



The Oscillator



"ALL THE ELECTRONS THAT ARE FIT TO FLOW . . ."

The Official Newsletter of the DVHRC

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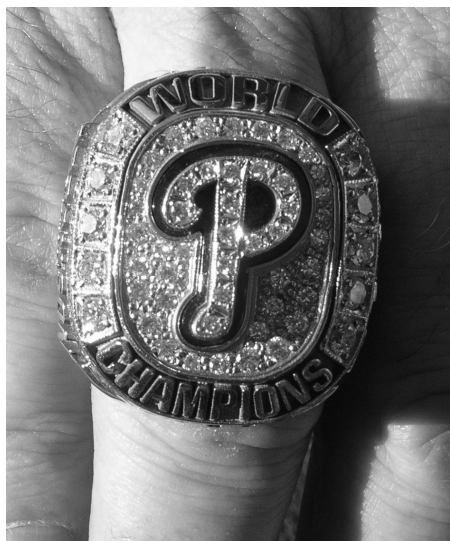
JULY MEETING NOTES

As is customary, the July DVHRC meeting was the outdoor tailgate swap in the parking lot of the Telford Community Center. As such, there was no business meeting or technical talk, so the report will be short and sweet.

The weather cooperated, Lew and Allie Newhard supplied the snacks and drinks, and Pete Grave did his usual bang-up job at auctioneering.

There was quite a bit of items brought in and nearly all of it found a new home.

One non-radio highlight of the evening was Dave Abramson showing off his Phillies World Championship ring.

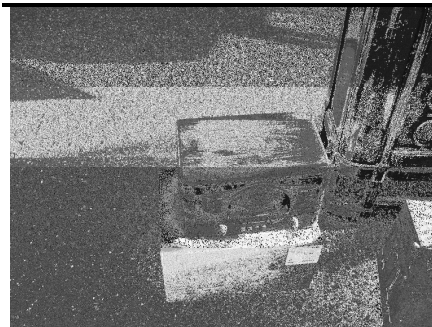
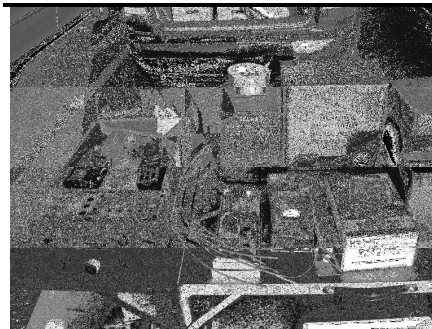
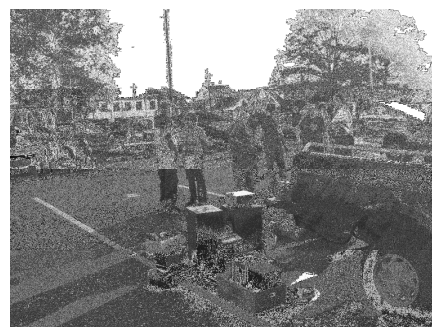
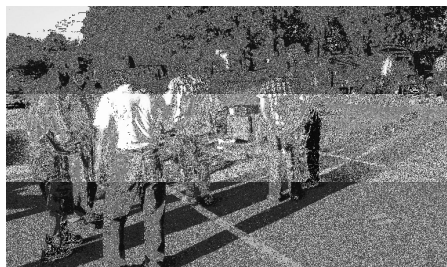


For those of you that don't know, Dave is the Chief Engineer for the

Phillies organization and was given the same ring the player's received.

It was impressive, and large - about the diameter of a ping-pong ball. Certainly something Dave will treasure for the rest of his life.

Following are some pictures of the swapmeet.



The Oscillator

Delaware Valley Historic Radio Club

**PO Box 5053
New Britain, PA 18901
www.dvhrc.info**

The Oscillator is the monthly newsletter of the Delaware Valley Historic Radio Club. We welcome information relating to radio and television history and collecting. Submissions should be emailed to saegers@ptd.net by the 25th of the prior month.

Personal views, opinions and technical advice do not necessarily reflect those of the members, officers or Board of Directors of the DVHRC, not is the DVHRC responsible for any buying or selling transactions.

Dues are \$20 per year and can be paid at a meeting or mailed to the above address.

DVHRC Board of Directors

President: Stan Saeger
610-967-5340
saegers@ptd.net
Vice-President: Dave Abramson
610-827-9757
dabramson@phillies.com
Secy/Treasurer: Dave Snellman
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snellman@bucks.edu
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dw.dean@verizon.net
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A FEW WORDS WITH MEMBER BOB SEIWELL

Q: How long have you been a member of the club?

A: Since about 2001.

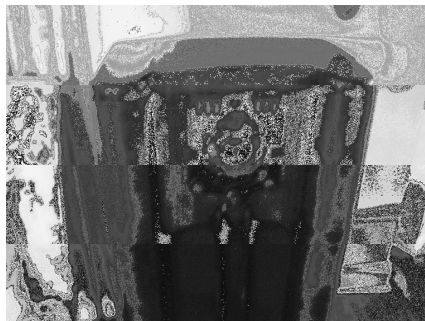
Q: Where did you grow up and where do you live now?

A: I grew up on Long Island and now live in Coopersburg, PA.



Q: Where do you work?

A: I work for Telesat, a communications satellite company, as an Electronics Engineer. Telesat is a Canadian company, but I work at their New Jersey site. We sell satellite resources to the military, broadcasters, oil companies - or anyone else needing satellite services. Before that, I did terrestrial microwave radio repair for AT&T. I retired from AT&T after 30 years.



Q: What got you started in the hobby?

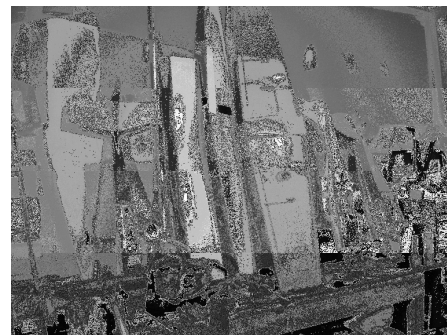
A: I had an uncle who passed away, and one of the items I inherited was a radio - a 1948 Silvertone tabletop, as I recall. My Dad had a 1939 RCA that I remember. I also have an AK breadboard that given to me by an uncle. These radios got me interested and I started to attend a few meets in New Jersey. I began to specialize in Philcos. I have about 150 Philcos in my collection.

Q: What radio are you most proud of?

A: Probably a Philco Model 70 cathedral. I used some of the skills I learned in one of my other hobbies, restoring classic Corvettes, to do the lacquer and finish work. *(Note: I've seen Bob's workmanship, and its first-rate).*

Q: Besides radios and Corvettes, what else occupies your time?

A: I build and fly radio-controlled airplanes. I think its good to have more than one hobby - if you get bored with one, you can switch to another until your interest returns.



PENNSYLVANIA RADIO HISTORY:

THE JOHNSONBURG RADIO CORPORATION

Ludwell Sibley

The early history of tube manufacturing is full of small companies which vanished or (if lucky) merged with others. There was a "first wave" of firms which disappeared under heavy competition in the mid-'20s. Examples are Allan, Blackstone, or Cleartron. Then there was a "second wave," better organized than the earlier ones, that might have prospered but for the Depression. Western Pennsylvania had one of the lesser known of these: the Johnsonburg Radio Corporation. (For reference, Johnsonburg is located in Elk County near St. Mary's, with 3300 residents today.)

The company appeared in 1929, originally using the brand name "True Tone." Gerry Tyne's *Saga of the Vacuum Tube* says about it only that it made tubes under the "JRC" brand, and Bro. Patrick Dowd's list of 500+ observed brands of 201As includes "JRC." But Johnsonburg isn't listed in Stokes' *70 Years of Radio Tubes and Valves*, and I had not seen one of their products until recently.

The "little guys" like Arcturus or Champion often introduced unusual tubes in hope of establishing a market niche that Mighty RCA didn't fill. A Johnsonburg product announcement in *Electronics* for March 1932 shows a new full-wave mercury rectifier in an S-14 bulb. Basically a five-volt version of the Type 82 rectifier, it was intended to replace the popular 80. Arthur V. Baldwin, chief engineer, is quoted as giving its ratings: it drew only one ampere at five volts, but delivered up to 150 mA DC.

Mr. Baldwin had been a tube engineer for Canadian Westinghouse. He was hired in July 1929 while Johnsonburg was being formed. After the company disappeared, he went to Hygrade Sylvania in Emporium and had a long career which included technical editorship, in the late '40s, of the *Sylvania News*. Interviewed by phone recently, he reported that the rectifier had been beset with problems; like all mercury devices, it had a tendency to "arc back" and that problem hadn't been solved.

Johnsonburg later made the 2B6, a dual-unit direct-coupled audio triode said to be good for four watts output. (Try finding that one in an RCA tube manual!) An isolated full-page ad in *Electronics* (Sept. 1933) introduced it. Mr. Baldwin reports that this type was actually originated by an outside tube man named Stromeyer. That was doubtless Charles F. Stromeyer, former research engineer of the Cable Radio Tube Corporation of Brooklyn. Cable was famous for its "Speed Triple Twin" dual-unit direct-coupled triodes (291, 293, 295) which were probably the direct predecessors of the 2B6. The 2B6 wasn't a big seller, but did find its way into the RK Radio Labs RK-60G/60L radios as diagrammed in Rider's Volume 5. The Acratest 108 PA amp used two 2B6s in push-pull.

An internal RCA Manufacturing Co. listing of tubes not made or sold by RCA, dated July 1935, shows Johnsonburg as producing the 2B6, 6B6, 12A5, and 12Z5. (Both the RCA list and Stokes' book show Arcturus as also offering the 2B6, probably as a distributor for Johnsonburg-made tubes.) The company is also listed as making the "Spartan" line of tubes: the 182B, 183, 482B, and 485. The fact that the company was on RCA's list (with 13 others like Arcturus and Triad) suggests that Johnsonburg was not as obscure as the really small makers.

Additionally, Johnsonburg is given as the sole maker of two full-wave mercury rectifiers, the 985 and 986. The 986 was apparently the one introduced in *Electronics*. The 985 was a mercury version of the 84/824, intended for use in automobile receivers. I've been unable to find any set that used them. (RCA dismissed them as "unimportant!")

When the company was founded, the town of Johnsonburg had a paper mill which supplied the stock for printing of the *Saturday Evening Post*. The mill's head, E. L. Myers, established the tube plant, in part to provide a labor outlet for the women of the town. (Sylvania, in Emporium, is said to have been founded there for the same reason.) Sadly, the only other ad that I've been able to find mentioning the company was a 1935 receiver's offer to liquidate the manufacturing equipment.

Mr. Baldwin has provided insight into other company personnel. The factory manager was Charles E. Foster, who had come from, and eventually returned to, Sylvania. He brought his brother Harry, with experience in the mounting department, and an individual named Mills as machine-shop foreman. The chief engineer just before the company closed was another Canadian Westinghouse veteran, Ernest Lyle, who wound up (1939) as chief engineer for receiving tubes at National Union. Mr. Baldwin's assistant was William G. Carson, a fellow Canadian, who later found a non-electronics job in New Jersey.

Johnsonburg was licensed by RCA to make only receiving types. Its business was both regular-market and private-brand tubes. In particular, Mr. Baldwin indicates that Crosley used some Johnsonburg products in its sets. Crosley, of course, consistently bought tubes from the smaller makers;

devices branded "Crosley - Ken-Rad" and "Crosley - Arcturus" are well known. Johnsonburg products also went into Howard receivers and Sears radios, especially battery sets. Among those tubes was a ballast tube of the iron-wire-in-hydrogen type to regulate the filament current through a group of 60-mA tubes. (Indeed, most Sears Silvertone battery sets of the period use tapped-filament ballasts with numbers like 30, 31, 52, 1A2, and 6E1.) The company apparently also made a few "crater-glow" tubes for disc-scan television receivers. One of its prototype products was the KGG - "Knowles grid-glow" - tube, a cold-cathode trigger device similar to the later 6A4G and named for an engineer at Westinghouse.

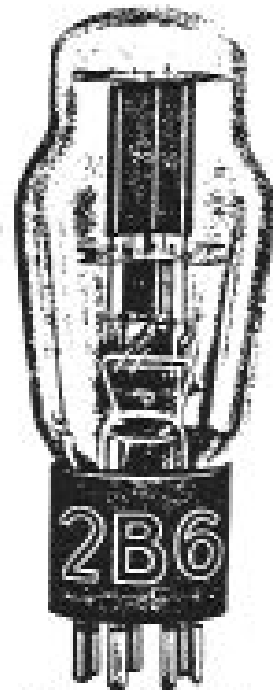
The smaller tubemakers often used catchy packaging schemes to distinguish their wares, like Champion's peek-a-boo cut-away box. The cartons for Johnsonburg tubes were heat-sealed in red cellophane.

One of the company's promotional stunts was to drop tubes from an airplane to show how rugged they were. Mr. Baldwin believes that Johnsonburg originated the idea of using a mica disc at the bottom, as well as the top, of the tube mount. Added ruggedness came from using support posts of 50-mil wire instead of 40-mil. Of course, RCA's later "ST" bulb with its top-support feature provided ruggedness a different way.

Arthur Baldwin deserves thanks for his insight into the Johnsonburg company, without which 90% of this article would have been impossible.

1934 AUDIO-QUALITY

4 WATTS POWER OUTPUT •
HIGH SENSITIVITY •
Low Set Manufacturing Cost •



Super Triode

Technical Data Mailed Upon Request
Write



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