

Call Letter

Vol 21

September '95

Number 9



Don't miss the
September Meeting

More than two decades in Print

September 1995

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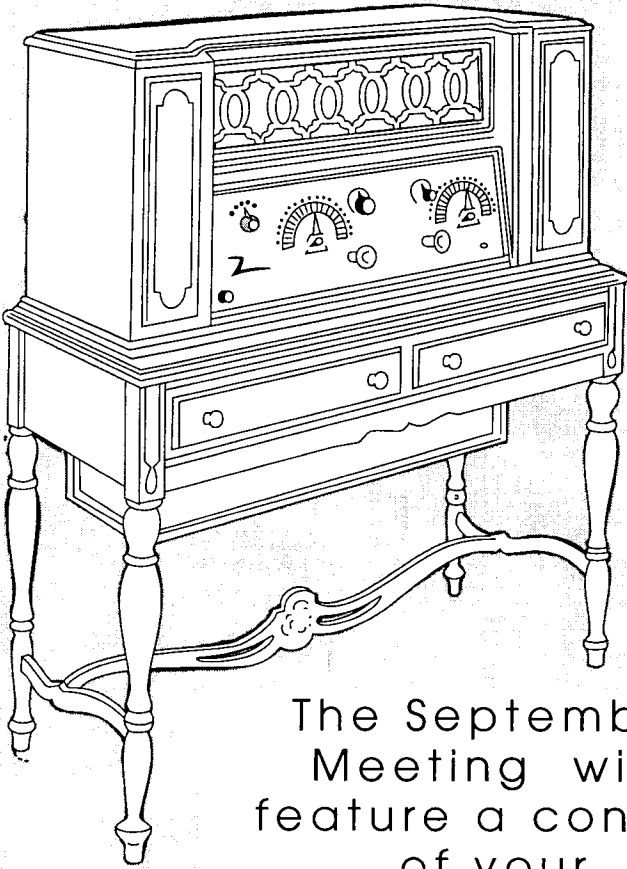
The CALL LETTER

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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 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.



The September
Meeting will
feature a contest
of your
“Best Summer Finds”
or
your
Summer Restoration



ATMOSPHERICA

By J

The Opportunist

*Gnats are in the varnish—
There's sand mark in the grain—
And you can see the shading
Where he goofed the color stain.
And he'll put it on the block
When the Swap meet comes again.*

*The crystal in the holder
Is a broken hunk of glass;
But what the heck's it matter,
The green coil shows the class!
And he'll sell it for a bundle
When the Swap meet comes to pass.*

*The cone of the Peerless speaker
Is faulty, here and there
But Scotch tape on the ribs
Will make it medium rare!
Should bring a pretty penny
At a swap meet anywhere.*

*He says it's not important
If the chassis is rusted black
As long as the model number
Is emblazoned on the back!
Someone will surely grab 'er
At the Swap meet, that's a fact.*

*Now when you read these verses o'er
And try to figure who
Could be the culprit anyway
With such a callous view —
I'll bet high, at our Swap meet,
It won't be me ! Or you ?*

Know Your Tube Tester

Sylvania service manual, 1943

Generally speaking tube testers may be divided into three general types: Those which apply direct current voltages of approximately correct values to the various elements under test; Those which apply a-c voltages to the various elements with correct phasing of grid and plate; and those which connect all elements together except the cathode and apply a-c voltage between the cathode and the other elements, commonly referred to as emission testers. The cost of these instruments decreased in the order named.

The d-c style of instrument requires a rectifier and filter together with a voltage divider to apply proper voltages to the various elements of the tube being tested. This test more closely approximates the service conditions and hence is likely to be more accurate than others. This type of tester is usually called a "mutual conductance" type. The indication is obtained by changing the grid bias and reading the change in the plate current, or by introducing an a-c signal on the grid of the tube and reading the signal component of the plate current. The definition of mutual conductance is the change in the plate current produced by a change in grid voltage, so that either of the above systems meets the requirements. Obviously this type of tester is more difficult to keep up to date, since new tubes may have added elements and will require added controls and sockets.

The next type of tester mentioned is that which employs a-c voltage on the various elements of the tube, but with proper phase relations so that the grid is negative when the plate is positive. With a tester of this type the indication is usually obtained by changing the grid bias and reading the corresponding plate current change. This is generally known as a grid-shift type of tester. This change is somewhat proportional to mutual conductance; but since a-c voltages are applied, and since the values are not the same as those employed in receiver service, the indications usually do not mean as much as a true mutual conductance reading. This fact is largely overcome, however, by supplying a calibration of various types of tubes with the tester. Intelligent use of this calibration, as well as a complete check of the performance of the tester with the different makes of tubes will usually permit quite accurate readings to be

obtained. This type of tester usually requires an additional control to set the meter to zero. Otherwise two readings must be taken to obtain the difference in plate current caused by shifting of the bias. In order to properly test all types of tubes a variable grid bias must be provided, which increases the cost of the tester, and also further complicates the operation. If, however, these devices are provided it is not difficult to keep the tester up-to-date as new tube types are announced.

At the present time the so-called "emission" type of tester or one of its modifications is most popular. This type of tester usually connects all the elements of the tube together except the cathode, and a-c voltage is applied between the cathode and the other elements. A meter is supplied to read the required current which flows each time the elements are positive with respect to the cathode. The cost of this type of tester is relatively low since only one value of a-c voltage is usually supplied, in addition to the filament. Since the elements are all connected together a minimum number of sockets are required for testing. The tester has the further advantage of requiring very few changes to adapt it to new tubes. It is obvious that such tests do not approximate operating conditions. Consequently a set of limits must be run for each type of tube, and perhaps for each make of tube as well.

Northwest Vintage Radio Show & Sale

Plans are being made now for the November 11th, 1995 Northwest Vintage Radio Show and Sale at Multnomah Arts Center, 7688 SW Capitol Hwy, Portland, Oregon.

To Reserve A Table

To Volunteer to Help

To Get The Details

Call Dick Dielschneider at (503) 246-1062

Fun With Radio

There is nothing more startling than a sudden argument breaking in between two engineers on a commercial radio program over a major network, unless it's a comment made on the radio about a guest at a party in your home right at the time. Both stunts and more can be accomplished by placing a microphone on your radio.

[NOTE: This was printed in 1938, with 1938 prices] The best means . . . is to buy a small microphone designed for this purpose. They are priced at ten cents to several dollars. The better ones start at fifty cents.

If no expenditure, however small, is desirable, an old head-phone, preferably of the Baldwin type though not necessarily so, can be used. It will give more volume, but much poorer tone, than will a moderately priced microphone.

The simplest means of connecting an ordinary home *broadcasting* microphone is between the control grid and cathode (or filament) of the detector tube. In superhetrodynes, this is the second detector.

This is a very easy connection to make, as most modern sets employ a screen grid tube in that stage. The grid cap is removed, and one side of the microphone lead connected in its place, the other being run directly to the chassis.

Sometimes, however, the set is so designed that the microphone works better if connected in series with the plate of the detector. This, however, is unusual.

Most microphones come with instructions for connecting. Many of them are packed with small adapters, to permit their connection to the prongs of the detector tube.

If you wish to connect to a tube's prongs, and have no adapter, simply remove the tube from the socket, wind the carefully scraped ends of the wire around the correct prongs, and press the tube back into the socket. Fig. 30 shows the prong positions for the most commonly used detector tubes.

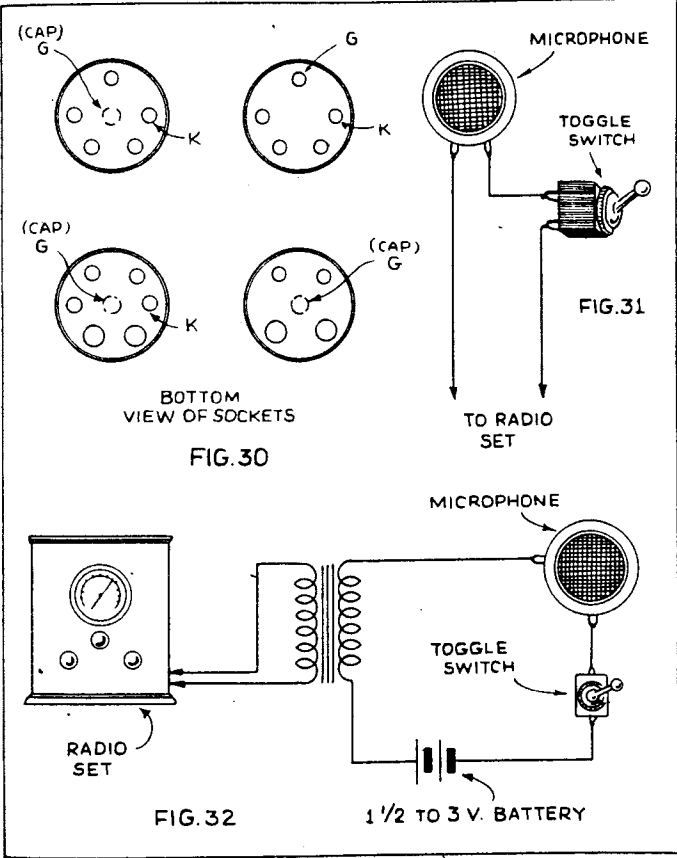
many *home broadcast* mikes have little push buttons built into them, so that the mike may be permanently connected, but put into operation only when pressing the button. If no such button is

present, any toggle switch or momentary contact switch connected into one of the mike leads, as shown in fig. 31, will serve the same purpose.

Much better microphone reproduction can be had if a special microphone transformer and a single cell battery are used, as shown in fig.32. This transformer should have an impedance of about 200 ohms in the primary, to match the microphone and a high impedance secondary, to match the grid circuit of the tube.

An old headphone can be connected across the grid and filament (or cathode) of the detector in the same way as a microphone. This sometimes works better if connected across the primary of the first audio transformer.

(This exercise was published by Hugo Gernsback in 1938.)



Calendar

Compiled by Dan Howard

- September 9 NW Vintage Radio Meeting
16-17 Portland Ham Fair, Portland Meadows
1001 NE Schmeer Rd. Portland, Oregon
16-17 Antique Show - Tacoma Dome
17 PSARA Meeting, Seattle
- October 14 NW Vintage Radio Meeting
15 PSARA Meeting, Seattle
14-15 NW Vintage Radio Display, Expo Center
21 Ham Swap Meet, Polk County Fair
Grounds. Rickreall, Or.
NW Car Collector's show
28-29 Antique Show - Expo Center
- November 11 NWVRS Annual Fall Swap Meet
19 PSARA Meeting, Seattle
- December NW Vintage Radio Christmas Party
10 PSARA Meeting, Seattle
16-17 Antique Show - Oregon Convention Center

Acquisitions

Acquisitions is a place to tell others what new or old items have been added to collections in the Northwest. If you'd like to share your finds with others, please get your list to Gordon Phillips (see inside front cover).

Mike Parker

- 1926 Atwater Kent 35 metal
- 1926 Norco 3-dial made in Portland
- 1925 Western Electric 25-B 2 tube AC amplifier
- 1927 RCA 100-A speaker
- 1938 Philco 38-4 Console
- 1968 Heathkit regen. SW receiver
- 1929 RCA Radiola 33 in RCA 106 speaker cabinet
- 1925 RCA Radiola 20

EVEREADY RAYTHEON TUBES YOU CAN HEAR THE DIFFERENCE ...AND SEE THE REASON



FIND OUT for yourself what people mean when they say that Eveready Raytheon Tubes give greater distance, more volume, better tone—try them in any standard A.C. receiver!

Then look at one of these tubes. See the solid, four-cornered glass stem, supporting four rigid pillars which hold the elements. This patented *4-Pillar construction* is anchored at the top as well—by a stiff mica plate. No other tube can be built like this, for it is patented.

These elements can't be distorted by the jolts and jars of shipment, or by the necessary handling of the tubes.

You can easily understand, now, why these tubes come to you, and go to the radio receivers of your customers, in perfect condition. All their added power is intact! They run uniform, too, and the A.C. tubes are quick action. The wonderful performance of Eveready Raytheon Tubes means greater satisfaction for your customers. And a minimum of

replacements for you to bother with. No legal troubles with Eveready Raytheons. No canceled deliveries or "frozen" stock.

Television too!

The Eveready Raytheon line is complete—with standard receiving tubes, battery and A. C. operated, rectifying tubes, Kino-Lamps, and Foto-Cells for talking pictures and television. In addition, we developed and make the original gaseous rectifying tube for "B" eliminators—the famous B-II tube—for which there is an enormous sale.

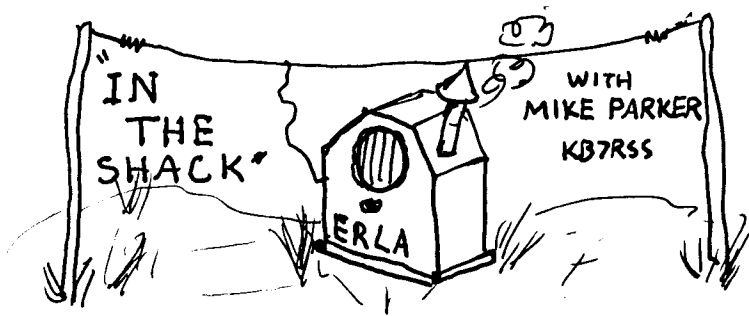
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In the last "In the Shack," I mentioned that I felt "guilty" when I robbed some perfectly good parts from a restorable Atwater Kent radio chassis. I know that this practice is common, one can always find an ad from someone wanting a junker chassis, for parts.

My concern is, if all the old chassis are cannibalized for parts, sooner or later there might be an excess of stripped out chassis. Will they just exist with no usable parts and no possibilities of restoration? There may come a day when there is not a restorable collector desired radio chassis left.

A good example of this syndrome is the possibility of finding a complete Philco 70 or 90 chassis, and I emphasize the word "complete". Just try and find a multiple tube shield for one of these models! I see ads for just this tube shield, alone. How many of you, once upon a time, found an extra chassis for a Philco 90, took the tube shield off and sold or gave the chassis away? Models like this, with high end collector value, are always the ones that parts for completion are sought after first. Somebody out there probably has 3 or 4 stripped out Philco 90 chassis, used as parts donors. I simply ask, "What good are they now?" Where is the future restorer going to find those parts? You may now have a complete set, but what is the future restorer to do?

Maybe, I am being an extremist. Maybe, it just doesn't matter and it is not important. I really don't know. I need some input. Should we really be concerned with what a future restorer has to go through someday? I know that we all appreciate a nicely restored old radio or even just a nice old radio that has been untouched. I also know that what I have had to go through to restore my radios in the past few years, has been harder than it would have been 20 years ago.

Let's face it, little by little, good original radio parts are slowly disappearing as more collecting and restoration occurs.

If you don't believe this, just look at the vintage auto hobby, a much more active endeavor than ours. Entire businesses are now devoted to nothing but manufacturing reproduction vintage auto parts. But, the demand for reproduction '32 Philco parts will never exceed the demand for reproduction '32 Ford parts.

Another example is an ad saying; Atwater Kent Model 10 Breadboard, complete except for tube island. Where will you find it? It won't be cheap, if you find it! Collector demand has driven this stuff clear out of sight.

There are some excellent reproduction radio parts already available and, I believe, more to come. I would encourage all of us to take advantage of this service, no matter what the price is, within reason, of course. The lower the demand, the higher the price of these items will remain. Nobody can survive just making repro Philco 90 tube shields!

Maybe we should just recycle our old chassis, just throw it in the scrap metal bin, this should eventually drive the price of an Atwater Kent 55 chassis to that of an AK Breadboard tube island! This may be the only way to solve the parts cannibalizing dilemma, in the future.

I encourage any feedback or comments about this subject from you, the reader, collector and restorer. Just contact the CALL LETTER editor or call me at (503) 235-7187 and we will print your comment. Your name may not be printed, if you so specify.

I hope to hear some input on this subject, otherwise, the next time that I need Atwater Kent belts and pulleys, I'll just find an old unused chassis and "STRIP 'ER OUT!" ...Guilty or not.

See you next time, "In the Shack"73's...Mike Parker

Portland September Ham Fair

By Gordon Phillips

The Portland Ham Fair will be held at Portland Meadows at 1001 N.E. Schmeer road. This is the first time that it has been held there. The date is September 16th & 17th, 1995. A table rents for \$12.00 each plus a \$5.00 per person registration fee. If interested call Ed at 257-4822 and he will send you a registration form.

Tool Tips

Build your own polarity indicator (From Popular Radio)

It's always better to know the polarity of a DC circuit before using a meter and wrapping the needle around the low peg. W. Millar submitted this solution to Popular Radio, back in the vintage days.

"Get small amounts of sodium sulphate and of phenolphthalein. Into a cup half full of warm water put as much of the sodium sulphate as will cover the area of a silver dollar, and as much of the phenolphthalein as will cover the area of a dime. Stir until the chemicals are dissolved.

"The try this mixture, place your charging wires into it (about 1 to 2 inches apart). The negative wire should turn the surrounding liquid a reddish color. Stir the liquid and the color will disappear at once.

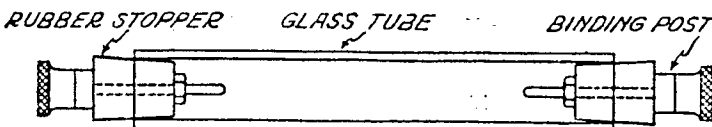
"Now put in it two wires from your "A" battery and add a little of each chemical until the mixture is sensitive enough to be discolored by the negative wire as before. Then you are ready to make the container shown below.

"Obtain a glass tube about three inches long and two rubber stoppers to fit in it. Put the stoppers into the ends of the tube and thread screws through the center of them to project a quarter of an inch on the inside. Put a nut on the inside of the stopper and both a nut and a terminal nut on the outside of the stopper to act as connections on the outside.

When this is done fill the tube with the liquid leaving a small air space so that the tube can be shaken to dispel the color.

Paper that indicates polarity can be made by immersing some blotter paper in the liquid. To use this, wet the paper with your finger and place the wires on it about a half inch apart. The negative wire will leave the read mark.

POPULAR RADIO



A POLARITY INDICATOR THAT YOU CAN MAKE YOURSELF

FIGURE 1: The container for the liquid. The only parts required are a glass tube, stoppers, binding posts, screws and nuts—which cost about 25 cents.

Swap Shop

WANTED

- RADIOLA AR Any shape. Jerry Brannon (206) 854-4234
- Crystal Sets. Have many radios to trade for crystal sets. Galen Feight (503) 231-9708.
- Eico Model HF65A Mono Pre-amp. Jerry Talbot (503) 649-6717.
- Hallicrafters SX-28 or 28A and S-36A receivers. Ken Seymour KA7OSM, (503) 306 7439 (days or evenings).
- Dial pointers, and parts for the Nordon-Hauck Navy Super C-10. Dick Karman, (503) 281-6585.
- Thumb wheel Tuning Dial for a Crosley model 56. Gordon Phillips (503) 234-3517.
- Tuning dial for Silver Marshall Mod 30 Walt Humbird (503) 642-0202.
- Cutting needles for Webcor type older type records. Glen Bricker 1030 N.11th St. Cottage Grove Or. 97424 (503) 942-3717
- Philco parts. Speed Feldschau (503) 390-3928
- AK Breadboard, at reasonable price Gerry Hale (509) 627-6319
- Chassis for Sparton Poco Club, Call letter for Mike Radio, Jem Star Doll (similar to Barbie), Admiral B&W TV Chassis model # 12x12 & 17DX11. Jim Gianacos (206) 784-9417 or 228- 9398.
- Grunow 801 Console, Darrell Forsberg (206) 363-0754
- Old radio Station and program memorabilia, prizes books, thermometers, calendars, etc. with call letters. Paul Bragg (306) 456-8631.
- Old Tube CB Sets and Crystals. R. Bartlett (206) 365-3056.
- 6T5 Eye Tube, new old stock. Steve Metzenberg (206) 941-06992818 S. 284 Federal Way, Wa. 98003
- WWII and earlier military radio equipment and manuals. Forest Service radio pre-1950 fishing vessel radios, old or recent, especially Pacific N.W. built & manuals or advertising materials. Beginners Kit built radios with 1-3 tubes or transistors. Will pay to ship or will be in Seattle twice a year. Hugh Miller 250 S 900E #4C Salt Lake City, Utah 84102
- Hallicrafters R42, R44, PM23 speakers; Hallicrafters S-200, S-210, S-107, S-53A Receivers; National N98SW Receiver; TMC GPR-90, GPR-92 Receivers; RML DB-22A Preselector. Steve Posey (206) 361-1967.
- To borrow owner's manuals for the following test equipment: EICO, 145 signal tracer, 221 VTVM, 239 VTVM, 315 Signal Generator, 332 VTVM, DeVry 1514 VTVM, Heathkits, V7A VTVM, IT12 Signal Tracer, SG8 Signal Generator, IM11 VTVM. Cliff Glaspey (206) 353-6637.

Vertical Transformer 800V CT, 6.3V 5A, 5.03A R. Atwood (360) 779-1480

To borrow service manuals for Heathkits VTVM V-7A & Oscilloscope OL-1 and Hammarlund SP-600 communications receiver. Fred Powell (206) 547-6695.

Volks Empfänger, Schematic, tubes VCL-11 & VY-2, Main tuning capacitor. Ernest Beetz 2310 Eastmont Way. W. Seattle Wa. 98119 (206) 285-2711.

Heathkit construction manual or calibration instructions for Tube Tester TT-1. Charles Johnson 21 Holly Hill Dr. Mercer Island, Wa. 98040 (206) 232-2040.

Sky Cheif Radios, boys radios, (2 transistor from early 60s), Pre 1950 TVs & literature, Blue 01A tubes, "Disaster radio" Crystal set & other ear-phone only sets. Ken Korhonen (206) 932-9363.

Cowan Publishing Co. Book "Command Sets" from about 1958. Russ Lawton (206)- 362-1708.

PRE-20s Radio receivers. Steve Von Talge (206) 527-2829 or 783-2543

Parts for 1942 ZENITH 12-H-689: (Insignia) that goes on the square dial glass with a hole in it. Jerry Cappoen (206) 874-5490.

1938 Zenith 15-U-270 Console. Also interested in consoles from 20's-40's. Debi Freal. (206) 334-7753

6A5 Tube, New in box, RIDERS or National Union Volumes 1, 21, 22. Steve Metzenburg (206) 941-069.

1920's Old crystal detector, Old Receiving tubes for collection (duds OK) 1920's thru 50's. Gil Arroyo (206) 244-2344.

TUBE TEST data charts for precision tube master series 10-12 Bill Dymont (206) 782-3563.

FOR SALE

Sonny is selling his sets! Help him reduce the size of mhis collection before he moves. Wood, plastic, consoles, and many others including early TV's must go. Sonny Clutter, 14407 NE Fremont St. Portland, OR 97230, - (503) 254-9296.

Stewart Warner 1928 table top metal radio receiver with matching speaker. \$75.00 and RCA Navy type CRV46148 86 LBS Radio Receiver 2 Mhz - 27Mhz with power supply. \$75.00 Duane C. Ballew (206) 851-4505.

For Sale: Over 200,000 tubes, panels, speakers, chassis, electronic surplus and supplies. R5-D3 Surplus. Bob Lee, 6111 SE 82nd Ave. Portland, Or. (503) 774-6560.

Over 200,000 tubes, panels, speakers, chassis, electronic surplus and supplies. R5-D3 Surplus. **Bob Lee, 6111 SE 82nd Ave. Portland, Or. (503) 774-6560.**

1942 Zenith 6G601M cloth-covered with wavemagnet and Sailboat grille \$40; Zenith 7C05 AM/FM 7 tube, wood cabinet \$35; RCA 6-XD-5 plastic radio with nipper grill, 2-tone green, \$40; Knight signal tracer, \$5; and many more **Bud Larson, 1325 Ridge Way, Medford, Oregon 97504; (503) 773-5214**

Mirror for Sparton Bluebird. I had 2 made, one for my set and I will sell extra for best offer. **Jerry Talbot (503) 649-6717.**

LEADS

Hallicrafter SX-62, \$25; a set of Riders, Call Don Knotts (503) 648-1738.

Guild 921ML "New Englander" Console Bernie Lenoue (360) 457-8929.

Collection of 40 Radios for sale. For list contact Gerry Scheffelmaier 911 W. 5th, Ellensburg WA 98926 (509) 926-9229.

Philco 19" "UHF" TV, Early 50s wood cabinet. Free (206) 283-9828

The "SELF-ADJUSTING" Rheostat

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- 4—No moving parts, hence no grinding noises; clear and full tones.
- 5—Prolongs tube-life by keeping filaments at a constant temperature.
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- 7—Brings the most out of each individual tube—automatically—no guessing.
- 8—Makes every set-owner a master operator, no knobs to turn.

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build is equipped with *AMPERITE**



California Swap Meet

The North Valley Chapter of the California Historical Radio Society will be holding a joint swap meet with the original SCARS (Shasta Cascade Amateur Radio Society) Saturday, October 7th, 1995 at 8 AM. The meet will be located at 3035 Crossroads Drive in Redding California. In addition to members of NVC-CHRS, and SCARS, members of the Puget Sound Antique Radio Association, California Historical Radio Society, and the NW Vintage Radio Society are invited and encouraged to participate. For more information call Norm Braithwaite at (916) 246-4209 (home), or (916) 245-0864 (work). [Directions: go east on California state hiway 44 from the downtown Redding exit of I-5 southbound. Drive about 3 miles and turn North on the "old Oregon Trail." Turn right on "old 44" and right again on Crossroads Drive.]

