010, and (J) the Museum of Radio & Tech-

nology Bookstore (Charleston, WV). Or, it's available from Ludwell Sibley, 44 E. Main St., Flemington, NJ 08822 for \$19.95 postpaid in the U. S. and Canada, \$24.95 by air overseas. Clubs get a discount on multiple copies. (7/8/97)

NOTICE: DVHRC doesn't meet in July, but John Dilks advises that he will have a large group of oldie radio books for sale at the NJARC meeting on July 11 (at Grace Lutheran Church, Business Rte. 33 (Main St.), Freehold, NJ, 7:30 PM). For details, John's on (609) 927-3873 eves. (7-97)

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

## AN OPEN LETTER TO BILL FIZETTE, AWA PRESIDENT

Dear Bill -

As a member of AWA for 21 years and of ARCA up to its end, I'm requesting an agenda item for this year's AWA member business meeting in November: a report on progress of the ARCA-AWA merger. Specifically, there is need for a status report on the fulfillment of AWA's commitments to ARCA. The November meeting will be close to three years after the merger, yet there has been essentially nothing reported in the OTB as to progress.

I'm publishing this an open letter because about half of DVHRC members are members of AWA, and since Oscillator readership includes four former directors of ARCA and three ex-officers. All these individuals naturally have an interest in AWA's actions.

To focus a bit, AWA apparently agreed to do several things:

- "Continue a number of [ARCA] award programs" not specified in detail, but ARCA's program seems to have comprised the Moore Editorial Award, Houck Award, and equipment-contest awards. A report on this continuation, and on the disposition of the ARCA Houck Award trust fund, would be appropriate.
  - Support the Museum of Radio & Technology by advertising in AWA publications.
- "Retain" the name "ARCA" [and] "Antique Radio Club of America" and "add its history to the history of AWA." [Natural places to do this would be the *OTB* masthead, the AWA Museum visitor brochure, and the AWA Museum Web site.]
- "Adopt and expand" the ARCA chapter system, plus having a "director of the chapters," an "expanded meeting schedule," and an "Advisory Committee" of chapter presidents. [An issue to report on would be the status of liability insurance for chapters if someone attending a Carolinas Chapter swapmeet is injured and litigates, is AWA Museum property at risk?]
- Merge the OTB and ARCA Gazette. [A natural reporting item would be the disposition of Gazette back issues if the two pubs were truly "merged," Gazette back issues would presumably be offered for sale along with back OTBs.]

I also request that the *OTB* announce the date, etc., of this meeting. As far as I can see, the 1995 and 1996 *member business* meetings were never announced, despite the Bylaws requirement to do so; *OTB* said only "Board of Directors Meeting," which is an unrelated meeting for a different audience. Please arrange for the *OTB* to give correct identification, date, time, and precise location ("Rochester" is a little misleading, given that the meeting's not in Rochester). This would avoid any doubt as to the validity of this year's election of AWA Board members in the *member business* meeting.

I look forward to a report on progress on the ARCA merger; such openness would dispel any possible impression of inaction (or worse) in this area.

Ludwell Sibley

## PHILLY NOSTALGIA

I enjoy reading . . . the Oscillator. When the June issue arrived, I began browsing through it and when I reached the article about Tom Appleby playing a minor role in a silent movie shot "on Lubin's lot," I smiled. (Lubin was a pioneer in the film industry, for those who may not know about this man, and he was a resident of Philadelphia). The reason for my smile was that my mother, who would be 97 if she were alive today, and one of Lubin's daughters were playmates in the 1905-1910 period in the 21st and Diamond St. section of north Philadelphia, where my mother's family and the Lubins lived.

Well, then I turned to the last page of the newsletter and my smile "turned" to apoplexy and an acute attack of *H. Pylori* when I saw the reprint of the "Tube Salesman" article from a 40-year-old, at least, back issue of *Sylvania News*. The article was submitted to *Sylvania News* by a man named Stanley Clymer, 6145 Lansdowne Ave., Philadelphia, who owned a retail and radio-TV repair shop at that location. My mother may roll over in her grave, but she and Stan were "an item" for about 20 years, from 1943 to 1963. Let me add that both were single all those years. I had not thought of Stan for many years, thus you can understand how startled I was when I saw his name . . . Incidentally, that Stan Clymer was the great-great grandson of George Clymer, a signer of the Declaration of Independence, and son of the owner of the Clymer Iron Works, which I think was in Berks County, PA. Jim Tate

## CHESTNUTS ROASTING ON THE INTERNET

or

Why would Galileo bother to drop two weights from the tower at Pisa, when everyone knows that the heavier one falls faster?

Alan Douglas

"Everyone" knows that if you wind an RF coil of litz wire, if just one strand breaks, the "Q" [quality factor] goes to pot. This old chestnut just won't go away, as evidenced by present-day techno-chatter on the Web.

John Morecroft tried. From the second edition (1928) of his <u>Principles of Radio Communication</u>, p. 172: "Analysis shows no logical reason for such an effect." He proceeds to give his experimental results which indeed show that the effect is negligible. Again, in 1933 the RCA License Laboratory made a study, using three- and seven-strand litz, and got the same results. Here is the report as condensed for *Electronics* magazine in Dec. 1933: One broken strand out of seven drops the "Q" by two percent. Wow!

#### Effect of broken strands

When using fine wire, e.g., No. 41, it is comforting to know that a broken strand is not of great importance, particularly when there are seven or more strands. When a break occurs, it is most likely to be found at the end of the lead where a mechanical operation prepares the wire for tinning. The following table shows the percentage loss of Q due to broken strands:

Number of broken strands	I.F. L Wire	Percentage loss			
		450 kc. 2 mh. 7/41 3 5	450 kc. 2 mh. 3/40 11 30	260 kc. 4 mh. 7/41 2 5	260 kc. 4 mh. 3/40 19 49
3		7			
5 6		18 33		41	

It is evident that the effect of broken strands is far less than proportional to the number of broken strands. One broken strand is of no practical importance. The above data apply to broken strands at the high end of a coil. Broken strands at the low end of a coil are found to have practically the same effect.

As a conclusion, it is fair to state that 3/40 is favorable when very *small* i-f coils are desired; 7/41 is desirable when i-f coils of medium size are in order; 10/41 is worthwhile only when *large* coils can be tolerated, at i.f.

At r.f., 7/41 and 10/41 are worthy at the low frequency end of the broadcast spectrum, but at 1,500 kc. no Litz wire tested in this study is to a worthwhile degree advantageous over solid wire.

The effect of a broken strand is unimportant when using 7/41 or 10/41, and not serious when using 3/40. A broken strand is not the equivalent of a removal of that strand. Despite the break, the strand still assists the process of conduction through the coil.

Considering both i.f. and r.f., 10/41, 7/41 and 3/40 appear to be three suitable Litz wires for general use in present-day receivers. The inclusion of 10/41, if not definitely logical at i.f. is desirable as regards r.f.

It is not important to make an extensive study of Litz wire at 175 kc. Only at high intermediate frequency—such as 450 kc. and at r.f. is Litz wire worthwhile.

Anybody with a Q-meter and some time can do the same. I did it and guess what? I got the same results!

## LISTENERS' COMMENTS

## AMATEUR RADIO

I have been listening to hams on AM and SSB with all the jargon. I wonder how many of them could build their own radio transmitters. As a matter of fact, how many know what the Wouff Hong or the Rettysnitch are, as pictured in the 1927 issue of the ARRL <u>Handbook</u> that originally sold for \$2 and now is \$38. Alton A. DuBois, Jr.

#### RIDER'S ON CD-ROM

David Kraeuter, editor-emeritus for the Pittsburgh club, points out that all 23 Rider's manuals are available in CD-ROM format, six discs in all. He's curious as to how the smaller diagrams came out: "I have original Rider's here on which I can't read some of the voltage measurements even with a magnifying glass. I wonder how they come out on a computer screen!"

For details, information is available from Radio Era Archives, 2043 Empire Central, Dallas, TX 75235, 214-358-5195 or 888-EC-IMAGE, http://www.electrosys.com/riders.htm. Price for all 23 volumes is \$450 - a bit more than a complete original set of Rider's binders, except that you can actually get the CDs! This, in addition to saving about eight feet of shelf space. Reportedly, a modern database-oriented indexing scheme is included for instant location of a given diagram. The producer claims to have found numerous diagrams that never made it into Rider's paper indexes. However, there's an opportunity lost here: Rider got back into the radio-diagram business via Vols. 24-27 of his television binders, some years after radio Vol. 23. It would have been clever to include these later diagrams on the CD - the later TV volumes are rare, and are even bulkier than the radio ones.

This is reminiscent of an experience that occurred when CD-ROMs were first becoming common. I needed to analyze some fairly arcane aspects of a particular digital telephone switch. In doing so, it turned out that the manufacturer's "practices" covering the switch in this area were incomplete, ambiguous, and generally unhelpful. On mentioning this to a co-worker, I was told proudly that the practices were being made available on CD, with the implication that this should help the problem. A few weeks later the CD-ROM drive was working and I hopefully "brought up" the practices. Sure enough, there was the information on the screen - still incomplete, ambiguous, and generally unhelpful. The CD will faithfully reproduce what it's given!

FIRST CLASS MAIL



