

The

Call Letter

February, 2012
Vol. 38 – No. 2



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 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 2012:

President	Mark Moore	(503) 286-5224 mark@pdxhistory.com
Vice-President	Mike McCrow	(503) 730-4639 tranny53@comcast.net
Treasurer	Cliff Tuttle	(503) 666-7005 kiptuttle@comcast.net
Recording Secretary	Charlie Kent	(503) 281-9335 radiogallerykent@qwestoffice.net
Corresponding Secretary	Jim Harper	(503) 538-8738 JLHarperclan@aol.com
Board member at large	Dick Bixler	(503) 690-2557 rf2af@comcast.net
Call Letter Editor	Tony Hauser	(503) 438-0297 abhauser@aol.com
Librarian	Robert Robinson	(503) 255-3585 srrobins@comcast.net

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On the cover: Jay Johnston’s Morrow model CM-1 which accompanies this month’s article from Art Redman about this Salem, Oregon, radio manufacturer.

The next meeting is February 11, 2012

February Monthly Feature: Free radios or test equipment

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

Next Call Letter deadline: February 29, 2012

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, Tony Hauser

At this moment I am frantically trying to finish this month's issue for printing. There is still so much to learn, but I know I will eventually get to the point where I am comfortable creating our newsletter every month.

First of all I'd like to take the opportunity to thank all of the wonderful ladies who worked so hard at our Holiday party to make it such a success. My apologies to the ladies for neglecting to mention this in last month's issue.

This month's articles include one from Art Redman. It describes the history of the Morrow company of Salem, Oregon. The picture on this month's cover is of member Jay Johnston's model CM-1 from the mid-fifties that was displayed at a past meeting.

Sid Saul has submitted another article. This one describes resistance power line cords used to drop incoming line voltage to radio sets.

And Dave Wise has returned with another Play It Again, Sam! article about his restoration and repair work on a 1980's Panasonic multiband receiver. This month's issue has Part I of his article.

Lastly, consider this your next-to-last reminder that your 2012 membership renewals are due. **Next month's March issue will be the last issue of The Call Letter for those who do not renew by the end of March.**

The sun outside is calling me. Time to put this issue to bed!

Remember, the dial stops here.

Tony

NWVRS Meeting Minutes

by Charlie Kent, NWVRS Recording Secretary

At 10:02 a.m. on January 14, 2012 outgoing President Dick Bixler called the Annual Meeting of the NWVRS to order. Charlie Kent read the November and December 2011 meeting minutes as written by long-time Recording Secretary Liles Garcia. The minutes were accepted as published with no corrections.

Treasurer Cliff Tuttle presented an annual treasurer's report in great detail similar to what he reports to the State of Oregon for our organization. In 2011 we had 138 members, revenues of approx. \$4,300 and expenses about \$6,100. A new printer created our deficit. We have \$3,600 in our checking account. The swap meets did very well last year adding \$870 to our income.

Our 2012 budget estimating 130 members is \$3,700 in revenue and \$3,850 in expenses. The Call Letter is our single biggest expense costing approx. \$29/member, estimating \$25/member for 2012 due to surplus ink and stamps. Our Savings Account, aka Jim Mason Account, has an approx. balance of \$33,000, which reflects a 10% increase on our \$30,000 over the years. Cliff was given a well-deserved round of applause.

Dick introduced the NWVRS officers for 2012. Charlie Kent is the recording secretary relieving Liles Garcia from about 12 years of service. James Harper is corresponding secretary replacing Mike McCrow. Cliff Tuttle will continue as Treasurer making the trek from the beach. Mike McCrow has taken on the vice president role replacing long-time Tony Hauser who replaced Rick Walton as the long-time Call Editor. Our new President is Mark Moore. Dick thanked the club for the help given him during his two-year term as our President. All officers incoming, outgoing and doing musical chairs were applauded.

Mark Moore was handed the gavel taking the helm as our new President. He asked Charlie Kent to present his idea on the monthly meeting minutes. Discussion ensued on taking meeting time to read the monthly minutes. A vote decided to not read the minutes as published

in the Call Letter at the meeting, with a follow-up vote to not post the minutes at the meeting.

James Harper announced The Houston Vintage Radio Association is having a convention and auctions over the two days of February 10 and 11. He suggested those interested in learning more go their website at www.HVRA.org for more information.

Blake Dietze told of Wednesday night radio restoration gatherings he has in his garage in Vancouver that begin at 8:00 p.m. (please no early birds). This is sponsored by Blake, not NWVRS. Currently about 15-20 members gather with projects needing help to receive advice from experts. Blake would like to see someone in the Portland area host the gathering at their home alternating Wednesdays to give him and his family hosting relief.

Brian Toon reported our next Spring Swap/Sale will be on May 12th in Aurora at the American Legion Hall. Four months out and already all but two tables have been reserved. A new layout is seeking to add four more tables upstairs. After discussion on the possibility of a location price increase from the \$120/event due to new management, Brian noted as long as we're not losing money, he recommends we stay where we are. Every time we change venues we have growing pains to re-establish ourselves. The subject was tabled to add to the agenda to discuss further next month.

Tony Hauser stated the transition of the Call Letter is going well, and that credit should be given to Rick Walton for the current issue. He asked all to kept the articles coming in. Tony has also been coordinating the purchase and sale of NWVRS clothing (polo shirts and hats) and nametags. Wendy Johnson-Kent will take these tasks, so please seek her out for these items.

Pat Kagi asked members to send him a link and he will post items to our website. Dave Brown from Salem who is no longer a club member has been managing the website and is asking for someone to take over. After discussion, a vote approved the move to hosting our own website. Pat Kagi and Cliff Tuttle will work out the logistics and report back what will be done.

Librarian Robbie Robinson contributed a couple of books to the library. There are five books checked out, and some were returned at

the meeting. He asked after the timeframe a librarian is expected to serve. Our bylaws have the position as an annual appointment.

New Business

Mark Moore took this opportunity to announce it's time to review and update our Bylaws. He asked for volunteers to be on a committee, at which time Robby stepped forward. Cliff Tuttle pointed out changes to our Bylaws must be presented at our next annual meeting next January.

Mark asked for volunteers to work with our archives. Robbie Robinson volunteered to participate in the detail work, which includes rosters.

Old Business

Pat Kagi reported a committee looking into our club using Facebook as social media met at Vintage TEK, a unique museum on Tektronix equipment located in Hillsboro. Six recommendations were suggested by the committee which were approved by vote. At next month's meeting equipment will be brought in for a Facebook demonstration.

The Don Iverson Restoration Award will be awarded at the November NWVRS meeting.

Leads and Needs

Dick Karman needs a diagram for a Lemco crystal set. A picture will do.

Art Redman needs Miller crystal 565 and 595 tuner parts.

Mike McCrow asked for February Program Topic suggestions. **Anything (radio, test equipment, etc.) Free with a story** won with 22 votes, followed by Any FM band radios with 12, tuning eye radios with 9, crystal sets with 5 votes, and test equipment.

There were 64 attendees at today's meeting. The meeting adjourned at 11:26 a.m. A Tech Talk by Sid Saul followed on replacing a speaker choke. He did an amazing presentation using state-of-the-art computer software, including on-screen oscilloscope.

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

- February 11** NWVRS monthly meeting 10 am; tailgate swap 8:30.
- February 18** Salem Hamfair & Computer/Electronics Swapmeet. Rickreall, Oregon at the Polk County Fairgrounds. <http://www.w7sra.com>. Flyer: <http://www.w7sra.com/flyer/Flyer%202012%20Final%20-%202011-10-18b.pdf> (588K) or a low resolution flyer (142K)
- March 10** NWVRS monthly meeting 10 am; tailgate swap 8:30.
- March 10** Mike & Key Swap Meet. Puyallup fairgrounds exhibition hall, Puyallup, WA. For information, contact dmdink@yahoo.com or n7wa@arrl.net. <http://www.mikeandkey.org/flea.htm>. Flyer in PDF. (298K)
- March 31** MicroHAMS Digital Conference. Redmond, WA. <http://www.microhams.com/softcontent.aspx?scId=58>
- April 14** NWVRS monthly meeting 10 am; tailgate swap 8:30.
- April 14** Yakima Hamfest. Yakima, Washington. Selah Civic Center, 216 South 1st Street, Selah, WA. This is an ARRL sanctioned event. For information, contact Lindsay Kooser (509)965-6612 n7rhw@arrl.net. <http://w7aq.org/>
- April 14** Communications Academy. Seattle, WA. This is an ARRL sanctioned event. <http://www.commacademy.org>
- April 20-22** Idaho State Convention. Boise, ID, Voice of Idaho ARC. ARRL sanctioned. Info, Lynn Rasmussen, W7RAZ, (208)550-7710, w7raz24@gmail.com. <http://www.idahostateconvention.com/>
- May 12** NWVRS Spring Swap/Sale at Aurora American Legion Hall, Aurora, Oregon.

The Morrow Radio Company

by Art Redman

Morrow's first mass produced radio was the ac Model CM-1, AM Conelrad receiver shown in the enclosed photo, which dates from 1953 to 1955 where he assembled it in the home of Ray E. Morrow at 577 N. 23rd in Salem. This small set is owned by Jay Johnston and measures 5 7/8" x 4 3/8" by 7 5/16" deep.

Ray E. Morrow went in business in 1945 when radio and automobile production began again after the end of WWII. He sold and installed Motorola, Clarion, Packard Bell and Philco auto radios from his location at 150 South Liberty Street in Salem. Soon, he discovered a more lucrative market installing commercial and custom-made mobile amateur radio equipment. In the 1945 Salem city directory Morrow advertised, "We can make any radio and electronic equipment to order."

The Morrow Radio Manufacturing Company was incorporated in October 1955 and moved to a Salem factory site at 2794 Market Street, NE where the company remained until the late 1980s. The period from 1955 to 1961 are the most interesting for radio

collectors when Morrow centered its manufacturing on fixed station and mobile communications equipment.

The receiver models include "the thirteen tube with twenty tube function" MBR-5 home station or mobile receiver covering 80 to 10 meters selling for \$224.50 in 1957, two Falcon models priced from \$169 to \$189 and the MB-6 receiver. Morrow also manufactured ac power supply units, the FS-1 Field Strength Meter, model MR-2 converter, MB-560 sixty watt transmitter, speakers, and later in the 1960s and 1970s commercial and citizen band transceivers, marine and aviation electronic equipment.

The five band MB-6 receiver was Morrow's top of the line amateur radio in the company's history selling for 239.50 in 1959 and featured a calibrated S-meter, crystal calibrator, noise balanced squelch circuit and a rotating drum dial mechanism unlike the more common model MBR-5. The compact MB-6 measures 4" x 7" deep x 4" high with three of the thirteen tubes mounted sideways. The set is known for its extraor-

dinary stability out performing all its lower priced competitors like the Elmac models PMR-7 and PMR-8.

The board of directors fired Ray Morrow in 1982 due to a nasty labor dispute that went public. The company reformed with public support from his family and became II Morrow. The restructured company centered on avionics and started manufacturing the SL 40 airplane radio-intercom for \$1300.00, LORAN units and GPS systems. The Oregonian and Salem newspapers hailed the restructured company as a great success due to its strong entry in the export market.

UPS Bought the II Morrow Company in October, 1986 because the parcel service was interested in the mobile tracking and communications systems Morrow could produce for its' many delivery trucks. The old Morrow building at 2794 Market, NE is now a Community Action Head Start Center. UPS later sold II Morrow to Garmin GPS.

The End

Bibliography

“II Morrow Sails on Successful Loran Units”, Statesmen Journal, June 12, 1983, page 1A.

“Cinderella-Morrow Rebirth Gets Boost in Export Market”, Statesmen Journal, November 20, 1983, pages C 1, 6.

Johnston, Jay. Owner of Morrow radio model CM-1 and member of the Northwest Vintage Radio Society.

Moore Raymond S. Communications Receivers The Vacuum Tube Era: 1932-1981. RSM Communications: La Belle, FL, Fourth Edition, 1997, pages 89-90.

Polk's Salem City Directories 1942 to 1961: R.L. Polk and Company, Seattle, WA.

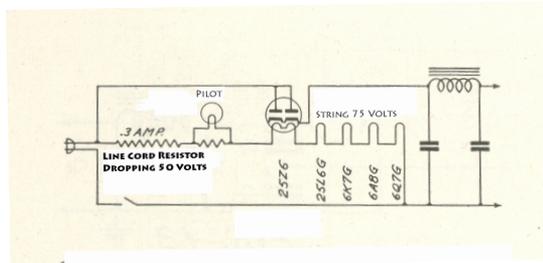
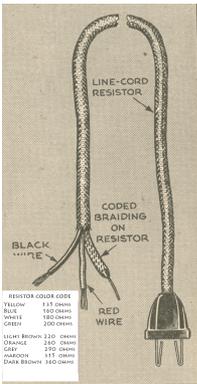
“Ray Morrow's Wife Urges Employees to Stay”, Statesmen Journal, March 6, 1982, page 1A.

“UPS Buying Salem Firm”, Statesmen Journal, October 8, 1986, pages 1A, 2A.

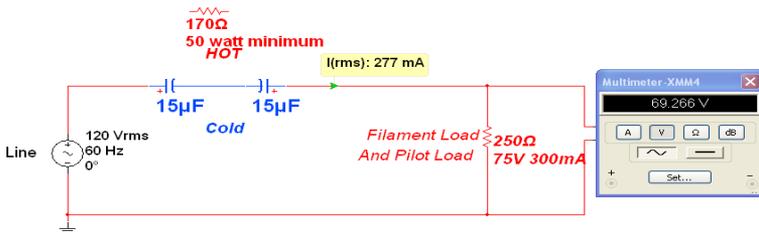
Be Cool!

by Sid Saul

Using the *Line Cord* resistor found incorporated in the original power cords for our beloved *AC-DC* radio, to drop tube -string filament voltage was a great idea. Disapating all that heat over several feet of cord was better than one super hot resistor. That is of course until the cord started to fry, or the *poor* cat chewed it in half.



Even replacing the plug became a major problem. As the nichrome wire didn't solder well, and was not understood to the home owner anyway, repair was often abandoned. Replacing it with a conventional cord became disastrous after the tubes blew out! As seen from the chart, a *Blue* coded cord of 160 ohms would be the ticket for replacement. 50 volt drop divided by 300 mA. Today, we either use a resistor or capacitor to drop the voltage, as line cord resistors are all but gone.



We can either use one *large* “**hot**” resistor to drop the voltage from 120 volts to around 70, or use a *non polarized capacitor (NP)* without all the heat. A 7.5 uF capacitor is about right. Without a lot of math, trial and error centered around 6.5 to 7.5uF is a good start.

If you don't have a single *NP* 7.5uF cap, it can be built from two 15uF electrolytics put “back to back”. This means either negative to negative, or positive to positive. The result being our desired 7.5uF “*NP*”.

There's tons of discussion as to whether back to back electrolytics are a good idea. The use of modern design and high quality a *must*. Eye protection always a good idea. This will not work with the *older style* litic caps placed back to back. If in doubt us a single *NP* cap. Some swear that higher voltage ratings are needed to disapate heat. I would monitor the temperature of the caps, being satisfied after an hour or so without rising much beyond ambient temperature. Bigger may be better. Something to think about next time we gotta to be cool!

See you at the Feb meeting.

Source for AC Non Polarized Caps:

Cascade Electronics (Portland)

All Electronics (California)

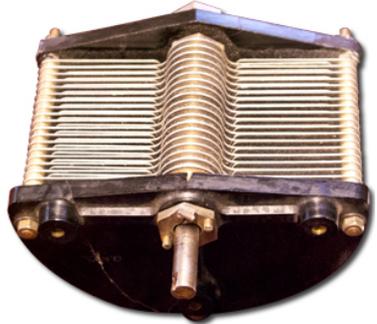
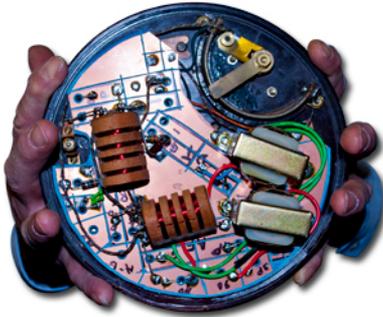
Alltronics (California)

Tanners Electronics (Dallas, TX)

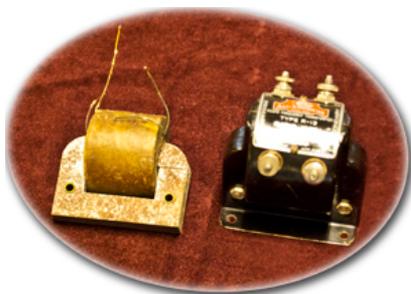
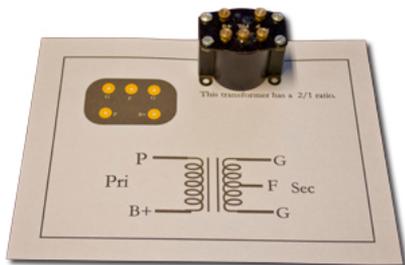
Newark Electronics (hang on to your wallet)

January Display

Blake Dietze, George Kirkwood, Mike McCrow, and Sonny Clutter brought items for the Component Restoration display



January Display



Play It Again, Sam!

by Dave Wise

Panasonic RF-1110E: Part I of II



Made around 1980, this radio is too new to be called Vintage, but I still have a few things to say about it. I got it at the Goodwill Outlet for \$2. It tunes Longwave (150-280kHz), Mediumwave, Shortwave (6-18MHz), and FM, and it has a tuning meter which ingeniously doubles as a battery gauge when between stations.

It was probably some returning veteran's overseas purchase, as it was built for 240V mains. (The RF-1110LBS version is 120/240.) I inquired about the service manual on the Antique Radio Forum, and a nice Englishman sent me a photocopy. The power supply circuit board was common between the two models, with the LBS sporting a regulator in addition to the dual-voltage transformer.

I replaced the 240V transformer with a 6.3V filament transformer, and put a transistor and zener diode in the empty spaces on the board, because I didn't like how high the rail went at zero volume - it's supposed to be 6V but I saw eight-point-something. The original was a 2SC1226 which uses the now-obsolete TO-202 case, but I used the first TO-220 part with the correct E-C-B pinout I could fish out of the drawer. It was a D44C8, a 6-amp piece I had previously used with huge success when I repaired a core memory driver in my IBM 1620 computer.

Although the set works passably well with this arrangement, I think the transformer should really be around 8V, because at high volume the regulator saturates and the rail droops appreciably. This set draws an amp when you crank it up! Not only do the output transistors have

heat sinks, they're not even the slim little TO-1 parts I'm used to - they're 2SC1568's in the TO-126 package, the other popular medium-power plastic case after the TO-220. They drive a transformer, but it's odd, the secondary is used only for negative feedback; the 16-ohm speaker goes right across the primary. It's a very effective arrangement.

Panasonic limited the low-frequency response by under-sizing some coupling capacitors. I increased a 0.01 and a 0.033 to 0.1uF radial-lead film caps that fit neatly in place of the ceramics, and upped the 0.1uF electrolytic to a 1.0 . After listening a while I realized that it was better before, because low-bass transients like bass drum thumps and bass guitar notes were causing the output stage to clip. I put back the 0.033 and 0.1uF caps. (The 0.01 was too small; and also unnecessary, because it was in series with the 0.033 .)

I'm still new to FM alignment, and this set was a fascinating adventure. I had to feel my way, as the service info was patently wrong, showing the two classic scope traces with the same equipment hook-up! I determined that in this set there is no convenient test point for displaying the IF amplitude, so I settled for peaking the tuning meter. Most of this radio's selectivity comes from fixed ceramic filters, with only one transformer to peak. There are two others, but they are part of the detector and get special treatment. Here I could use the supplied test points, but instead of doing the classic sweep alignment procedure, I decided to go for minimum distortion instead. I injected modulated 10.7MHz at TP2, and viewed the audio on a scope and a distortion meter. With 75kHz deviation, I tuned the detector transformer secondary for zero volts average output, then tuned the primary for minimum distortion. Repeat. Then I increased the deviation. 75kHz is the legal maximum supposedly enforced by the FCC, but stations routinely violate this in their ceaseless efforts to bring in funding by sounding the loudest. As I went from 80 to 100kHz, I discovered that the ceramic filters weren't quite on 10.7, because the upper peak of the sine wave clipped before the lower. I edged the injected frequency upward, and eventually found the sweet spot to be 10.73MHz. I was able to pump the deviation clear up to 130kHz without exceeding 3% distortion. Back at 75kHz, it was 0.6% . End of Part I.

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

WANTED: *50's & 60's VM & BSR record changers. Also, a speaker for an A-K model 42 that fits into a Pooley cabinet. Can pick up items at the May swap meet. Homer J. "Jim" Myers, Walla Walla, WA, 509-525-6264

Leads and Needs

Questions about restoration of vintage radio? Visit Radiolaguy's web site often for this information plus lots of other interesting displays, photos, 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>

NEED: ***Cabinet for my slant front HALOWAT All wave 5. Panel 7inches high X 21" long. The panel height is the one that I must match...the 21"length can be worked out by fancy extensions on each end if needed and the panel must slant back, the usual amount. Dick Bixler 503-690-2557.

NEED: ***I'm looking for some knobs for a Crosley model 175. Thank you, Robbie Robinson.

LEAD: ***I have a "Majestic", Grigsby-Grunow Co., Model 90-B, Serial #9B-627575that I'm trying to find a good home for. I cut the electrical cord on it years ago as it was pretty frayed. It has a complete set of new replacement tubes. Contact John Ekberg, Corbett, Oregon. Phone is 503-695-5547 and the e-mail is friedafolks@yahoo.com.

LEAD: *I have several boxes from my father's estate of Sams TV schematics from the 50's & 60's and hate to recycle them. If someone can use them please contact Paul Tyler, Cheshire, OR, 541-998-5920 or 541-207-2525.

Radio Service

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

Roger Brown – (503) 693-6089

Bruce Baur - (503)-708-4537, brucebaur@comcast.net

Blake Dietze – (360) 944-7172, wb6jhi@ix.netcom.com

Jack Doyle – (503) 305-8097

Pat Hickman – (503) 887-9015 Web: www.classictubeaudio.com

Email: phickman@comcast.net

Jim Myers – (509) 525-6264

Todd Ommert – (503) 246-4141 Web: www.burlingame-radio.com

Email: burltv@msn.com

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.

Roster Updates

New members:

Whiting, Brad KD7GDT
PO Box 831
Corvallis, OR 97339-0831
KD7GDT@arrl.net
Interests: US Military Aircraft Radios – WW2 and Korea eras

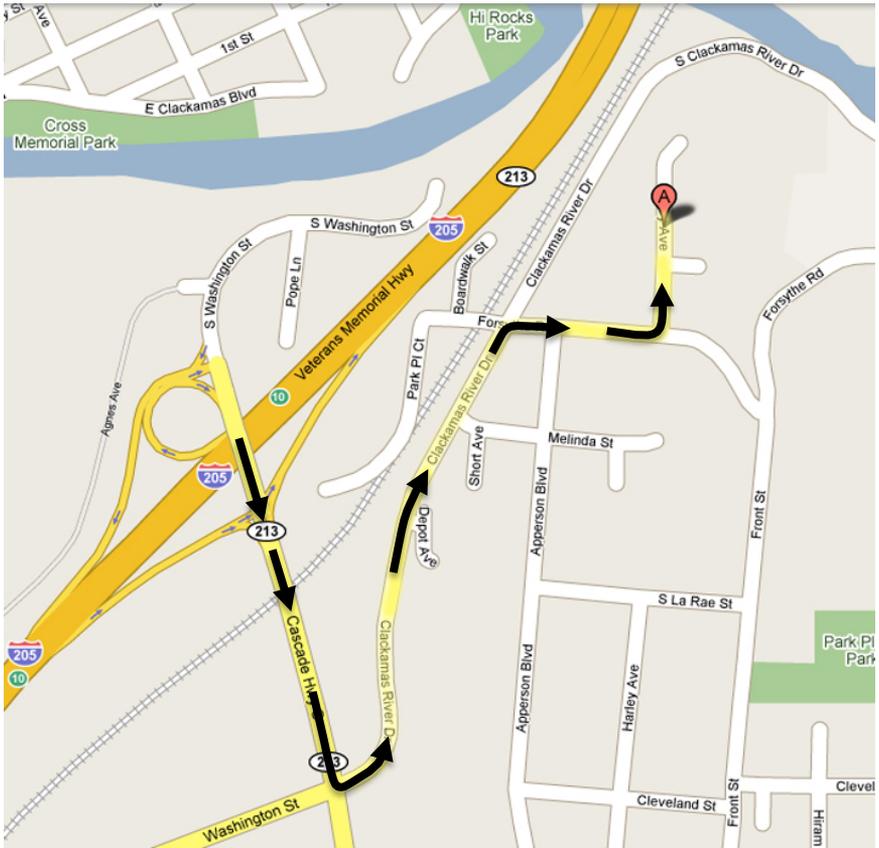
Honeycutt, Jack
2131 N. Dekum St.
Portland, Or 97217-5330
503-283-0871
jack@solid.net
Interests: Early sound equipment, Early TV & Radio

Rossi, Philip R.
59 Wilbur Street
Lake Oswego, Or. 97034-3920
503-635-6658
prossi@juno.com

Kupper, Jim
1935 NE 226th Ave
Fairview, Or 97024
541-731-6878

Bensch, Wayne
PO Box 482
Jefferson, Or 97352-0482
Interests: Bring old Radios back to life. Radio Comm

Meeting Location

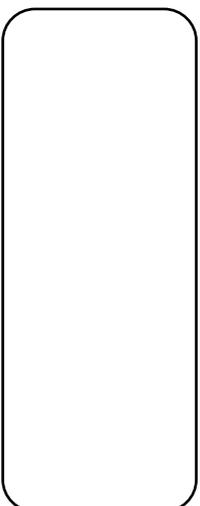
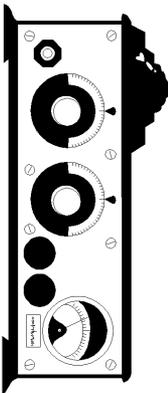


To get to the Abernethy Grange Hall:

1. Exit I-205 at SR-213 (Exit 10 to Molalla) and head south on 213.
2. At the first intersection (the traffic light), turn left onto Clackamas River Dr.
3. Turn right at Forsythe Rd.
4. Turn left onto Harley Ave. The Grange Hall is on the left about a block and a half.



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