

The

Call Letter

June 2018

Vol 44, #6



Nice Radio from May Auction

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.

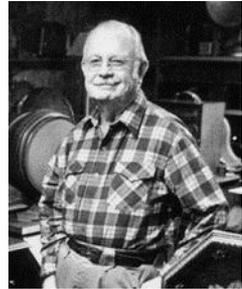
Membership in the Society is open to all who are actively interested in historic preservation. The dues are \$25.00 for domestic membership, due on January 1st of each year (prorated quarterly).

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	Pat Kagi 360 909-7009	patkagi@yahoo.com
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On the Cover

Nice Radio From May Auction

by Happy Goat

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Announcements

The June meeting will start at 9:30 AM on Saturday, June 9.

Note from President Pat Kagi -

We hope that everyone had fun at the auction on Saturday and got some good deals to add to their collection of radios. At this time, we would like to recognize the following members and their efforts to make this auction a great success! Special thanks to: Blake Dietze, Brian Toon, Brian Wegener, Dave Eaton, Don Hanson, Ed Tompkins, Jeff Ladoe, Joe Millward, Liles Garcia, Mark Moore, Mike and Janet McCrow, Sonny Clutter, Myron White

Editor's Note

Please have June's Call Letter Contributions in by June 30.

Visit our web site at:

www.nwvrs.com

Find us on Facebook:

www.facebook.com/nwvrs

NWVRS Meeting Minutes - May 12, 2018

President Pat Kagi called the meeting to order at 9:30 AM. Everybody present pledged allegiance to our nation's flag.

OLD BUSINESS: Some members of our Society are working on plans for our July Swap Meet and Picnic. Our Trash Bash will be at our August meeting. Brian Wegener mentioned that we should be thinking about participating in the OMSI Maker Faire later this year.

NEW BUSINESS: Ed Tompkins is working with KPAM Radio on an advertising agreement for our Swap Meets. The minutes for our April meeting were approved as printed in the May Call Letter.

LEADS AND NEEDS: Larry Tobkin needs a 6K7G tube and a 6A8 tube. Joe Millward needs a brass bezel for a Zenith 6S222 radio. Ray Holland is interested in getting any books and articles written by Jack Darr.

The meeting was adjourned and we auctioned about 150 radios and boxes of radio items.

Recorded by Secretary Liles Garcia

PUGET SOUND ANTIQUE RADIO ASSOCIATION
ANTIQUE & VINTAGE TECHNOLOGY MARKET
SUNDAY AUGUST 19, 2018
Huge **ONE DAY ONLY** event.
Radio, phono, audio, ham, electronics, tubes, books & more.
Sellers fee \$20. Open 6AM for seller setup.
Buyers no charge, 9 AM - 1 PM. Public welcome.
at Shoreline Community College parking lot
16101 Greenwood Avenue North, Shoreline, WA 98133
for information: <http://www.pugetsoundantiqueradio.com>

Calendar of Events

June 8-10. 50th Annual Apple City ARC Hamfest. Apple City ARC. *This is an ARRL sanctioned event.* Dryden Gun Club. Dryden, WA. (Five miles east of Leavenworth on Hiway 2). <https://www.applecityarc.com/>

June 9. KARS Hamfest. Kootenai Amateur Radio Society. Post Falls, ID. Always the 2nd Sat in June. For information contact k7idhamfest@gmail.com . www.k7id.org .

June 9. Port Ludlow ARC Old Fashion Tail Gate'r. Port Ludlow, WA. <https://www.n7pl.org/>

June 18 - 24. 50th Anniversary Washington State SAR Conference. Central Washington University, Ellensburg, WA. <http://www.wasarcon.org/> . Registration is now open! <http://www.wasarcon.org/Registration/tabid/1605/Default.aspx>

June 22-24. 39th Annual KBARA HamOut and Meeting. Valleyford Park, WA. Contact Scott, KA7FVV at ka7fvv@yahoo.com . <http://www.kbara.org/>

July 6, 7 & 8. 9th Annual Kuh Pig Roast. Springdale, WA.

July 7. Parking Lot Tailgate Swap. Spokane, WA. [Flyer in PDF](#) (48K)

July 13-15. Salmoncon. Pacific Northwest QRP Group annual weekend outing. North Bend, WA at Valley Camp. <http://valleycamp.org/> Contact Wayne McFee nb6m@att.net <https://sites.google.com/site/pnwqrpgroup/salmoncon>

July 14. Kootenai Amateur Radio Society K7ID Hamfest. Hayden, Idaho. Contact Adam Crippen, N7ISP adam.crippen@hotmail.com . [Flyer in PDF.](#)

July 14. NWVRS Summer Picnic, Saturday 9:30 AM @ Abernethy Grange, Oregon City, Oregon

Touching Tube Envelope Stops Mystery Hum

By Sid Saul & NWVRS Members (From Society Email List):

Today I deliberately touched my finger to the glass envelope of my radio's audio output tube. Why would I do this? This tube sure looked strong on my good- ol' emissions tube tester! Clue: Boy, my shop must have a boat-load of "sixty cycle" somewhere. -- Sid

--

Touching the tube envelope stopped the mystery hum. Change-out, replacing the tube was the remedy. Cathode to grid (C-G) leakage, (60 cycle), does not always show up when testing tubes. But there it is, mystery hum. It often does not present itself until the tube reaches temperature, and (still) may not indicate bad unless the tube is tapped while testing for shorts. So how did touching the tube envelope stop the hum? Our bodies are always conducting 60 cycle energy from surrounding power sources. When touching the glass tube near its grid, we are canceling the tube's C-G leakage path with our own out-of-phase 60 cycle energy. Bet you suspected I was out of phase! -- Sid

--

It seems to me just too unpredictable that the AC pickup on your body limb would be out of phase with the AC current in the tube. It seems to me that the voltage on the body might even be 90 degrees displaced from the power mains since it is capacitively coupled to the body. The test of my thought would be to reverse the polarity of the AC plug of the radio. Of course, this may not be possible due to a polarized plug. Then this experiment would have to be done with an isolation transformer of some kind, a hookup where you can roll the polarity of the secondary. Or to use a grounded tube shield. The body as well as picking up more than a volt of AC voltage from (especially) fluorescent lighting, also has a capacity to ground. I suggest the mechanism of this effect is due to body capacitance, a capacitance path to a ground, even if it is low capacitance, something on the order of 30 - 50 pF (just a semi-informed guess.) I would be very interested to learn of any explanation of this effect in any text. I don't mind being set right, learning from a puzzle. Or the opinion of other readers. Thanks -- Hue

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This occurred to me also. To cancel the hum noticeably, and thoroughly, the AC on the hand has to be 1- out of phase with the AC on the tube grid, 2- same amplitude as the grid AC, 3-transmitted thru the tube glass to the grid. I suggest that a perfect alignment of all three may be difficult. I am very interested to hear other opinions or explanations. Some of these puzzlers could be demonstrated by a setup with an O-scope, but that's something I cannot get to playing with for some time yet. For example in this case, a 2 trace scope comparing hum waveforms. - Hue

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I was reading on the internet that another source of tube related hum is heater/cathode leakage. It's noteworthy that some tubes can have a substantial magnetic field around the heater conductors that under certain conditions can induce an undesirable hum voltage. Either way I'm sure Sid's Magic finger would help. It really is special, Sid would be inclined to show it to you if asked. -- Tom Millward

--

Not questioning the experience Sid demonstrated, just suggesting you consider the likelihood of one's finger applying the exact phase and magnitude of AC voltage to cancel the leakage. That's not a correct explanation. I kind of wish I had some set that was exhibiting that, it would be fun and interesting to investigate. Re the mag fields, homebuilders sometimes ran into problems from where they placed power transformers and chokes on the chassis. - Hue

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Fun read and very thoughtful of you to share with the group!
Thanks Sid! – Bill Holeman

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I should have said thanks to all, since this was a team effort!
Thank you! -- Bill Holeman

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Sid, what was the output tube type in this question? This is a kink I want to try to remember for servicing. Thanks - Hue

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12CU5 -- Sid

Pics from the May Auction

By Sonny Clutter and Happy Goat

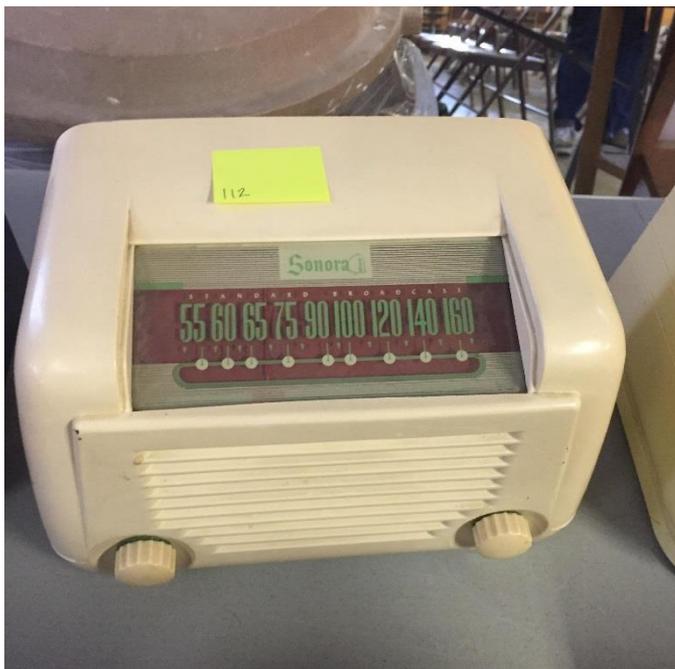


By Sonny Clutter

By Happy Goat



Westinghouse RA-DA - RC



Sonora Model RBU-176

1945 Gyppo Service Tech Spoof Article

From Tom Mayfield, with help from NWVRS members

Just some light reading. - Thomas Mayfield

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This was a recurring subject over the years. I seem to recall a "Dragnet" radio episode about television - repair shop cheat racket. Also a "Tales of the Texas Rangers" radio episode about truck hijackers stealing a load of car radios. Selling "hot" car radios! Both stories were based on actual cases. "Tube rebranding" also goes way back and in fact, goes on today, since there's a huge price differential for some tube brands preferred by audio cultists. - Hue

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Dear Members,

I went to the trouble of downloading the entire article. The author clearly had no business on a subject he knew very little about. This has to be the absolute worst story ever written for these kinds of publications. It embarrasses me to no end. One has to read the entire article to fully appreciate it being totally ridiculous. I am sure there were dishonest repair rackets in radio repair, as there are in everything else. But this article should never have gone to print.

I too remember the radio broadcasts mentioned by Hue. Thanks for jarring my memory. Can you believe this perversion of advice, telling the readers to stay tuned for his next article - How to repair "yourself" the TV's high voltage power supply. At least the illustration was good.

- Sid

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PS, I hope our newsletter editor will include this Sept 1945 Radio Craft article in its entirety in a future Call Letter. Unbelievable!

Sid

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Full Sep-1945 Radio Craft magazine in pdf - Article starts page 774, continues page 815.

<http://www.americanradiohistory.com/Archive-Radio-Craft/1940s/Radio-Craft-1945-09.pdf> - Sid

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I particularly appreciated the explanation of capacitance: "Condensers are nothing more than a roll of ordinary silver paper wrapped up in a cardboard tube with melted wax poured around it. They are graded according to capacity, which in plain language means how much silver paper the tube can hold." If I had known that I would have got my ham license the first time around. Larry Osborne Ph.D. (Ret.)
No longer an authority on anything - Larry Osborne K17UFC

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How about when he was alone, twisting all the knobs on the tube tester. And still couldn't hear anything. Imagine being blamed by that repair fraud of damaging the tube.
Or am I reading more into this than I should. Naaa! - Sid

--
Good afternoon Everybody, I just read both pages of this article. It gives a whole new perspective on political correctness and proper manners!! I also wonder how this article ever got published—but it was published many years ago. See you all on Saturday!! - Best, Liles Garcia

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The illustrations are probably the first clue, but by the second paragraph, where the ill radio is described as a '19-something Colonial", you know it's a satire. I found it pretty heavy-handed and dull and didn't read further. I think it was probably born of radio servicemen's exasperation with dealing with the public. If you have ever been in a job that deals with "the public" you'll know what I mean. There is a lot of variation in the human species. Just look around at Walmart. These old magazines are really a wealth of information. You can gain a lot of radio experience by just reading through them. In this copy was an article on a 3-tube superhet that used a 6J7 as IF, detector, first audio, and AVC, in one tube. The suppressor grid was used as the detector diode. This I think was an idea thought up first in prewar Europe and was also used in the German military receivers that used only one tube type through the whole receiver. I am probably later going to enlarge that schematic in the article and redraw that section of the circuit so I can see how it's all done. There was also in this issue an article on a "Loud Crystal Set". My comment is that with 150 foot of antenna, any crystal radio near any city is going to be loud. - Hue

Beware! The Serviceman!

How to Avoid Being Gyped by this Master Racketeer

By E. A. WITTEN

Do you know that 98% of the servicemen in the United States will gyp you if they get the chance? Yes, of course you do, but do you know what you can do about it? No, Well—this article will tell you all about it.

First, suppose you were to find some day that your Colonial (midgets-when vintage) did not work some fine morning. You turn the radio off (it had been on all night), and shop around for a radio store. (It really doesn't matter which one as they are all just about as bad.) Try to pick one not too near you. This serves two purposes: One, at least you will have made him earn his money, and two, he won't be as likely to lother you in the future.

When you have decided which one you'd like to try this time, call him up and tell him that you have a big job for him. Make it sound important but act as if you are completely ignorant of what goes on in a radio. Tell him that you want him to call for the set at 11 o'clock that night. He'll be tired then and his sales pressure will be

can tell this at first glance.) If you are satisfied that he won't charge you for his time, you can let him come in.

Now as for the kind of treatment he should get. There are two schools of thought on this subject. I usually prefer to stand over them and watch. You'd be surprised how much you can learn this way. Don't offer to help as this only puts you on a friendly basis with him and he'll try to charge more. If he speaks, grunt or don't answer. After all, he is only a tradesman (like salesmen and plumbers) and should know his place. This makes him nervous and he wants to leave in a hurry and so makes his price that much lower.

Some of my friends try the opposite approach. They treat the radio man with a friendly smile. (This always puts him off guard as he seldom gets that kind of welcome.) Then they invite him in and tell him to sit down in their best chair. Then they give him a cigar. A strong one helps. Two

to give you an estimate without even examining the set. If he has to examine it, watch what he's doing. You can learn his business and fix it yourself the next time. He will follow the usual procedure as outlined below.

First, he will remove the set from the cabinet. He might make faces at dust or roaches, but give him a stern look. It's none of his business what is inside of the cabinet besides the set. He might then try to tap the tubes. **DON'T LET HIM.** His excuse will be something to the effect that he's trying to find a mikrohomic tube or something, but don't fall for that stuff. **HERE NO SUCH TUBE LISTED.** I had one serviceman tell me that that was the trouble with my radio once, and I went out to check up on him. I couldn't buy one of those tubes anywhere. Some of those dope radiomen didn't even know what I was talking about. I finally took the set to a good radio store, and do you know what the trouble was? It was just a burned out I.F. transmitter and a busted speaker input condenser.

SO-CALLED TUBE TESTERS

The serviceman will then test the tubes. This always makes me laugh. Those tube testers are a fake if I ever saw one. The mechanic puts the tube in this gadget and looks up a list telling him what he should do. Then he turns a lot of knobs and pushes some buttons and watches a pointer that looks like a speedometer. He then pushes a button marked "Noise Test." That's how I found out it was a fake. I got the guy to leave the room by telling him that I had another radio for him to look at, and then I listened in on his earphones or headphones or whatever you call them. Now my hearing is unusually good and I couldn't hear even one station or any noise whatever no matter how much I turned those knobs. When I confronted him with this damaging evidence, he had the gall to accuse me of burning up my own tube. Imagine.

Well, I knew I was right but I decided to give him enough rope and let him hang himself. He continued this procedure throughout the rest of the tubes. Then he put in another tube in place of the one he claimed I damaged. He next proceeded to turn the set upside down. Then he poked around and touched this and that. He took out of his bag a condenser or something and stuck it in the set. Then he touched it to the metal box of the set and it nearly scared me out of a year's growth. Big sparks almost two inches long jumped from it. I am still convinced that the sparks that jumped that time damaged the set even more than before. This is just some more of these so-called mechanics' attempts at mystification in order to justify their prices.

OTHER "RUBE GOLDBERGS"

He next proceeded to connect and disconnect a lot of wires and he hooked up a machine that had a funny sound but apparently didn't do anything satisfactory because he soon disconnected it and proceeded to hook in a thing that looked like a television set. It had a lot of knobs like all

(Continued on page 815)



"Then he touched it to the metal box of the set and scared me out of a year's growth."

low so you'll be able to see that he doesn't gyp you.

When he comes, act as if it's just a small matter and doesn't really require attention. Also, see that he carries at least four separate instruments. (This is the test of a good serviceman.) He should have a tube tester, and a gadget that makes a loud piercing noise, and at least two more things that have a lot of buttons and dials and other things. These things aren't really too important in having your set fixed but may help to some extent. Mostly they are just his way of trying to make you think that he is doing a good job.

Before he gets in, find out if he is going to make a service charge in case you decide that he is a crook. (Usually you

purposes are served by this. One: he's likely to be friendly and lower in his price to you, and two: if he has greasy clothes on, or if he drops ashes on your new furniture (how careless of you not to provide him with an ash tray) then you have grounds for a suit. It doesn't matter how old or decrepit the furniture might be or whether his clothes are greasy or not. He can still be bluffed into dropping his charges. Maybe you can even get a new radio out of him.

KEEP YOUR EYE ON HIM

When using this approach, again watch him carefully, to see what you can learn. If he's any good at all, he should be able

BEWARE! THE SERVICEMAN!

(Continued from page 774)

radiomen's junk, and it also had a television tube in the center of it. This only showed him a bunch of wavy green lines but no pictures. He tried to make the lines change shape and move around but I guess he saw that he was getting nowhere. I let him see that he didn't make much of an impression on me.

He took out a dirty old black thing with a lot of wires coming out of it, from the set. Then he took out some more parts and stuff. He had to go back to his shop for something or other (I think he said it was a power transformer he needed but that doesn't sound right). This gave me a chance to look over his equipment and see how they work, but the manufacturers purposely make them so complicated and tricky that even an expert electrician couldn't figure them out in less than fifteen minutes.

I did some checking up on prices while he was gone, just so's he wouldn't be able to put anything over on me. I'm passing along the information to the reader for what it's worth. I got it from my janitor who admits that he can repair radios better than most of these so-called radiomen. I also got some good inside dope from one of the kids upstairs who fools around with bells and other stuff, so must know something of what goes on in the radio field. They told me that most radiomen don't know what they're doing and guess almost all the time. He also gave me a list of what parts cost. A condensor only cost three cents except if it's an electrolytic and then it cost about five or six cents. A resistor only costs one cent each. A power transmitter only costs about 30 or 35 cents.

Tubes are cheap also, costing between 23 and 48 cents.

"INSIDE" DOPE ON PARTS

From this price list, you can easily see how much these gyps make on the unknowing customer. I also got some inside dope on what these things are made of. Condensers are nothing more than a roll of ordinary silver paper wrapped up in a cardboard tube with melted wax poured around it. They are graded according to capacity, which in plain language means how much silver paper the tube can hold.

Re-sisters are merely hunks of ordinary carbon put together with two pieces of wire sticking out of them. Some are made with a lot of wire wound around a piece of plaster. These are called wire wound re-sisters. Transmitters and chokes are only big bunches of wire coiled up on pieces of iron cut in the shape of letters like "E" and "L" and "T." Then a lot of tar is poured in and the whole thing is put into a metal box or case. Coils are a bunch of wire wound around a piece of cardboard tube and then covered with wax again. A speaker is just a circle of paper mounted in a metal frame, with a coil of wire wound around the smaller end of it.

Tubes are one thing that always scare the average person into paying a large bill. This bug-a-boo should have been destroyed long ago. Tubes are only little glass bottles with wires inside of them. Some of these wires hold up pieces of metal, while others are apparently just put there for

(Continued on the following page)

RADIO-CRAFT for SEPTEMBER, 1945

(Continued from previous page)

their beauty as they don't hold up anything at all. And that's all there is to them. Absolutely all! If you ever get the chance, or if you have a radio at home that you'd like to experiment with, do as I suggest. Take the set apart. Find at least one of each of these parts. Take each one of them apart thoroughly and carefully, noting what goes where so you can put them back again the same way. In the case of the tubes, be careful that you don't damage the glass too much. The paper piece of the speaker is only glued on so it should come off with a slight tug.

Try your best not to break the little wires on the bottom of this, as it's fairly hard to put them back. The condensers can be taken apart with a penknife and a small pair of pliers. Re-sisters might have to be broken apart with a hammer but the cost of these is so small that you can easily afford the fun. After you have satisfied yourself that what I am saying is true, put the set back together again. If you find that it is too much trouble scoop it all up carefully into a large paper bag and take it to your nearest radio store. For a nominal fee (usually about fifty cents to one dollar) he will put it together again for you. Watch him carefully as he does this, for several reasons. You can learn a lot by watching him and listening carefully to his muttering, and you can see that **HE DOESN'T DAMAGE YOUR SET!** In case you have no confidence in him, or if you prefer to put it together by yourself, you can obtain complete instructions by writing for the author's complete instruction manual, en-

closing \$2.00 to cover cost of handling and air-mailing.

EXORBITANT CHARGES

To continue with my exposé: About an hour later the mechanic came back and after fooling around for another hour he fixed the set so that it worked perhaps a little better than before. He gave me a long sales talk about what he did and then presented his bill for \$8.00!! Imagine the nerve of that gyp! After wasting four-and-one-half hours of my time and ripping my entire radio apart, he wanted to charge me \$8.00. I held my temper, though. I told him that I only had \$2.00 on me at the time and paid him that just to get rid of him. He'll never see the other \$6.00 though. I know better than that. If he tries to collect, I'll sue him for fraud.

Now that I have exposed this thieving racket, I'd appreciate any letters from readers who have similar experiences to relate or who can supply additional information on how to beat the radio racketeer at his own game.

In my next article I will give you the inside story of television and tell you how you can repair your own high-voltage-power-supply television receiver and FM set. I am endeavoring to set up a school to teach the layman how to do all these repairs without any instruments at all, but at present we are bound up in red tape and they refuse to give me a license to operate this sort of school. Eventually we will set up this school, in another state if necessary. Then the public will benefit and these crooks will be driven out of business.



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DJ

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NWVRS Picnic Features:

Sweet Music from the 1930s

Big Band Music from the 1940s

'Happy Days' Music from the 1950s

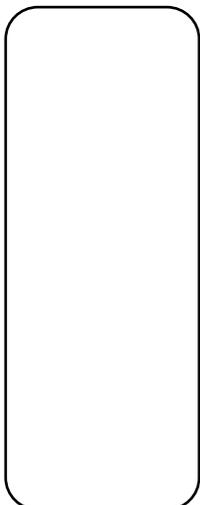
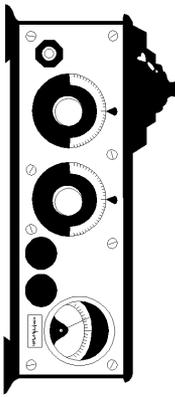
Reliving Radio provides history, music, magic and memories of the **Way Radio Was** at car shows, picnics, wedding receptions, "Senior" Proms and any event where people enjoy the swing music of the 1930s, the big bands of the 1940s, or the *Happy Days* sounds of the 1950s. The mix is just right, no matter what the decade.

Dick Karman has been an NWVRS member since 1979

If you would like period entertainment or just music at a special event, indoors or out, call **Reliving Radio** for availability. He brings everything *except the audience*.



NW Vintage Radio Society
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