

April 2015 Vol 41, #4



## APRIL 18, 2015 2015 Spring Show & Sale

This Saturday, at the North Portland Eagles Lodge 7611 N. Exeter Street Portland, Doors open at 9 AM-Closing Auction at 12:30

#### 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 9:30 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 1999. 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 2015:

PresidentMike McCrow (503)730-4639Vice-presidentBryon Toon (503) 266-5527TreasurerEd Tompkins (503) 573-3895Recording SecyLiles Garcia (503) 649-9288Corresponding Sec'yPat Kagi (503) 694-6149Board member at largeMark Moore (503)286-5224LibrarianDamon Vandehey (503)459-1777

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# **Next Meeting:**

# The April show and Sale in North Portland Aprill 18, 2015

# May Monthly Feature:

Radios who's cabinets are made of non-wood or plastic. Example; paper, leather, metal, glass etc. Frame-work or base platform construction made of wood is ok, but the finished exterior must be made of materials other than wood or plastic..

The NW Vintage Radio Society conducts monthly meetings to promote and preserve the hobby of radio and radio equipment collection. The Public is invited to all meetings, shows, and sales.

Visit our web site at <u>www.nwvrs.com</u> Find us on Facebook: <u>www.facebook.com/nwvrs</u>

# **MEETING MINUTES**

President Mike McCrow called the March 14, 2015 meeting of the NorthWest VintageRadio Society to order at 9:30 AM. The group recited the Pledge Of Allegiance to our Nation's flag.

There were 60 people at our meeting today. Leonard Keith and Ken Deder attended as guests. The minutes of the February meeting were approved as printed in the March Call Letter with the following two corrections:

The WWII radio presentation at the Lake Oswego bookstore was produced by both Chris Butler and Blake Dietz. Chris co-wrote and co-presented the information at the bookstore.

Our Show and Sale advertising partner is Radio Station KKOV--AM 1550 KHz.

Fellow member Bill Meloy gave his grand-daughter, Yvonne, a radio to start her radio collection. Welcome, Yvonne to an interesting and informative hobby!!

Pat Kagi announced that we can now post information to the PSARA website. He will be meeting with other members to discuss our website. Mike reminded everybody to have their picture taken for our Society's Roster. Damon asked everyone to sign out any books that they have borrowed from the Library.

We still need a "Call Letter" editor. Please let Mike know if you are interested in doing this job.

Charlie Kent announced that there are Show tables available. He also said that we will have food at this Show and Sale.

There are some donated radios for auction at the end of our meeting today. All proceeds will go our Society.

The Featured Radios today are "Radios That Were Your Worst Deal Or Purchase ". Several members participated.

Dick Karman gave a presentation on "Early Radio In Portland".

The Featured radios for our May meeting will be " radios who's cabinets are made of non-wood or plastic.

The meeting was adjourned. April 2015

## Images from the "Worst Radio Transaction Feature"



Pat Kagi



Sonny Clutter



# Tips and Tangled Cords No. 2

## Blake Dietze

In this month's column, I'm going to focus on the **oscillator** section of the superhetrodyne radio on my bench. I'm going to take a fairly non-technical approach to troubleshooting first. I'm currently working on a Philco 116X which is a mid-1930's 12-tube 5-band superhet.

After restoring the chassis and bringing it up to 120Volts, the radio is playing to a degree; it has static, but it's not tuning in any stations. From the schematic diagram I can see that the Intermediate Frequency (IF) is 470Kc and band 2 is Standard Broadcast. Armed with this information, I tuned the radio to the center of the broadcast band around 940Kc which is twice the IF frequency and turn the volume all the way up.

Varying the tuning a bit, I hear a faint signal from 860KC, but not any others. 940Kc is the second harmonic of the intermediate frequency and can "sneak" through IF's of the radio and if there is a powerful station near that point on the dial, you can usually hear it faintly. At this point I suspect the oscillator.

Next step is to grab my handy AM transistor radio and set it next to the oscillator coil. Next I tune the suspect radio to 1000KCs and the transistor radio to around 1470KC (1000KC + the IF frequency of 470KC). If the local oscillator is working properly, this is where it will be operating and you should be able to hear it on the transistor radio.

In my case, there was no signal found across the entire AM band on my transistor radio, validating my suspicion that the oscillator was not functioning. After checking the circuit, the components, and the wiring, I turned to the oscillator coil itself.

Philco radios from this era are famous for coil issues, usually due to corrosion. After continuity checks, I determined that the primary winding was open (or nearly open – measuring 22 Meg

ohms). Rewinding it was the only viable solution. Rewinding the coil is not a difficult task, but very tedious.

**ALWAYS** make a *wiring diagram*, and consider using *wire labels* before you remove the coil. I was fortunate, as once I had removed and inspected the coil, there were only 27 turns on the primary (if you collect Philco radios from the early-mid Thirties, you might want to memorize that number). If you see any green coloring on the winding, especially near the ends, that is the tell-tale sign of copper oxidation and likely where the break is located.

It is imperative that you rewind the coil in the same direction or it won't work. I strongly suggest that you leave a bit of extra wire on both ends after rewinding, as you may have to reverse the leads if you wound it in the wrong direction. A couple of tips when placing the wire on the coil form: Use double sided tape <u>under the winding</u>. This will keep the wire in place while you are winding it. As an alternative, use paraffin or candle wax to do the same job, though in my opinion, the tape is superior.

I elected to rewind the entire 27 turns as there were breaks in several places, including one about 5 turns in. Once the coil has been repaired or rewound, inspect the rest of the coil and make any proactive repairs necessary. After reinstalling the coil, power up the radio to see if this resolves the problem. If the radio still exhibits the same symptom, try reversing the oscillator coil leads.

In the case of my 116X, I now receive plenty of stations where there used to be none. After a complete IF/RF alignment, the radio sounds pretty good but has an intermittent crackle, and wouldn't you know it – I see some green wiring on the RF coil, right where the coil lead attaches to the coil form lug. A blast of canned air confirms my worst fears. Tomorrow night I'll be doing it all again on the other coil right next to the one I just finished!

That's it for this column, "happy hunting" and "keep 'em playing".

# Amplitrex AT-1000 Tube Tester By Robert Stephens



I have lived with the Amplitrex AT-1000 tube tester for 2 years now. The Amplitrex tube tester is \$2,675.00 plus the adapters plus shipping. Why in the world would anyone spend this much on a tube tester? Is it worth the asking price? Am I happy with my purchase? All valid questions I have been asked

by many of my friends in the hobby.

My own journey to own one of these testers was born out of extreme frustration with Hickok tube testers. I purchased my first calibrated tube tester from Kara the Tube Wizard in Vancouver years ago. After selling tubes and shipping them overseas, I quickly realized that tube testers in most cases were never intended to be precision test equipment. I would sell high value tubes overseas and frequently get push back because the end user was getting different results on their tester versus mine. Some of this was an eBay game and some of this was real. It turns out that Hickok tube testers with the shunt control in the circuit have an accuracy of plus or minus 20 percent even when calibrated.

To further complicate things the Hickok is testing the tube at a plate voltage of 150V when many power tubes are operating in equipment at over 350 volts. After messing with multiple brands of testers including some really nice Triplett, Heathkit, Eico and Sencore units, I decided I needed something that was more accurate and reliable than what a 60 year old piece of test equipment could provide. This is how I came to research and buy the Amplitrex tube tester.



The Amplitrex tube tester was designed and made to order by Chris Terraneau in California. They take about 6 weeks to get. They are used by many professionals in the music and electronics industry including high volume tube dealers like Euro Tubes here in Portland.

So we get to the question of why would you want one? They

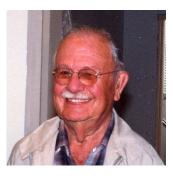
connect to a laptop and print the results. They can test tubes at real operating voltages up to 500V. They give you really important parameters like DC plate current, plate resistance and tube gain. They can trace tubes. You can make or buy adapters to test tubes no other tester can test like the 845 or 211. You can buy adapters from Chris to test sub-miniature, Novar and Compactron tubes. You can program in tubes that are not already programmed in the tester. And the biggest feature for me - transconductance accuracy at plus or minus 1.5%. I can sell a tube to someone tested on my Amplitrex, ship it overseas and they get the same results on their Amplitrex. This is virtually impossible with any other tester.

Now for the downside. The reviews are pretty bad. The software is outdated and very hard to use. It will not test any tubes with a filament voltage over 12.6 volts. The curve tracing software has an error when testing tubes with a directly heated triode. The fan is loud. The price is bordering on crazy. Someday someone will make a better tester for a lot less money.

Am I happy with my purchase? Yes. I would buy it again in a heartbeat. I am relatively young and love this hobby. High value tubes tested on an Amplitrex sell for more money and sell faster. The results are very accurate. I can match power tubes by micromhos or DC plate current and preamp tubes by gain. I can test 211 and 845 tubes. Is it my favorite tester? Maybe not. That place might always be held by the Jackson 648 series tube tester, but that is another article.

## **Remembering Jim Mason**

Jim's contribution to the society has been in discussion lately. Many who never knew him would probably not understand the impact that his collection and his generosity had on the organization. No one before or since has made the contribution of time and money that Jim made. This story explains a little bit about Jim Mason and his collection.



## From the *Hillsboro Argus*, Tuesday, November 3, 1981 – **Old radios fill collector's home**

Radios of the past have become Jim Mason's present and future. He studies them, collects them, then repairs what he can. After that, they are shelved and marveled at.

A 1918 World War I Army radio built for the signal corps, one of Mason's earliest, sits on the top shelf of his display room among a couple of hundred newer models, half of his entire collection.

Collecting and restoring radios only since 1975, Mason, a resident of Washington County for 20 years, claims to have between 400 and 500 radios. "I have a house full of 'em," he said. He added he would like to continue seeking out only the finest and rarest radios ever made, but "I've simply run out of space."

Born in Ellensburg, Wash., Mason attended grade and high school there, later receiving a bachelor's degree in zoology from the University of Washington. Then he enrolled at Washington State University, where he earned a master's degree in entomology. In 1940, Mason, [in 1981] a 67-year-old bachelor, was hired by the Dept. of Agriculture in Spokane, Wash., working there until 1947, when he "took to the sun."

"I worked as a quarantine plant inspector in Honolulu until 1961," he explained, "when I came out to the Portland office as an inspector in charge."

"As a matter of fact, we (the house and I) just celebrated our  $20^{\text{th}}$ -year anniversary here." he said. "Me and this house have been together 20 years."

It was during the winter of 1974 that Mason stumbled onto the hobby he'd have for the rest of his life.

"Christmas of 1974," said Mason, "I was visiting some good friends in Seattle. I was wandering around their garage and noticed an old battery radio that belonged to my friend's uncle. I was really interested in getting the thing to work, and my friend said 'take it home and see what you can do.""

Mason's friend made him promise one thing after he took the radio home and fixed it.

"He told me to put the radio in my will for him if I kicked-off," laughed the gray-haired, gentle-mannered Mason.

One day Mason's neighbor, a worker at Tektronix, checked out the radio and told Mason of a speaker at Tek who's primary topic was vintage radios. The speaker, Harley Perkins, had taught electronics at OSU for several years.

It was that evening that Mason knew this was his life, and decided he wanted to know everything there was to know about radios. He joined the Northwest Vintage Radio [Society], becoming a charter member in February, 1975. He has been treasurer, president, and currently [1981] holds the editor's position for its newsletter.

It was then he was taught how to hook up certain types of radios, what books to read, and a little about collecting. "I was always interested in listening to music," he said, "because I was always into high-fidelity stereos. I have about 300 reels of tapes here, too."

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# Sonny's Tech Tip: Tip #7

### More on wood radio cabinet issues

If after doing as I suggest in my previous columns and there are minor flaws, scars and surface scratches that still show, here's how to make the cabinet look better without a re-finish job.

### Minor sun bleaching and surface scratches

(scratches that have not penetrated into the wood).

**1st,** I would treat the finish with "Mar-A-Way" (a product I use). After using according to directions apply a good furniture polish.

If still not satisfactory, one more thing can be tried and that is an "amalgam", I make my own by mixing equal parts of Gum Turpentine and Boiled Linseed oil. This is best done in small areas (4 - 6" square) using "0000" steel wool, soaked with the "amalgam", rubbing in a circular fashion. Do a section at a time until the entire surface is done wiping down after about 20 passes for each section. When all done then repeat the process with a soft cloth. Then do the same again, this time with long strokes across the entire surface following the grain pattern.

**2nd,** after the "Mar-A-Way" treatment and if you are pleased with the results, use a good furniture polish such as "Oz". If there are still scratches that show, you can use a felt tipped pen that's made for this purpose. These come in a variety of colors and there are a number of brands on the market. Not all of these brands work all that good. The two best I have found are the "Mohawk" brand, second best is the "Scratch Fix" pens from the Miller company. Don't waste your money on the "Minwax" brand, I find these to be vastly inferior. Keep in mind that if the scratches go through the finish and into the wood, you can't make these go away without the efforts and expertise of a wood re-finisher or finish repair. Finish repair is very specialized and I will not get that serious.

Call Letter

**3rd,** If still not satisfactory, one more thing can be tried and that is an "amalgam", I make my own by mixing equal parts of Gum Turpentine and Boiled Linseed oil. This is best done in small areas (4 - 6" square) using "0000" steel wool, soaked with the "amalgam". Rub vigorously in a circular fashion a section at a time until the entire surface is done. Wipe down (remove the excess) after about 20 passes for each section. When all done then repeat the process with a soft cloth. Then do the same again, this time with long strokes across the entire surface following the grain pattern.

**Crazing** (the finish is *alligator' d* but still intact). Treat as suggested in step 3 (above).

If the above does not leave the cabinet looking presentable, the only thing left is to strip it and refinish.

## **Past President invites visitors**

If you're traveling through Hebo, Oregon (a small community on Hiway 101 in Tillamook County) don't hesitate to give Sid Saul and his wife a call. You may even want to take time to stop in. The reports of his hospitality are stellar.



# **Remembering Jim Mason**

CONTINUED FROM PAGE 10

In the early 1950s, Mason became interested in taping music. "They sound quite good now," he said.

His first radio was a Stromberg Carlson that he had refinished at a firm in Hillsboro. "It snowballed from there," he said. "I was retired and single so there was nothing to hold me back.

"I've been learning by trial and error. I do most of the refinishing," he said modestly. "I talked to collectors and simply started scouting around."

Lately, however, vintage radios are becoming scarce, causing Mason to slow down and spend most of his time refinishing his radios and getting them to work.

"I'm still in the market," said Mason. "I feel I can be picky because I have so many now. I'm concentrating on unusual pre-1930 sets that are small, plus literature on old radios."

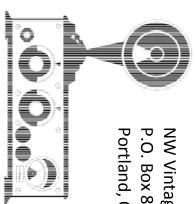
When Mason was "heavy" into collecting, he'd go anywhere for a good buy. He'd answer ads, comb flea markets, antique shops and garage and estate sales. At one sale, he found a RADA battery super-heterodyne (a type of circuit) that was just beginning to be used in the mid '20s. He paid \$300 for that set.

His most precious piece is a 1924 Atwater-Kent model 10, sometimes called the "breadboard" style because of its long and flat top, which is being displayed in the Georgia-Pacific museum in Portland until January. The museum is open to the public.

Other of his valuable radios include a 1924 Eisemann; 1925 Stewart Warner battery radio; a Neutrowound six-tube radio made in 1926; a 1921 RADA [RC] made for RCA by Westinghouse; a Philco Predicta made in 1958; a priceless Port-o-Bar novelty radio made in the mid '30s, and an RCA Radiola III two-tube regenerator made in 1923.

The above only dents his collection, worth more than Mason knows. When he isn't fiddling around with his radios, Mason manicures his yard while listening to a radio or two...or three... P.13 Call Letter





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