

The

Call Letter

June 2016

Vol 42, #6



Alan Shadduck's Hallicrafters TW-25

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.

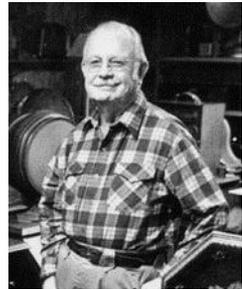
Membership in the Society is open to all who are actively interested in historic preservation. The dues are \$25.00 for domestic membership, due on January 1st of each year (prorated quarterly).

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	Brian 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

Alan Shaddock's Hallicrafters TW-25
Photography by Chris Butler

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Announcements

Our July 9 meeting will be the "Speed Feldschau Memorial Swap Meet and Picnic"

June Meeting

The next meeting will be on June 11 and starts at 9:30 AM.

June Feature

June Feature is "Factory or Homebrew Two-Tube Battery Radios"

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

Visit our web site at:

www.nwvrs.com

Find us on Facebook:

www.facebook.com/nwvrs

Meeting Minutes

NorthWest Vintage Radio Society--Meeting Minutes

President Mike McCrow called the May 2016 meeting of the NorthWest Vintage Radio Society to order at 9:30 AM. Joe Millward and Mr. Lillie attended today as guests. Welcome to both guests!! We had fifty three attendees at our meeting today. We received a "Thank-You" note from former member Gordon Ormsby's family. Mike thanked everyone who helped with our Swap Meet last month. Most members had a good impression of our Swap Meet. Members gave those who helped a round of applause.

Members discussed the auctions that we have been having at the end of our Swap Meets. The auctions require a lot of time and many of the left-over items are only marginally saleable. The group voted to continue this discussion next month. We will have our "Trash Bash" at our June meeting. Our July meeting will be the "Speed Feldschau Memorial Swap Meet and Picnic". Mike told the group that he will not run for President next year. Brian Toon also said that he will not run for Vice-President next year.

The minutes for our March meeting were approved as published in the April Call Letter. Pat is looking for more information on the Zenith radio from the Internment. Damon mentioned that the library has some new books. Charlie Kent said that the Swap Meet advertising is working well. He also said that he has shirts and caps for sale. The Monthly Feature for our June meeting will be "Factory or Homebrew Two-Tube Battery Radios". The Monthly Feature for today is "Radios From Someone Special"; members showed and discussed the radios that they brought.

The meeting was adjourned and an auction followed.

Recorded by Liles Garcia, Secretary
May 14, 2016

Calendar of Events

June 3-5. Sea-Pac Hamfest and ARRL Northwestern Division Conference. Seaside Convention Center, Seaside, Oregon. *This is an ARRL sanctioned event.* SEAPAC@seapac.org . www.seapac.org/ . [Mailer in PDF](#). (919K)

June 5. CVRS Antique Radio Swapmeet. Burnaby, BC. http://rac.eton.ca/events/detail.php?event_ID=1812

June 9-12. Mountain Rescue Association Spring Conference. Port Angeles, WA. <http://mraconference2016.com/>

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. Our July NWVRS meeting will be the "Speed Feldschau Memorial Swap Meet and Picnic"

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. *This is an ARRL sanctioned event.* <http://www.gwhamfest.org/> [2015 Photo Gallery](#)

Monthly Feature

Radios From Someone Special

Photography by Chris Butler



Sonny Clutter - Gilfillan Mirror Radio with non-original chassis from Joey Tompkins

Guest Dave Walter – Philco 46-480



John Cushing - Stromberg Carlson 130R from Dr. Banting (Nobel Prize, Insulin, '23)



**Jerry Hertel – six tube 1946
Farnsworth with extra RF section
from his brother**

**Liles Garcia - Delane PR-15
Special Pierson Emelia Earhart
Radio with low band
from Ron Hershey**



**Alan Shadduck –
Hallicrafters Table Radio 1953
with original manual**

**George Kirkwood –
RCA Model 32
from Jerry Talbott**



Apollo Radio Manufacturing Company

By Art Redman

For over five years, Portlanders could only buy battery powered sets made in the East and in California. In February 1933 Portland, one radio manufacturing company made ac powered sets. The 1933 company was the Apollo Radio Company located at 441 Glisan near Eleventh, which was the old 1933 Portland address. Apollo Radio is not in the Polk's Business Directory or phone books.

Curly-haired M.E. Moes, who was the Edison manager in Orange, New Jersey, was the general manager. C.R. Woodward and E.E. Fitzwater were the other officers and L. Hosman was sales manager.

The Apollo Company began with a large storeroom filled with parts and employed 15 beginning February 5, 1933, and with development was expected to have a payroll of about forty. Their plans were big - manufacturing three to 16 tube sets, midgets to consoles. In addition, an auto radio adaptable to police short wave was planned.

Advertising began in the Oregonian on April 30, 1933 for their midget set selling for \$24.95 (on sale for \$14.89) at Meier and Frank stores and Cohn Brothers and a 5-tube superhet short wave receiver for \$29.95. It seems Apollo made only two models because their advertising in the Oregonian ended during November 1933. How many Apollo sets have survived is unknown. The only reason I knew about Apollo is the midget set owned by a NWVRS society member Tom H. from Washington County and he does not have a console or a sixteen tube set. Does anyone else in the NWVRS have another Apollo radio made in Portland? Call Letter readers would like to know.

Sources:

"Behind the Mike Column, The Oregonian, February 2, 1933, page 18.

"Apollo Ad", The Oregonian, April 30, 1933, page 14.

"Midget Set Prize," The Oregonian, October 12, 1933, page 4.



**Apollo Midget
Radio**
Long and Short Wave **\$19⁹⁵**

Reg. \$29.90

Here's a real long and short wave set at less than an ordinary radio. The best value of the year.

- New Type tubes
- Dynamic speaker
- Dial light
- Kilocycle tuning

—Downstairs Store

Reprint of 1992 Article by former President Dave Rutland

Introduction by Dick Karman

One of our active members in the early years of the Society submitted material to the Call Letter. This is one of his later reminiscence. His historical perspective is still enjoyable today, more than two decades later.

Hi Fidelity Circa 1945 By David Rutland

Toward the end of World War II I was working on a secret war project in Pasadena, California, as an electronics engineer. During my college days I had become interested in hi-fidelity sound equipment as a hobby and had built my own amplifiers and two and three way loud speakers. This is the story of how enthusiasts like myself obtained high quality music programs to play on our "Hi-Fi's".

Most of us that collect old radios enjoy the "tone" of great consoles of the '30's and it is still amazing to me that they were able to produce such good quality using the AM broadcasting system and the simple vacuum tube amplifiers. But we all must agree that there is a vast difference of quality between those radios and the modern stereos and CD players. This difference is, of course, due in large part to the increased range of audio frequencies that modern systems can reproduce.

AM Broadcast

The AM broadcast system, which has served in its basic form for so many decades, was designed to transmit audio over the range from about 100 to 5000 Hz while a good stereo is expected to reproduce from 20 to 20,000 Hz. It's the nature of AM broadcast that a station takes twice as much room (or bandwidth) on the dial as the highest audio frequency that it transmits. So AM stations were placed as close together on the dial as 10 KHz (10,000 Hz) which meant that if one wanted to receive high audio frequencies to increase the fidelity of your system you would most likely get a 10,000 Hz beat note from a neighboring station. This sounds like a very high pitched squeal which, to say the least, is not at all conducive to high fidelity listening. A well-known supplier of radio frequency coils for hobbyists in those days was the Miller Company. They made a kit for a high fidelity AM broadcast receiver which used the old fashioned (in 1940) TRF circuit more typical of the 1920 radios. This

circuit appealed to the purists because of its low noise. The superhets of the day introduced a hissing noise in the heterodyne circuit which, when you tried to obtain a wider frequency response became quite noticeable.

However, the reason that I mention the Miller tuner is that I remember the 10 KHz filter that you could switch on to eliminate the squeal from the adjacent station. I built a tuner using an alternate way to get hi-fi AM sound. In order to reduce the hiss I used a very low noise superhet circuit with a variable bandwidth feature. Thus I could increase the band width until I heard the 10 KHz squeal and then back off a little until it was gone. Powerful local stations could be received on a wider bandwidth than those farther away.

Collectors of communication receivers might be interested to know that my variable bandwidth tuner used IF transformers from Hammarland's Super Pro. I still have this vacuum tube tuner and it still works!

Early FM Reception

Of course the great early radio engineer, Armstrong, had the solution for the noise and bandwidth problem -- Frequency Modulation or FM. What a long time it was before it was recognized as a far superior system for accurate sound reproduction.

By the beginning of World War II the FCC had authorized FM transmission as we know it now but without the stereo. Commercial stations were licensed to broadcast on a band around 50 to 60 Megahertz, about one half of today's band (88 to 108 MHz). Back East several stations were on the air, including, I believe, those of Armstrong and Westinghouse. Everything in broadcast radio, including the early 441 line television, came to a halt with Pearl Harbor. In Los Angeles only one FM station was on the air, KHJ-FM. A Mutual Broadcasting network affiliate, KHJ was owned by Don Lee, an automobile dealer. They were always thought of as ahead of their times and Don Lee had the FM station on top of Mount Hollywood, the high peak right above Hollywood.

Now here was the possibility for me to get real hi-fidelity and so I looked for an FM tuner. They weren't building them during the war so in 1945 I had to settle for an old chassis without a front panel and in need of

minor repair. Since there was only one station to receive I didn't have to get the set very well aligned. I was, however, able to find a test oscillator at work to align the IF section which, in those days, required delicate adjustment to provide the proper wide bandwidth.

Since I was in Pasadena not directly in sight of Mt. Hollywood I couldn't just use a short piece of wire for an antenna. I therefore got a 6 meter directional amateur radio antenna and installed it on the roof. Now I was ready to really hear some good music over my home-built three-way speaker. Or perhaps it was my studio Altec speaker with multi-cellular horn and 15 inch woofer? But I was in for a little disappointment at first.

The problem lay with the program material available to broadcasters in those days. Of course for the general public there were the scratchy shellac records made to stand up to the eight ounce (that's right, one-half a pound not 8 grams) pickups or tone arms. I remember my first "four ounce" and by 1945 the studios were using one ounce (30 gram) pickups.

But the studios didn't always play shellac records, they had vinyl pressings. Many of these were 16 inches in diameter. They had the same size grooves as the 78's but ran at 33 1/3 RPM so that you could put 15 minutes of program on each side, adding up to the length of the old radio shows, one-half an hour for both sides. When visiting Camp Irwin in the desert north of LA on business many of us, electronic engineers and some hams, visited the camp broadcasting station. Every military camp had its own station which broadcast through the ac power lines. Most of the time they played these 16 inch "transcriptions" as they were called which were distributed by the Armed Forces Radio Service. All the old programs were on these large vinyl records and I was able to scrounge a few to take home. Of course I had to build a 16 inch turntable to play them, but that's another story.

But these didn't have the fidelity I would have liked. Part of the problem lay in the telephone lines used to transmit radio across the nation. Ordinary telephone lines generally do not have a frequency response above 3000 Hz. But the Bell people put two of these lines together to provide about twice then bandwidth and leased these lines to all the networks. The bandwidth was satisfactory for AM radio but fell far short of the capabilities of FM. Unfortunately for me most of the big

bands were playing in New York and Chicago and by the time they were transmitted to KHJ they sounded pretty bad, at least to a Hi-Fi fan like me.

But I was in luck. Once a week Don Lee put on a live music program from their studios in Hollywood that went by RF link direct to their transmitter. This program played popular and semi-classical music and used a format that satirized classical music concerts. They called it Music Depreciation and had a very funny host. But the music was great, the orchestra was first class, and famous people were guests like Les Paul on guitar and Andre Previn on the piano (he's now a famous symphony orchestra director). And, don't forget my friends and I could hear the full audio range as good as today's CD's. Well almost as good!

I was fortunate to have another source of high fidelity material through a friend who had connections with the Hollywood recording studios. You must remember that magnetic tape was unknown in America in 1945 except perhaps to our intelligence services for the Germans had magnetic recorders all during the war. So all recording was done "direct to disc" as they used to say. Very sophisticated recording machines or "lathes" were used to move a cutting head across the spinning disc with a V- shaped diamond cutter. These acetate discs had an aluminum base, except towards the end of the war when glass was used instead of aluminum, the latter being a scarce war material. I still have some glass records, the majority being broken over the years.

Incidentally, it took an amplifier with 100 watts or more of power to drive the cutting heads. This was supplied by large amplifiers using small transmitting tubes such as the 807. Studio control rooms were filled with racks full of these monsters.

Since the recordings were made from the performers direct to disc there was no way one could edit and if the "cut" wasn't up to perfection the performers just had to try again. So now and then I got a rejected disc bootlegged out of the studio by my friend. These records had very little scratch noise, especially when they were new, and I built special turntables with low rumble (the bane of the record changer) to play them. In this way I was able to have music in my room with the fidelity of the LP's of the '60's while everyone else had to be content with scratchy shellacs.

Don Iverson Special (a one of a kind radio)

by Sonny Clutter

Don Iverson of Portland, OR (WA7AKY) was a master mechanic, highly skilled & knowledgeable electronic technician, amateur radio operator and a genius when it came to electronics and mechanics. His imagination and creative skills came to life with his many vintage looking radio creations. He even coined his own brand name for his creations; "WIRELESS APPARATUS".

His collection not only included his many creations but the very best of rare radio & wireless items.

More on Don and his creations can be found on this webpage:
<http://www.n7cfo.com/Tgph/iverson/iverson.htm>



After Don's passing in 2009, a *picker* in the Vancouver, WA area acquired and sold much of his collection (as well as many of his creations) on eBay. I was fortunate enough to purchase one of them, the subject of this article.

The above piece represents one of his original creations; an attractive one tube regenerative radio receiver that covers the broadcast band and works quite well. The internal parts are all vintage. The tube is a more modern reproduction that I purchased a number of years ago when offered for sale in the publication; "ARC". It was made by a European manufacturer.

I'm not sure why (as most of his work included authentic looking labels), this piece did not have a label or any ID when I purchased it on eBay. So I created not only the rear terminal label but did a little creative work of my own by designing and making an appropriate logo for Don's "Ghost" company; "WIRELESS APPARATUS".



Tube Lighted



Oblique View



Back Side



Size Comparison

Adapted from Sonny's Website <http://www.radiolaguy.com/Showcase/Battery-20s/Don%20Iverson%20Special.htm>

The music you love to listen to...

Sunny1550AM33016



America's best music

33 rpm

45 rpm

QUARTZ

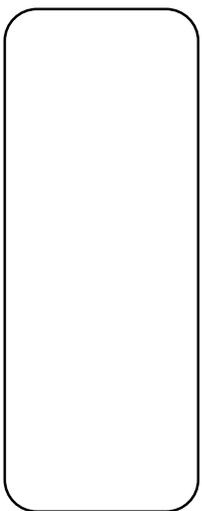
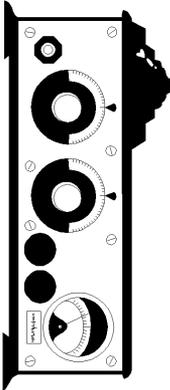


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P.O. Box 82379
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