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# Next Meeting: June 13<sup>th</sup>, 2015

The Call Letter has been continuously in print since 1974

#### 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, due on January 1st of each year.

The Call Letter has been a monthly publication since 1974. The Call Letter has continued to 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).

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 continued publication of the Call Letter.



# Thank You

A word of thanks to those who have made this issue possible: Sonny Clutter, Chris Butler, photographer; Wendy Johnson Kent, Historian: Sid Saul; Liles Garcia, Secretary; Blake Deitz, Charlie Kent and John Cushing.

#### Society Officers for 2015:

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June 2015

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**On the Cover-** A reminder for our Speed Feldshau memorial July Picnic and outdoor swap meet. (photo from last year) This year the event will be on July 11, 2015 at the Grange Hall.

# **June Monthly Feature**

The monthly feature is a time during most of our monthly meetings when members can bring, display and talk about a radio that meets the criteria for that month. The June featured Radio is the Homebrew Radio and Equipment. Many pieces of equipment were "built from scratch" parts in the early days of radio. If you have a favorite Homebrew (radio that is) in your collection bring it to the meeting and share it with the crowd.

# Note from the Layout guy – New Editor!

Don Hanson is looking into becoming our new editor. I won't speak for him. We're waiting to see how he likes the job and if he will accept it – Next issue we hope that folks who submit articles and news to the Call Letter will be sending it to Don.

# **MEETING MINUTES**

from the May 9, 2015 meeting

President Mike McCrow called the May, 2015 meeting of the NorthWest Vintage Radio Society to order at 10:00 AM.

The group recited the Pledge Of Allegiance. There were 48 people attending. Ken Basting attended as a guest and became a new member. Welcome Ken!!

Mike thanked everyone for all of their assistance at our April Swap Meet. He also thanked Brian Toon for organizing our Trash Bash today. He asked members to send their dues in earlier in the year to make our bookkeeping easier.

The minutes of the March meeting were approved as printed in the April Call Letter.

Members voted to spend \$40.00 for a new lock for our PO Box. Dick Bixler mentioned that our Call Letter will have the KKOV advertising in it and KKOV will advertise our Swap Meets. Mike told the group that we still need a Call Letter editor. We discussed getting a memorial donation box in Rudy's name; the box would be for coffee and donut money.

Members discussed some possible topics for tech talks at out meetings. George Kirkwood described a project that he is working on. Members also discussed some future program topic ideas. The program topic for June will be "Homebrew Radios and Equipment ".

Pat Kagi asked if anyone that paid dues, but did not receive a Call Letter, to let him know. Pat also needs some radio-related items for a museum that he is working with.

Members discussed changing our meeting starting time. We decided to discuss this more at future meetings. Charlie Kent and Rick Ryan said that they had good inputs on our Swap Meet. They thanked everyone that helped at the Swap Meet. Members discussed having a defibrillator unit at our meetings. The program topic today is " radios with cabinets made of nonwood material 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 ". Members showed and discussed the radios that they brought.

The meeting was adjourned, and then some donated radios were sold at auction.

submitted by Liles Garcia, Secretary



# Tech Tip Removing the Potting Material from Transformer & Cap Cans (Tip 11)

By Sonny Clutter

(Potting material is the black\* stuff that looks like pitch or tar)

If you haven't had to do it, you will some day, if you you're your chasis to look original.

Remove the container from the chassis and place it in the freezer overnight. The potting material will become very brittle and you can bang around on the can and often the entire contents will just fall out.

For the more stubborn ones, you can tap or chip the stuff away with a screwdriver until it's loose enough that the whole insides can be dumped. Be careful and don't gouge to deep in the can as you may damage good components such as a transformer or choke.

Do it outside or over a garbage can, that stuff will get on your floor and shoes and if you think getting the stuff out of the can was a problem, you have an even bigger one removing it from you carpet. When you tap on the can use a wood block between the hammer and can so you don't ding it up.

Any number of ideas are on the internet to place more modern components inside the original can to keep the radio looking good.

\* There are different materials used for "potting" components and other colors will be found. Some have fairly low melting point such as "Pine Pitch" which is amber in color. This can be melted with a heat gun, saved and reused.

# The Aspiring Radiotrician I had a problem

My admittance of this embarrassing situation was only made possible for the kindness of our fellow club member. Who by the way wanted to remain *strictly* anonymous. I positively assured him that I would respect that wish. The *senior* club member along with his beautiful wife recently paid a visit to our new home in Hebo. It was such a surprise as they drove up in their Mercedes-Benz Sprinter Van.

Aware I had a problem, feelings of embarrassment kept me from admitting this to myself and to fellow club members. Our secret guest that day took me aside during a demonstration of my late 40's TV. The truth surfaced as we stood in close proximity. Both staring into the screen and making short glances toward one another. I pretended not to notice. He said "you should not feel like you are alone". I pretended not to hear, and not quite sure about wanting the truth. It seems he had these symptoms many times himself over the years. And always while restoring TV's for his own fine collection. I felt caught, but can you imagine the weight lifted at that very moment! I now had hope, and even better a name for this terrible secret now exposed, "Barkhausen Oscillation" he muttered.

I recall he may have used other names such as Snivets or "Spooks". The latter describing my symptoms to a tee. He explained that those vertical black bars appearing in the picture were due to the unwanted oscillations of the horizontal sweep output tube, such as the 6BG6, or 6BQ6, etc. The easiest cure was to simply find another tube without this oscillation, or to place magnets on both sides of the tube and adjust their placement until the lines disappeared. He told me back in the day that you could buy what was then called B.O. Eliminators. "Wow" I exclaimed. So others have been in my shoes? I had inklings that I should have called the local Radio Shack in Tillamook long ago, using another phony name of course. "Now what did I call myself the last time."?

Since then I have found an old ad in a 1953 Service magazine. This little devise had been made by the Perfection Electric Co. of Chicago 16 Illinois. I hope I don't have to send off for one, as they may have been out of stock for some time due to high demand. I hope they can ship one in my frequently asked-for plain wrapped box. Remember I live in a very small town, and what if word got out!

It was so nice of this gentleman and his wife to stop by. He took my picture in front of the house before they left. Maybe someday I will share this with you. I feel much better now that I have finally confessed, and all without having violated this members trust. I can now face you and the club once more.

So until next time, and from one who can keep secrets! Your Aspiring Radiotrician,

Sid Saul

(More on vintage TVs on page 10)

# Photos from the May Feature



## Alan Shadduck





#### Mike McCrow

Call Letter

# Bringing Your Antique TV To Life Again

By John Cushing

One reason so few folks collect antique TV's is that almost all the analog stations went dark in 2009. I say *almost*, because in Bend there's still one UHF analog station broadcasting religious programming. But aside from that all you could get on your 1948 Hallicrafters T-54 today is snow.

I got tired of this and built a system that lets me watch whatever I like on my vintage TV's. My system has four parts:

1) **Analog video/audio sources.** My media rack includes a DVD player, a Laserdisc player, a VHS videotape deck, a Hi-8 videotape deck, and a digital TV tuner. All of these have an analog composite video output and a stereo audio output.

2) A signal switcher. With all these sources I needed a way to choose a source. My switch is an 8-input 1-output box that lets me choose any of the sources just by pressing a button.

3) An agile RF modulator. Before digital TV these were often used in hotels, businesses, and schools to distribute analog TV over cable to multiple locations. These differ from more basic RF modulators in that they have more power and you can choose from many channels not just channel 3 or 4.

4) A dipole antenna. Agile modulators were intended to drive networks of coax cable to hard-wired TV's. But if you connect a simple dipole antenna to its RF output the modulator can radiate a strong enough analog TV signal to be picked up by nearby TV sets with "rabbit ear" antennas.

Parts 1 and 2 are pretty self-explanatory. You really need just one source of analog audio/video. I built a more complex system because I have a large library of videotapes and laserdiscs.

Part 3, the agile RF modulator, is easy to find. Agile analog RF modulators were made by many companies, such as Blonder

Tongue. As I write this there are over 75 BT agile modulators for sale on eBay. You can get one for less than \$50.

There are several models, some with more output power than others and some with more features to adjust and display the modulation or output. Some agile modulators have stereo audio inputs, while others only handle mono. For most antique TV's mono is what you want.

The nice thing about an agile modulator is that you can choose any of the VHF or UHF stations for your in-home broadcasts. This is important, because you will want to avoid any active TV stations or other VHF/UHF uses in your area. (More about this below.)

Part 4, the dipole antenna is actually two parts: First you need a 75-ohm to 300-ohm antenna coupler. Most RF modulators want to see a 75-ohm load, but your dipole antenna will act more like 300-ohms. You can find these all over.

Second you need the dipole antenna. The simplest way to do this is to use an old pair of "rabbit ears." Just connect the twin lead from the rabbit ears to the 300-ohm side of the 75/300 coupler and the 75-ohm side to the RF modulator's RF output. By adjusting the length and position of the rabbit ears you can get the best signal output for your chosen channel.

I did something a little more fancy, because I always use the same channel. I built a folded dipole out of 300-ohm twin lead, with the length adjusted for that specific frequency. Here's a website that shows you how to calculate the length and make the folded dipole: http://users.wfu.edu/matthews/misc/dipole.html

With this setup I can transmit any of my analog sources to vintage TV's within about 30 feet. Most agile modulators allow you to adjust the output level, and you will want to keep it as low as possible so as to not interfere with anyone else. An easy way to check your signal is to walk around with a Sony Watchman pocket TV. You can find these on eBay for less than \$20.

On the next page see my 1957 Admiral two-tone portable receiving one of these broadcasts.

Some of you are probably about to say that what I have been describing is illegal. Here's what the FCC has to say about this in Bulletin #93 concerning low-power non-licensed (Part 15) transmitters:

Hobbyists, inventors and other parties that design and



build Part 15 transmitters with no intention of ever marketing them may construct and operate up to five such transmitters for their own personal use without having to obtain FCC equipment authorization.

This is the rule under which hobbyists have long been building low power AM transmitters to broadcast to their radios from phonographs, etc. For television the rule is more restrictive:

With the exception of intermittent and periodic transmissions, and biomedical telemetry devices, Part 15 transmitters are not permitted to operate in the TV broadcast bands.

I am not a lawyer and I am not offering legal advice, but as I read this it says that *intermittent* or *periodic* transmissions in the TV bands are OK so long as they do not violate the other rules for Part 15 uses. In particular, your transmissions must not cause any interference with licensed uses of those bands.

There are many unused VHF and UHF frequencies in most places. If you choose a TV channel that is not in use in your area and you use it for brief periods of time and you limit your signal strength so that it does not leave your property it is very unlikely that anyone will even detect your broadcasts, let alone experience interference.

People in the middle of 100-acre ranches in Central Oregon have nothing to worry about. On the other hand, if you live in a Portland apartment house and run your transmitter all day every day, it's probably not a good idea to start a TV station for your Vintage Televisions

# **History** From our Historian Wendy Johnson-Kent

# GENERAL LETTER NO. 265. DECEMBER 24, 1924 TO SUPERVISORS OF RADIO AND OWNERS OF AMATEUR RADIO STATIONS REGULATIONS GOVERNING THE OPERATION OF AMATEUR STATIONS.

# WAVE LENGTHS

 $150\ to\ 200\ meters,\ 75\ to\ 85.7\ meters,\ 37.5\ to\ 42.8\ meters\ 18.7\ to\ 21.4\ meters,\ and\ 4.69\ to\ 5.35\ meters\ are\ allocated\ to\ amateur\ stations.$ 

# SPARK TRANSMITTERS

Amateur spark transmitters produce considerable interference and consequently are responsible for many complaints. Amateur owners of such transmitters should abandon their use as early as possible and adopt a system producing less interference. Until such change is made they will be permitted in the wave length band between 170 and 180 meters and should have a decrement not exceeding .1.

## PHONE and ICW TRANSMITTERS

Phone and ICW (Interrupted Continuous Wave) transmitters will be permitted in the band from 170 to 180 meters. ICW shall be defined as the type of wave produced by mechanically interrupting one or more of the radio frequency circuits of the type of wave produced by any transmitting set which produces an equivalent effect.

## <u>CW TRANSMITTERS</u>

CW (Continuous Wave) transmitters will be permitted in all of the bands allocated for amateur use.

## COUPLED CIRCUITS

Amateur stations must use circuits loosely coupled to the radiating system, or devices that will produce equivalent effects to minimize key impacts, harmonics and plate supply modulations, accept in cases where loops are used as radiators. Conductive coupling, even though loose, will not be permitted.

## POWER SUPPPLY

No restrictions will be imposed relative to the character of power supply, provided the emitted wave is sharply defined.

#### <u>QUIET HOURS</u>

Amateur stations when using wave lengths between 150 and 200 meters, are required to observe a silent period from 8 to 10:30 p.m. daily, standard time, and on Sundays while church services are being broadcast. Such stations, when using wave lengths below 85 meters and having a pure continuous wave or where a full wave rectification is employed, are not required to observe a silent period, provided no interference is caused other services.

#### STATION LICENSES

Licenses issued for amateur station will authorize the use of any or all of the wave lengths allocated for amateur use, provided the transmitter meets the requirements of the above regulations. No alterations in the apparatus will be permitted which results in changing the character of the emitted wave, except under the authority granted by the Supervisor of Radio.

#### INTERCOMMUNICATIONS

Amateur stations are not permott4ed to communicate with commercial or government stations unless authorized by the Secretary of Commerce, except in an emergency or for testing purposes. This restriction does not apply to communications with small pleasure craft such as yachts and motor boats, which may have difficulty in establishing communications with commercial or governmental stations.

#### SPECAIL AMATEUR STATION LICENSES

There being no further need for special amateur station license, owners of stations holding such licenses will be permitted to continue the use of their "Z" call under regular amateur station licenses. No new "Z" calls will be issued.

The privilege of using the wave lengths from 105 to 110 meters is withdrawn.

(signed) A.J. TYLER, Acting Commissioner S.B. DAVIS, Jr., Acting Secretary of Commerce

(A scan of the original 1924 document is in our archives and was submitted by Wendy – all typographical errors can be attributed to the lay out guy.)

# ...it's always a Sunny Day at...



In the Portland Metro area tune your vintage sets to some of the great music of the last 50 years.

# **KKOV 1550 AM**





