

The *Call* Letter

April, 2009
Vol. 35 — No.4

*"Coming again
MAY 9th, 2009
to Historic AURORA"*



BIG *Antique* **RADIO SHOW & SALE**

*Presented by the
Northwest Vintage Radio Society*

**SATURDAY, MAY 9th
9 AM 'til 3 PM**

American Legion Hall
21510 Main St.
**IN HISTORIC
AURORA, OR**

*You'll see and can purchase consoles,
table tops, Catalin, shortwave, wood,
Bakelite and project radios. Radio tubes
& hard to find parts will also be available.*



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*for more information, see our
website www.NWVRS.org*

Almost **35** years in print!

The Northwest Vintage Radio Society

Post Office Box 82379
Portland, Oregon 97282-0379

The Northwest Vintage Radio Society is a non-profit historical society incorporated in the State of Oregon. Since 1974 the Society has been dedicated to the preservation and enjoyment of "Vintage radio" and wireless equipment.

Membership in the Society is open to all who are actively interested in historic preservation. The dues are \$25.00 for domestic membership, due on January 1st of each year (prorated quarterly).

The *Call Letter* has been a monthly publication since 1974. It was originated with the founder, Bob Bilbie, and our first president, Harley Perkins. Through several editors and with the assistance of numerous society members, the *Call Letter* has continued to be a publication that informs members of the society's business and that supports the hobby of collecting, preserving, and restoring vintage radios.

Society meetings are held the second Saturday of each month at the Abernethy Grange Hall at 15745 S. Harley Ave. in Oregon City, Oregon. They convene at or about 10 AM for the purpose of displaying radios, conducting Society business, and exchanging information. Guests are welcome at all Society meetings and functions (except board meetings).

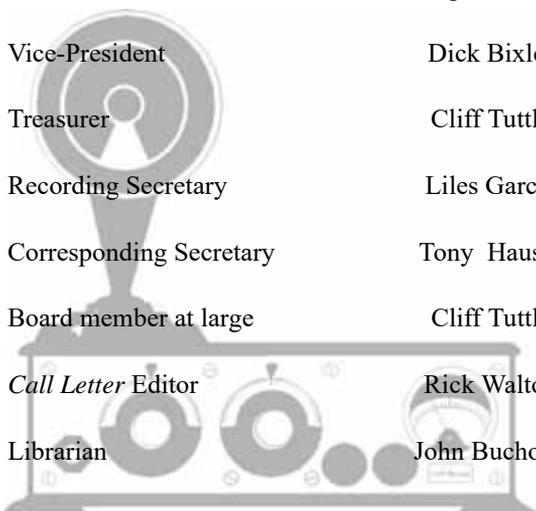
Other Society functions include guest speakers, auctions, radio shows, and radio sales which are advertised in the *Call Letter* and are held in and around Portland.

With each issue of the *Call Letter*, we remember Jim Mason, a charter member of the society who remained active until his death in 1998. A generous bequest from Jim's estate ensures the vitality of the Northwest Vintage Radio Society, and continued publication of the *Call Letter*.



Society Officers for 2009:

President	George Kirkwood	(503) 648-4809 radiogeo@hevanet.com
Vice-President	Dick Bixler	(503) 690-2557 rf2af@verizon.net
Treasurer	Cliff Tuttle	(503) 666-7005 kiptuttle@comcast.net
Recording Secretary	Liles Garcia	(503) 649-9288 landn2@verizon.net
Corresponding Secretary	Tony Hauser	(503) 397-0074 abhauser@aol.com
Board member at large	Cliff Tuttle	(503) 666-7005 kiptuttle@comcast.net
<i>Call Letter</i> Editor	Rick Walton	(503) 656-4104 rwalton@easystreet.net
Librarian	John Bucholtz	(360) 693-7135 Bucholtz3049@comcast.net



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On the cover: “The Spring Swap/Sale event is only a month away, as you are reminded by our cover. This is the poster, created and updated by Sonny Clutter, that several volunteers are putting up all around the region.

The next meeting is on April 11, 2009.

April Feature: Communications/Military Radios

Did we get your photo for the roster? We’ll be taking photos at this month’s meeting.

Visit our web site at <http://nwvrs.org>.

Next Call Letter Deadline: April 2, 2009.

The *Call Letter* is the official publication of the Northwest Vintage Radio Society. Circulation is limited to the membership and guests of the Society. The Society is not responsible for the material contributed for publication, nor the quality, timeliness, or accuracy of the items or services offered for sale in the SWAP SHOP. By common agreement of the board of directors, the buyer assumes all responsibility for the satisfaction of any transaction.

From the Editor

by Call Letter Editor, Rick Walton

Thanks to all those who have contributed to this April edition of *The Call Letter*, which is full of useful (mostly) information for society members.

Next month we have our spring Show/Sale instead of the regular meeting. Vice-president Dick Bixler reminds us that we need to act soon to secure a table, and provides a run down of society members' efforts to publicize the sale.

Dave Wise has contributed a "Play It Again, Sam!" description of his on-going work with a Philco 18B. "Play it Again, Sam!" is an occasional feature that appears when someone, like Dave, writes up an account of their restoration of a radio.

Mike Parker has chosen another of his "In the Shack" articles, this time one that describes his efforts to put 12-volt tubes in a battery set. As always, Mike makes it an interesting adventure.

And be sure to tune in to WRNO, back "on the air" after missing a month due to some "transmission difficulties."

Sinatra, Bennett, Norah.

Portland's only station for classic American standards
of yesterday and today. Sunny 1550 KKAD.

Listen online at: www.sunny1550kkad.com



NWVRS Meeting Minutes

Liles Garcia, NWVRS Secretary

President George Kirkwood called the March 14, 2009 meeting of the NorthWest Vintage Radio Society to order at 9:50 AM. Liles Garcia read the minutes of the February meeting; the minutes were approved as published in the March Call Letter. Cliff Tuttle gave the Treasurer's report; and the report was approved as provided by Cliff. Former member Doug Davee and his wife, Leslie, attended today as guests. Doug rejoined our Society. Darren Couch also attended today as a guest. Members gave all of our guests a round of applause. There were 58 people at our meeting today.

New Business

Swap Meet--Brian Toon reported that half of the tables for our Spring Swap Meet are sold. Dick Bixler told the group that the Swap Meet posters are being distributed throughout the state.

Library--John Bucholtz reported that our library is doing well. Bob Campbell donated the book "Essentials Of Radio" by Slurzburg & Osterheld to our Society's library. Members gave Bob a round of applause. Many thanks to Bob for his donation!

WRNO (Wednesday Radio Night Out)--George mentioned that the evenings at Blake Dietze's home are interesting and very informative. He suggested that we should also have a WRNO somewhere in Portland.

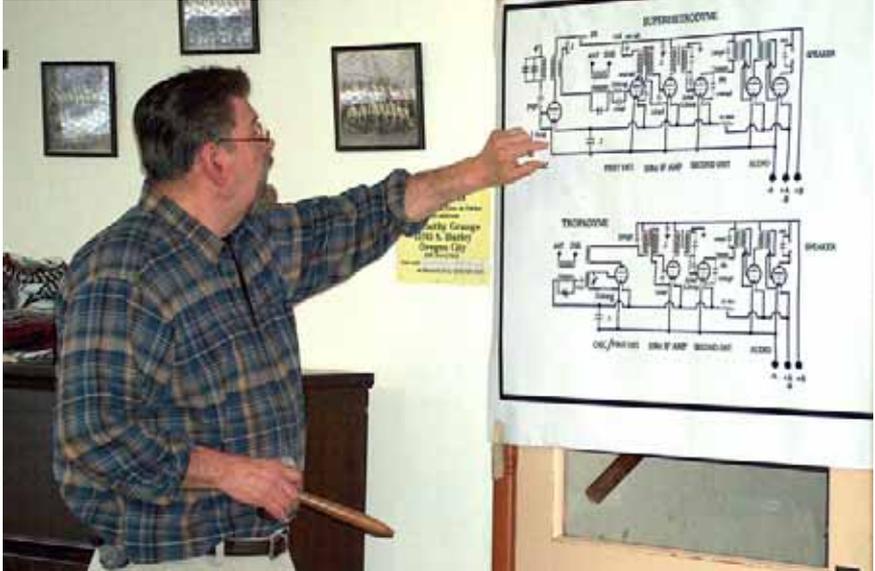
Community Outreach--Jay Johnston discussed some ideas for helping local schools and colleges resulting in promoting our Society. He suggested that we form a committee to work on these ideas. Members discussed Jay's suggestions and other related topics.

Leads and Needs

Dick Bixler told the group about some radios that are for sale in the Eagle Creek area. Contact Ron at (971)221-9192. Joe Corsi needs some program cards for a Hickok "Card-O-Matic" tube tester. Dave Wise needs a cabinet for a Philco 20. He can also use other Philco cabinets from 1929 to 1932. Jim Harper needs Victrola Model 14 parts. See Gordon Phillips for Society nametags.

Tech Talk

George talked to the group about superheterodyne radios. He used a superhet radio that he built for demonstration. His talk was very interesting and there was discussion and several questions from the group.



Program Topic

The program topic was “Exposed Tube Battery Sets and Speakers.” Members showed and discussed nine radios and five speakers that they brought. The program topic for the April meeting is “Communication Receivers and Military Receivers.”

The meeting was adjourned.

NWVRS Show/Sale Notice

by Dick Bixler

If you haven’t reserved your table yet for the upcoming Vintage Radio Show/Sale on May 9 at the Aurora American Legion Hall, better hurry and call Brian Toon at 503-266-5527. Lots of promotion for this event is under way and we expect large crowds. Secretary Liles Garcia and VP Dick Bixler spent one day last week in Aurora telling our story to the various Antique dealers and passing out our announcement posters for

window display in all the stores. The announcement kiosk in the center of town was also filled with the take-away card stock flyers.

Additionally, Garcia activated his e-mail list of associated northwest electronic clubs calling attention to the May sale. Bixler has distributed promotional cards to the Tourist info centers in Wilsonville and Woodburn and is working on Portland. But most importantly, various of members including (but not limited to) Corsi, Ewing, McCrow, Phillips and Zvarich as well as the Killebys have been hitting the PDX and suburban antique shops with flyers and our warmest invitations to attend. Both Norvacs stores and Ham Radio Outlet have been covered. So clean out your garage and storage and let's have a good presentation of quality vintage radios and spare parts.

NWVRS Calendar of Events

Most of the hamfest and ham swap meet information comes from: PNW Hamfair web page at www.n7cfo.com/amradio/hf/hf.htm

- April 11** NWVRS monthly meeting 10 am; tailgate swap 8:30.
- April 11** Yakima Hamfest. Selah Civic Center, 216 South 1st Street, Selah, WA. <http://w7aq.org/> Flyer in PDF.
- April 24-26** Idaho State Convention. Voice of Idaho ARC. Idaho's FIRST Section Convention! This is an ARRL Sanctioned event. <http://www.voiceofidaho.org/>
- May 9** NWVRS Spring Swap/Sale at Aurora American Legion Hall, Aurora, Oregon.
- May 9** Stanwood Camano Amateur Radio Club (SCARC) Hamfest, Stanwood Middle School, Stanwood, WA. Always the second Saturday in May. Contact Vic, N7KRE (360)387-7705). nwecop@tgi.net
- June 5-7** Sea-Pac Hamfest. Seaside Convention Center, Seaside, Oregon. This is an ARRL sanctioned event. ai9q@arrl.net www.seapac.org/
- June 13** NWVRS monthly meeting 10 am; tailgate swap 8:30.
- July 11** NWVRS monthly meeting 10 am; tailgate swap 8:30.

- July 18** Coos County Radio Club Hamfest and Swapmeet. North Bend Middle School, North Bend, OR. Contact Marilyn Mansker, ke7oam@yahoo.com or Dave Granicy k7nbo@charter.net. www.coosradioclub.net/.
- August 8** NWVRS monthly meeting 10 am; tailgate swap 8:30.
- August 8** Radio Club of Tacoma Hamfest. Spanaway, WA. <http://www.w7dk.org/> Hamfest@W7DK.org
- August 16** Antique Radio Swap Meet. Puget Sound Antique Radio Association. 9 AM to 1 PM. N. 175th & Linden, Avenue, North Seattle. <http://www.eskimo.com/~hhagen/psara/swap.html>
- September 12** NWVRS monthly meeting 10 am; tailgate swap 8:30.
- September 12** The 3rd Annual Clark County ARC Tail-Gate Swapmeet. Vancouver, WA. <http://www.w7aia.org/> Rob, K7JAO at k7jao@arrl.net
- October 10** NWVRS Fall Swap/Sale at Aurora American Legion Hall, Aurora, Oregon.
- November 14** NWVRS monthly meeting 10 am; tailgate swap 8:30. Nomination of officers for 2010.
- December 12** NWVRS monthly meeting and annual Holiday Party 10 am. Election of officers for 2010.



"Watch that character try to offer me \$2 for that old radio."

From *Popular Electronics*, Oct. 1964.

Photo Display

Photos by Rick Walton

Exposed Tube Battery Sets and Speakers, displayed at the January meeting.



Rola and Radiola UZ1325
Joe Beseda



Rola horn & Homebrew receiver
George Kirkwood



Federal 135
Dick Howard



Gilfillan
George Kirkwood



German 1-tube Regen
George Kirkwood



Kitcraft - Unassembled and complete
Dick Howard



Navy - Wireless Apparatus
Dick Howard



1925 Langhorne
Doug Davee/Sonny Clutter



Radio Shop
Sonny Clutter



British Horn
Sonny Clutter



Ware Type TU
Doug Davee



A-K 10C Breadboard
Cliff Tuttle



A-K Model H Speaker
Kurt Torgerson

Voilà

...new and recent finds by NVRS members

Compiled by Jay Johnston

Dave Wise — Philco 111 lowboy, from the Ed Charman estate. I bought it for the cabinet, which was also used for the model 96, my sentimental-value chassis I was looking for a cabinet for last meeting. But being Philco's first superhet, the 111 chassis has technical interest, so I think they will time-share the cabinet.

Rick Walton — Bendix 55P3 5-tube table set; 3 miniature Japanese sets, one pink, one white, one black; several magazines including four 1940's *Radio News*, Nov. 1929 *Citizens Call Book*, 1922 *Radio Broadcast*, 1927 *Radio Listeners' Red Book*.

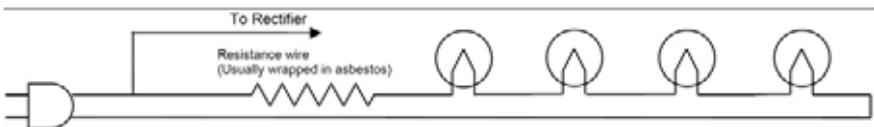
WRNO: March, 2009

Contributed by Blake Dietze

Last month we finished up a couple of radio-phonograph projects and I suggested utilizing a company called: West-Tech Services; which brought several requests for the address and phone number. I will list them at the end of this month's column for any others who may be interested. The crystal cartridge that was rebuilt for Jerry Hertel's Zenith radio-phono was returned within ten days of being sent. Performance was excellent, exceeding expectations. West-Tech also offers idler wheel rebuilding and total record changer restoration among many other phonograph related services.

Several radio projects were wrapped up last month including Ed Tompkins 11-tube Philco chassis, Tom Hoskins Philco model 84 (including performance upgrades), and a couple of Emerson AC/DC radios with resistance line cords, which is the focus of this month's column.

In the days before the appearance of 150mA octal and miniature tubes with higher operating voltages and tapped filaments (50L6, 50C5, 35Z5, 35W4), radio manufacturers often had to resort to ballast tubes, ballast resistors, and resistance line cords. The intent was to drop the entire line voltage (commonly 117VAC) across the tube filaments to light them while rectifying the line voltage to provide the B+ for the radio; all for the explicit purpose of eliminating the power transformer (a costly component). These radios were often referred to as "AC/DC" radios and later "All American 5" sets. Ballast tubes are becoming difficult to find, and resistance line cords, aptly called "curtain burners" are no longer available, or safe to use. In the diagram below, you can see the resistance line cord diagram. In the picture of a worn out example, note that the resistance wire was wrapped in asbestos.

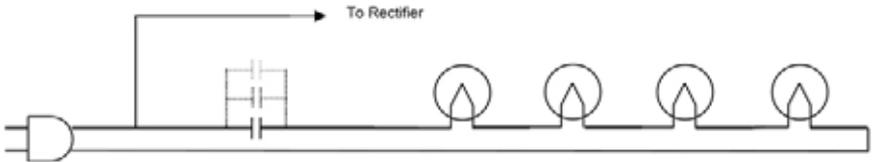


Circuit Diagram showing a 4-tube set with resistance ballast



Photo of a badly worn resistance line cord

The discussion on how to restore a radio with this type of circuit spanned two Wednesdays, and lead to an example project being used for illustration. The radio chosen for the project was an Emerson AX-212, which represented a near worst case scenario. The AX-212 has 5 tubes plus a resistance line cord in a very compact chassis and a tightly fitted cabinet where heat was already an issue. The total filament voltages of the five tubes in this radio add to 68 Volts (25, 25, 6, 6, 6), leaving 49 volts that needed to be dropped or dissipated in order to account for the entire line voltage of 117 volts. There are several ways to deal with this 49 volts, including pure resistance, transformers, silicon diodes, AC blocking capacitors, or combinations of these methods. Without diving into the mathematics which I'll save for another article, the restorer would be faced with several constraints, including: heat, size, availability of parts, and cost. My choice has typically been to use AC blocking capacitors, and while they are expensive and can take up a good amount of space under the chassis; they operate without heat and also provide in-rush current protection. When using pure resistance, most of the examples (including the AX-212) require the use of high-power resistors in the 25 watt – 50 watt range, but if you use AC blocking caps for the initial drop and a resistor for the pilot lamp, a 1 or 2 watt resistor will suffice. Below is the circuit diagram modified to use AC blocking capacitor (possibly two or three in parallel).



Circuit diagram showing a 4-tube set with capacitive ballast

In the WRNO example, we calculated the need for 7.2 uF. We were able to achieve this value by placing 3 -150VAC AC (non-polarized) caps in parallel. Never use electrolytic caps and always make sure you have a high enough operating voltage to cover the AC load (not DC). A photo of the completed Emerson with a standard cotton covered electric cord and AC capacitive ballast (encased in heat shrink, for additional protection) is shown below.



Photo of the completed modification

As promised; here are the specifics for West-Tech Services. See ya'all next month.



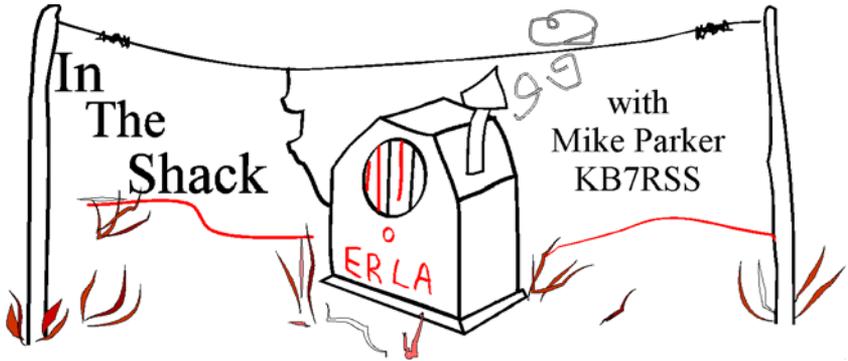
West-Tech Services
615 Fairground St.
Caldwell, Ohio 43724
TELE/FAX: 740-732-6056
westtechservices@yahoo.com

Tech Note?!?

Submitted by Dick Bixler

This technical explanation is courtesy of columnist Dave Barry and not of our resident stable of electronic boffins:

Electricity originates inside clouds, and there it forms into lightning which is attracted to earth by golfers. After entering the ground, the electricity hardens into coal which, when dug up by power companies and burned in big ovens called "generators," turns back into electricity. It is then transformed by TV sets into commercials for beer, which passes through the consumers and back into the ground, thus completing what is known in technical groups as a circuit.



Editor's note: This "In The Shack" article appeared initially in the April, 1997 Call Letter, and was reprinted in the November, 2006 issue. It appears now as Mike's Pick for April.



12 Volt Tubes in a 1920's Battery Set

April Fool! "Aw come on!" you say, "Never happened, nobody was making 12 volt triodes for broadcast use in the 1920's." Well, you are probably right. But, one time I got a crazy idea and decided to try it anyway. Maybe I was the April Fool, but the experiment was fun, albeit slightly expensive. An April fool and his money soon part company or something like that.

Always having a few odd 1920's Battery Set chassis laying around here IN THE SHACK, I thought that it would be interesting to try to run one of them on 12 volts. Why not? 12 volt batteries are very plentiful nowadays. Let's see what happens!

The subject radio is a venerable old 1926 or 27 AIRLINE one-dial with a slanted, slightly decorated metal front panel. It has a window tuning dial and 3 knobs arranged in a Y configuration. This chassis is usually seen in a highly unusual cabinet which, unfortunately, I do not possess. It is a 6-tube TRF using very unusual "Figure Eight" shaped RF coils that are wound with green silk wire and are spring mounted to a vertical plate mounted on the chassis, perhaps to offer some sort of shielding.

Further research revealed that this radio was made by Apex Electric Co. for Montgomery Ward, which is not unusual since all AIRLINE brand sets were made for M-W by other contractors.

The subject radio then, is actually an APEX 6, as shown on page 60 of "Radio Manufacturers of the 1920's," Vol. I, by Alan Douglas.

The advertisement highly touts the "Just One Dial" feature and their patented "Compensator" which was "Patented in 1924 and withheld from the market until its merit had been established beyond all question."(!) This features an extra tuning control, which is the upper right knob marked "Balance", which operates a shaft attached to the first RF stage tuning condenser and swings the entire unit in or out of proximity with the adjacent tuning condenser. All three tuners are gear driven from the central tuning knob. The set features impedance audio coupling using 3 audio transformers, hence the use of 6 tubes. Other than that the radio is just another "losser" TRF with a tuning gimmick, as aptly described in our own David Rutland's book, "Behind the Front Panel."

So, the biggest question now became, "Where do I find 12-volt triodes, obviously of a later vintage, that have characteristics similar to the good old 201-A 5-volt triode?" After an extensive search through my copy of an old SYLVANIA radio and television tube characteristics chart. I narrowed it down to some octal-based 12.6-volt cathode heater triodes. 12E5 became the choice triode amplifier tube and close other choices were the 12F5 and the 12G5. The 12F5 uses a grid cap, which I ruled out, and the 12G5 is rated at 9 milliamps plate current. The 12E5 was rated with many features similar to the 201-A such as 100 volts plate, negative 5 volts grid and 2.5 ma. plate current. An amplification factor of only 13.5 compared only slightly above the 201-A's factor of 8. Grid-to-plate capacitance was much less on the 12E5 with 2.5 mmf, compared to 8 mmf on the 201-A. I considered that an improvement.

Next, came the task of finding six 12E5's, a chore that actually ended up making me feel indeed, like an April Fool!

Searching the local scene, I naturally went to my old friend Bob Lee. of R-5 D-3 Surplus, in Portland on S.E 82nd near Woodstock. (*Ed. note: R-5 D-3 has long since moved. See Bob's ad in the Swap Shop.*)

Bob, a fellow NWVRS member always has a wide variety of tubes on hand. Bob will tell you if he has the tube in stock (he did not), or will let you look through every tube box in the store, if you are that much of a zealot (I was!). Finding none, and even more peculiar, no listing for this tube in some manuals other than Sylvania, I gained a whole new attitude about this project.

Bordering on despair, I placed a want ad in the magazine, ANTIQUE RADIO CLASSIFIED, P.O. Box 2, Carlisle, MA. 01741. This would give me worldwide coverage to round up this elusive 12E5 triode. Soon I started receiving replies from various people around the country. A fellow in Ohio had two of them in the original boxes. ANTIQUE ELECTRONIC SUPPLY, Tempe, Arizona 85283 supplied the other four. A fellow wrote and insisted that there was no such tube and that I must have meant that I wanted some 12ED5's and that he could supply all of those that I wanted!

I now had all six 12E5's, all were Tung-Sol brand and not the Sylvania's. I still do not know the purpose of this particular tube, I have never seen them in a radio. Since they were 5-pin octal base tubes, I had to make some adapters to fit the old 4-pin sockets. I found enough discarded 4-pin tube bases and 6 octal tube sockets. I then wired the octal sockets, stripped of their metal mounts, into the 4-pin bases and wired the cathode to one side of the filament, since I was using DC filaments. I filled the 4-pin bases with black silicone, holding the octal socket firmly in the base, and let them dry.

Setting the Airline up, I used a power supply here IN THE SHACK that I use to run 90 volts B+ for the plate voltage, with a tap for 45 volts or less, to run plate voltage for the detector tube. I then hooked up a heavy duty 12 volt auto battery to the filaments and tied A+ to B- in the usual manner for old battery sets. With my fingers crossed, it was time to “smoke test” the radio.

I flipped the switches and the filaments in the 12E5’s glowed brightly. I could hear a faint amount of audio and a weak station. I increased the rheostat, which acted rather quickly compared to 5 volts. This increased the volume to normal and even a loud sound level. The radio played fine in every way, but the rheostat felt a little warm after a while. Actually, the whole experiment was a success, in fact it was a little boring since I saw no burning, smoke or fireworks nor any other malady that I may have been expecting.

The only satisfaction that I had was that it worked and I thought how handy it would be to get some B batteries and play the thing in my car. You could definitely be the first on your block to run an old 1920’s TRF radio, hooked to your car battery and playing loudly, from your back seat!

Will somebody please drop me a line and tell me just what those blasted 12E5’s are really for? Thanks!

QSO you next time.....IN THE SHACK

Play It Again, Sam!

by Dave Wise

Philco 18B.

This is my fourth vintage radio, acquired from my first mentor when I was a teenager. I did a partial recap back then, and another about a year ago, replacing the now-dead NOS electrolytics I had laboriously reformed when I was a kid. This time I was going after a mechanical problem in the bandswitch that had been there the whole time but I didn’t recognize as a problem. I brought this radio to the last meeting, and people were playing with it. Sonny remarked, “This can’t be right,” as he clicked the bandswitch round and round. Philco was saving money. This is a dual-band set, MW and “police”, 1.5-4MHz. It comes in handy today to tune 1550. The usual band switch chooses between windings, but this one just shorts portions. It ruins the sensitivity and front-end selectivity by introducing shorted turns in the signal path, but it let Philco get away with a compact 5PST switch of novel design. The regular MW-SW dual-banders also use this switch, but they parallel windings rather than shorting them. I looked at it more closely, and discovered a nearly invisible edge where the stop arm had broken off. It would be impossible to restore this, but I was able to solder a piece of carefully-shaped baling wire to one switch contact, so that the hook on the end would catch the rotor and prevent it slipping past to the next position. It works perfectly.

Then I went hunting down a faint crackle the set has had the whole time. I traced it to the audio interstage transformer, but decided to wait until an exact replacement fell into my hands. This transformer has an astonishing frequency range. On my HP 339A Distortion Analyzer, driven from its 10V 600-ohm source, it goes from 30Hz to 10kHz +/- 1dB with less than 1% distortion, 0.05% at all frequencies above a couple hundred Hertz. My Heathkit IB-2 Impedance Bridge reads the winding inductance at 7 Henrys, with a Q of about 6 at 1kHz. Turns ratio is 1:1, single triode plate to PP grids. (Triode-connected 42's.) (Note: while doing this I discovered that the IB-2's internal signal source does not like large inductive loads, or maybe it was the stray capacitance, because I didn't disconnect the primary from B+. I couldn't get a reading until I switched to an external source and detector, namely the 339A.) There's also a small cap across the transformer primary. I couldn't get any readings until I removed it.

Or maybe I'll skip the primary and set up the secondary as a shunt-fed autotransformer.

While I was tracing this, another long-time problem reminded me it was there, an intermittent drop in volume followed by a pop and return to normal. Using a power supply to force the AVC line to a fixed voltage and my HP 3400A True-RMS Voltmeter to monitor signal levels, I worked my way through the set, a pleasant all-day listen while the problem came and went a couple of times. Eventually I traced it to the dual 110pf bakelite block condenser that filters the detector output. The input cap was opening up, causing the detector output to change from peak value to average value. I broke the cap lead wires where they go through the eyelets, unbolted the box, hit it for a few minutes with a heat gun with tinfoil beneath, and pushed the soft mass of "ukkumpucky" out onto the foil. Then I put in a couple of 100pf dipped silver-micas.

Apparently these bakelite paper caps like to open. Suspicious, I found two more, one in the bass-boost tone control and one in the power supply that tunes the filter choke for 120Hz rejection. The latter does not make much audible difference, but my Tek 545 oscilloscope monitoring filter output showed a drastic reduction.

After fixing these I went after one more old annoyance, a pop that occurs every time you switch the tone control to treble-cut. This is common to virtually all Philcos since the introduction of tone control in 1931, and is due to leakage in the treble cap. However, if you replace it, you still get one pop the first time you switch. I made a small circuit modification that eliminates even that, and without replacing the cap. This cap is on an audio plate, and the tone control grounds the other end. Simply bridge a 1M resistor across the switch. This charges the cap so closure doesn't cause a transient.

Swap Shop

FOR SALE: Thousands of tubes, hundreds of radio parts, panels, meters, surplus, etc. R5-D3 electronic surplus, Bob Lee, 9770 S.E. Stanley Ave., Milwaukie, OR 97222, (503) 513-0410

FOR SALE: RARE Grunow Selectrol # 1101, 11 tubes 1934. Dick Bosch 1-360-693-3482.

FOR SALE: *1 NOS 42 tests 2100/2000 \$10.00 and 1 50 tests 1900/1500 \$150 OBO. and 5 ARRL handbooks. will bring to the March meeting. Robert Campbell

FOR SALE: **I have 3 radios I am offering for sale. (1) Packard Bell 1939 Wood table radio that works great with tuning eye and bass and treble controls. (2) Setchell Carlson portable AC Radio that works great and (3) A Traveler bakelite that works, but needs filter caps. James Harper 503-432-0607

FOR SALE: **Two marking crystals for a Precision signal generator. They are 2mc & 4.5 mc. \$5.00 for both. Contact Tony Ranft: walterranft@hotmail.com

WANTED: **Jay Johnston is seeking a brass horn speaker in good condition. A Kilbourne & Clark speaker of any material is desired as well. 503-226-4181 or withat@msn.com.

Radio Service

These members have indicated they are willing to perform radio repairs:

Roger Brown – (503) 693-6089

Blake Dietze – (360) 944-7172, wb6jhj@ix.netcom.com

Todd Olmert – (503) 246-4141

Tony Ranft – (360) 944-8489 or walterranft@hotmail.com – General repairs.

Dave Wise – (503) 648-0897, david_wise@phoenix.com

If you are willing to repair radios, give your name, phone and/or e-mail, and any comments to the *Call Letter* editor.

The Northwest Vintage Radio Society is not responsible in any disputes arising from services provided by members listed here. By common agreement of the board of directors, the buyer assumes all responsibility for the satisfaction of any transaction.

Leads and Needs

Questions about restoration of vintage radio? Visit radiolaguy's web site often for this information plus lots of other interesting displays, photo's, virtual museum plus lots of other information on vintage radio and television. Oh, yes, there are items for sale as well and NVRS members get a substantial discount on most of these items. Thank You, Sonny the Radiola Guy
Visit my vintage radio web site: <http://www.radiolaguy.com>

Member Information

We plan to update the membership roster and publish it late in April. Just in case we don't have your most current member information, please take the time to send the information requested on this form by April 18.

This roster will include members' photos. If we don't take your photo at the April meeting, please include a head-and-shoulders photo of yourself. A digital photo attached to an e-mail is just fine.

Name*:

Mailing Address*:

City, State, ZIP*:

Ham Call Sign:

E-mail:

Check here if you'd like to be added to the Yahoo e-mail list.

Phone:

Collecting Interest (e.g. Battery sets, consoles, clock radios, etc.):

*Information we must have to be able to send you your Call Letter. The rest is optional, but we hope you'll share it with other club members.

Mail this sheet (or something like it) to Rick Walton at the society's mailing address:

The Northwest Vintage Radio Society

Post Office Box 82379

Portland, Oregon 97282-0379

or e-mail the information to rwalton@easystreet.net.