The Call Letter

April 2016
Vol 42, #4

1942 Chevrolet Car Radio

The Northwest Vintage Radio Society

Post Office Box 82379
Portland, Oregon 97282-0379

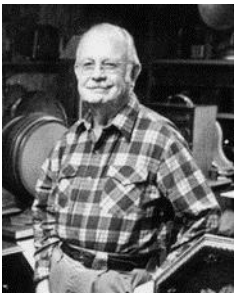
The Northwest Vintage Radio Society is a non-profit historical society incorporated in the State of Oregon. Since 1974 the Society has been dedicated to the preservation and enjoyment of "Vintage Radio" and wireless equipment.

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 2016:

President	Mike McCrow (503)730-4639	tranny53@frontier.com
Vice-president	Bryon Toon (503) 266-5527	
Treasurer	Ed Tompkins (360) 573-3895	edtomp@Q.com
Recording Sec'y	Liles Garcia (503) 649-9288	landn2@frontier.com
Corresponding Sec'y	Pat Kagi (503) 694-6149	kagi.pat@con-way.com
Board member at large	Mark Moore (503) 286-5224	mark@pdxhistory.com
Librarian	Damon Vandehey (503) 459-1777	
Editor	Don Hanson	vanguard4@lycos.com

On the Cover

Ray Holland's 1942 Chevrolet Car Radio

March Table of Contents

Announcements

April Meeting

No meeting this month (Swap Meet).

April Feature

None this month.

Spring Swap Meet

Our Spring Swap Meet will be on April 9, 2016. See page 12 for details.

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

A Letter from the President

None this month.

Meeting Minutes

NorthWest Vintage Radio Society Meeting--March 12, 2016

President Mike McCrow called the meeting to order at approximately 9:30 AM. Everyone present pledged allegiance to the flag. Mike said that the last day for paying our dues will be at our April 9 Swap Meet. Paying dues by that date will ensure that your name will be in our membership roster. Adam O'Connel and Gary Sanders attended today as guests. Welcome Adam and Gary!!

Members discussed the best way to auction approximately 50 radios at our Swap Meet. The Board will discuss this topic further. We also discussed the idea of having members describe their radio interests at our August meeting. The Program Topic for our May meeting will be "Radios From Someone Special ".

The Program Topic for today is "Vacuum Tube Shortwave Radios". Members showed and discussed the radios that they brought. The meeting was adjourned and we had an auction after the meeting.

Recorded by Liles Garcia, Secretary

Editor's Note - Please have Call Letter Contributions in by **April 29**.

Calendar of Events

April 9. NWVRS Spring Swap Meet. See flier on page 12 for details.

April 9. Yakima Hamfest. Yakima, Washington. Selah Civic Center, 216 South 1st Street, Selah, WA. http://yakimaamateurradioclub.com/yakima-hamfest/

April 9 & 10. Communications Academy. South Seattle Community College, Seattle, WA. This is an ARRL sanctioned event. http://commacademy.org/

April 22. Idaho State Convention. Boise, ID. This is an ARRL sanctioned event. http://voiceofidaho.org/ Contact: Larry Bickham, WA7ZZS. (208)453-1666, wa7zzs@arrl.net

May 1. Maple Ridge Swap Meet. Pitt Meadows, BC. http://rac.eton.ca/events/detail.php?event_ID=1774

May 14. Stanwood Camano Amateur Radio Club Hamfest, Stanwood Middle School, Stanwood, WA. Contact: Fred Laun, w7pig@arrl.net http://www.scarcwa.org/

May 20-22. Washington State Search and Rescue Conference. Longview, WA. http://www.wasarcon.org/

May 20-22. River Radio Campout 2016. Pateros WA. Free "dry" camping along the Methow River at Pateros. Always the weekend prior to Memorial Day Weekend. Contact Roger W7CH w7ch@arrl.net (509)687-3919. http://lakechelanradioclub.webs.com/ Flyer in PDF. (195K)

June 10-12. 48th Annual Apple City ARC Hamfest. Apple City ARC. Dryden Gun Club. Dryden, WA. http://www.qsl.net/w7td/ .

June 11. KARS Hamfest. Kootenai Amateur Radio Society. Post Falls, ID. Always the 2nd Sat in June. For information contact Bonnie, KG6QQM, 208-683-2939 or KG6QQM@ARRL.net or John, n7ju@arrl.net

June 11. Port Ludlow ARC Annual TailGate'r. Port Ludlow, WA. http://www.n7pl.org/

July 8-10. 7th Annual KUH Pigroast. Springdale, WA. Contact Ray, (509)258-7078 cdknray@wildblue.net Flyer in PDF. (226K)

July 9-10. Salmoncon. Pacific Northwest QRP Group annual weekend outing. North Bend, WA at Valley Camp. http://valleycamp.org/ Contact Wayne McFee nb6m@att.net.

July 15, 16 & 17. Glacier Waterton International Peace Park Hamfest. (Always the third weekend in July) Glacier Meadows Campground, 13 miles west of East Glacier on MT Hwy 2. http://www.gwhamfest.org/ 2015 Photo Gallery .

July 16. Coos County Radio Club annual Hamfest and Swapmeet. North Bend, OR. http://www.coosradioclub.net/ (Always the third Saturday in July) Flyer in PDF.

July 23. Chehalis Valley ARC 18th Annual Pacific Northwest Ham Radio Tailgate Swapmeet. Lewis County Fairgrounds. ***This is an ARRL sanctioned event.*** Contact John Ellingson, K7OSK. k7osk@boatanchor.com . http://www.cvars.org/ http://cvars.org/swapmeet_2016/Swapmeet%202016.pdf

Monthly Feature

Vacuum Tube
Shortwave Radios

Photography by Blake Dietz

George Kirkwood

National NC-88

Sonny Clutter

1939 RCA T-80

Alan Shadduck

Hetro 6-tube AC-DC and
Hallicrafters S-40A

Blake Dietz
Zenith Explorer M660

Ed Tompkins
1940 RCA Q-44

(Not shown – Bell & Howell FM/AM/SW 9-Band World Receiver)

Larry Tobkin
Zenith Transoceanic
8G005Y

Joe Burchyski

Hammarlund HQ-100

Myron White

Murphy TA 152 (England)

Ray Holland

1942 Chevrolet 5-band Car Radio with Steering Column Control

Hallock and Watson in 1931

By Art Redman

Hallock and Watson build a new 500-watt transmitter for Ashley Dixon the owner and operator of station KFJR in 1931. It had the same power as the previous transmitter and will have nearly 100 percent modulation. This newer model transmitter derives its modulation and high potential not from a generator but from mercury vapor rectifying tubes.

The transmitter comprises of two units: power supply, oscillator and radio frequency stages in the first and amplifier, modulator, and audio stages in the second. It is virtually the same transmitter Hallock and Watson built for the police department station KGPP (Government Portland Police) for $15,000 now owned by our own Dick Howard.

Hallock and Watson built stations KOIN and KBPS, and recently rebuilt KTBR for crystal control. The new KFJR will occupy the same premises the old one now occupies and was on the air on March 1.

Hallock, Watson and Yonge advertising as the "Portland Radio Pioneers" stopped selling Fada radios during January 1931 and became official dealers in Brunswick, General Electric, Gilfillan and Rola brands selling them at their retail location on 190-192 Park now the 900 block of SW Park Avenue.

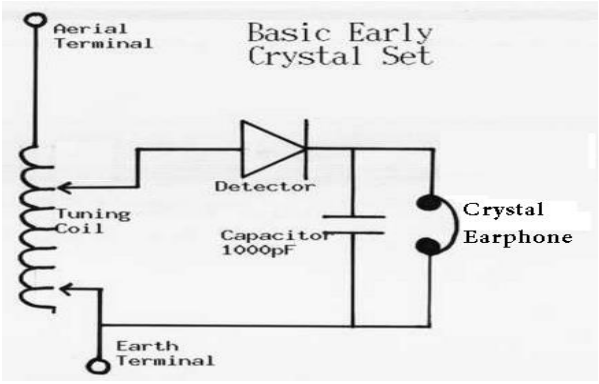
Sources:

"Long and Short Wave Novelties", The Oregonian, February 15, 1931, page 45.
"Oregonian Ad" January 18, 1931, page 44.

The Aspiring Radiotrician

By Sid Saul

(Reprinted from the February 2016 issue, followed by the answer…)



Mystery Circuit -- Why is it still not working?

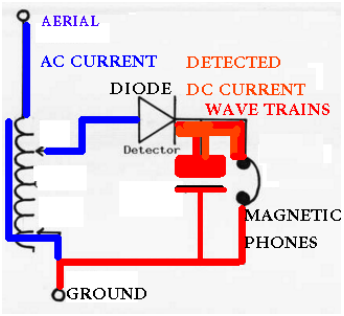
This month we are presented with the basic crystal set. I was ten when I built my Official Cub Scout Galena Crystal Set. This right out of my hand-me-down official 1954 cub manual. I still retain this book passed down from my older brother. He having no interest in radio whatsoever. This proving once again my theory that radio keeps us forever young, and that there is at least one in every family. It was easier in my later years forgoing the galena crystal and using nothing more than a water pipe ground, a 1N34A diode acquired from Radio Shack, and my official Scout 2000 Ohm magnetic headphones. You know, the thing between the ears with those round metal plates just under the screw-on plastic covers? I'm talking about headphones here!

I present this as another attempt at my Mystery Circuits. Here we see the familiar tapped coil, the .001 uF or 1000 picofarad fixed capacitor. This capacitor always a mystery in my early experiments. And lastly I am using a high impedance crystal earphone.

Building this today or fifty years ago would prove a disappointment. Can you see the error presented in this schematic, and help this perpetual ten year old earn his long sought-after merit badge?

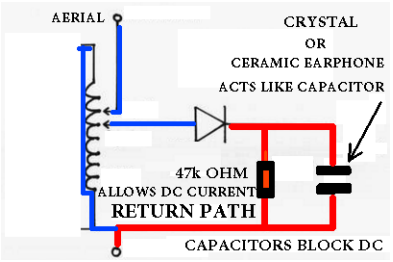
Until next time from your Aspiring Radiotrician, Sid

Last time we were presented with the basic crystal set. That pictorial depicting a magnetic headphone intentionally labeled Crystal Earphone. Both magnetic and crystal types have enough high impedance, with roughly 2K and 20K ohms respectively. So is there a problem with the mystery circuit? My first memories of building crystal sets began as a Cub Scout merit project. That official blue and yellow kit was supplied with a 2K ohm magnetic headphone. Included was a .001uF capacitor (cap) to be wired across the phones. Unknown to me at the time, the use of this cap, and why my experiments with crystal earphones failed.



There were two facts that escaped my youth. One of which is Wave Trains. The other being DC return paths. I remember thinking, "maybe this cap *could* be omitted". I was somewhat correct in one respect. Sometimes, omitting the cap with magnetic phones didn't make a noticeable difference. I've included two drawings today. One with a bypass cap across the magnetic phones. The other a resistor across the crystal earphone.

It is important to understand a diode detector needs a DC return path. Diodes need a certain amount of current in which to work. Crystal earphones do not pass DC very well. They act more like capacitors, preventing the flow of DC current. Notice the 47K resistor across the earpiece. The value is not critical. Anything from 10K to 100K yields the needed return current. 47K is often seen on schematics, so I include it here.



Even a nail with several hundred turns of fine wire will suffice. Magnetic or ceramic, both need capacitance to be efficient. Rectified audio signals from the diode are very weak. In order to boost the volume through the reproducer, electrons are routed to the bypass cap to collect and increase in number on its upper plate, as seen in the diagram. The headphone coils themselves actually resist audio signals. Eventually the cap's upper plate tries to discharge, forcing the increased number of signal electrons through the phones, then to collect on the cap's lower plate. This is the wave train that I mentioned earlier. DC return path is now satisfied along with louder volume. Coils have a certain amount of distributed capacitance all by themselves. Smaller less powerful wave trains are created even without a bypass cap. This explains my dilemma. Not having a grasp of the principles. Another question came to mind. I had often wondered if

it made any difference with diode polarity. If wave trains can be thought of as envelopes of detected signals, then does it really matter if either the top half or bottom half of the envelope power the phones? It makes no difference. The diode can be mounted with the cathode end pointed in either direction. Polarity would only matter if providing automatic volume control. Not even an option on my scout kit.

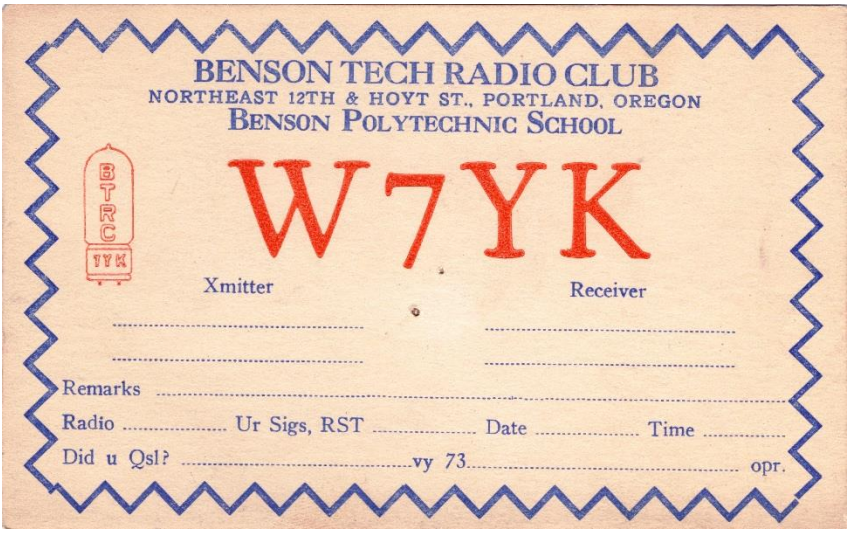
I hope you have enjoyed this yet another…Mystery Circuit.
Wonder whatever happened to that merit badge? I probably threw it away, along with that unneeded capacitor!

Until next time from your Aspiring Radiotrician, Sid

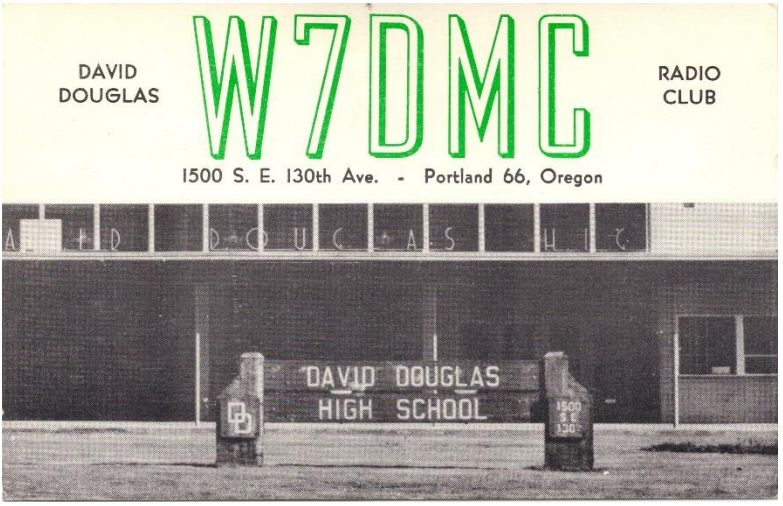
QSL cards from local student Ham Radio clubs

By Dan Howard

A couple of QSL cards from Portland area high school ham radio clubs --



Benson High School Radio Club (early 1930's)



David Douglas High School Radio Club (ca. 1960)

Swap Shop

Temporary Ads: Run for 3 months unless reset requested (each month adds one asterisk *****)
Permanent / Semi- Permanent Ads: Marked with a hash mark **#**

* Powerstat Variac $35 OBO
Variable autotransformer made by Superior Electric. 120 Vac in and 0 to 140 volts ac out; rated at 7.5 amps. Great for testing appliances or old radios. New cord-works good. Contact Craig Wohlgemuth at 360-573-6616 or e-mail cw2engineering@comcast.net

** Wanted: A Dial Glass, with three bands and dial pointer for Philco 41-260 Console or any other Philco. Also in the June 2010 Call Letter I had an article on my Minerva Tropic Master Model W117 that I sold and I would like to buy it back. I will be at the April swap meet so anybody can bring the dial glasses or the Minerva.
Homer "Jim" Myers 1-509-525-6264
Special Sale: Large collection of high-end quality radios that range from mid-1920s to late 1950s and into the 1960s for sale. Only NWVRS, PSARA club members and personal guests are invited! For appointment call Steve Berglund 206-244-6428

Amplitrex tube testing service. Highly accurate tube testing with computer printout. Can test 211, 845 and other rare and hard to test tubes. Will trade testing for tubes, parts, etc. robertwstephens@frontier.com

ANTIQUE RADIO SHOW & SALE

Saturday, April 9th, 9:am - 1:pm

Presented by the
Northwest Vintage Radio Society

at the North Portland Eagles Lodge
7611 No. Exeter St. Portland, OR 97203

You can see and purchase vintage radios from the 1920s - '70s. Short wave, plastic, consoles, wood, radio tubes & audio equipment will be available.

Low cost tables are available for vendors as well as outside spaces. For more info, contact Charlie at (503) 891-4615.

AUCTION *(near end of sale)*

FREE PARKING
FREE ADMISSION

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