



Broadcast News

June 2008

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PRESIDENT'S PAGE

By Jim Collings

I've been too busy to plan topics for my column, and now it's due, but here are my thoughts: The meeting last month was one of the best we have had in a long time. Tom Laszynski and Frank Karner took what sounded like a hard topic to discuss, on Morale radios, and turned it into one of the best programs we have had. Jim Tyrell has details elsewhere in this issue.

The June meeting will be on June 14th at the Hometown Buffet on NW Expressway, at the normal 6 PM time. The topic for the meeting was suggested last month, and is on portable radios. This is a wide open topic, and anything with a handle can qualify. So everyone should have something to bring to tell us about. We will continue our discussion begun last month on needing to raise the dues to cover printing and mailing costs for the Broadcast News. It seems that raising the dues is required as our treasury is dwindling, even with some members electing to receive their issue by email. Also June is typically when we elect/re-elect officers. We should have a good donation auction, as usual.

I attended the VRPS swap meet in Irving on May 17th. It was held at the Irving Garden Center where the meetings used to be held, as the normal facility had been previously booked by another group. It was smaller, with fewer parking spaces, but still was adequate. There were some interesting items, and I bought a few things, but did not sell much, as I did not take a lot of items. It seemed a little smaller than some of the previous swaps, but still had quite a few out of town collectors. We continued our trip south to San Antonio, stopping at the antique malls along the way. I don't recommend this to anyone. Anything relating to radio was rare and what we saw was in poor condition and way overpriced.

Don't forget the Summer Sizzler! This is the Tulsa club's annual swap meet and contest. It will be held at the same location as last year at a church in Broken Arrow. The date is June 21st, the Saturday after our meeting, and of course, it starts at 8 AM in the morning. I enjoyed last year's event! This one should be good also. I'll have more data at our meeting. See you there!

The OKVRC Monthly Breakfast will be held at 8:30 AM, Wednesday morning, June 11, 2008, at the new Denny's just off of I-40 and the Douglas exit on Douglas Blvd. The address of the restaurant is 3130 S. Douglas Blvd., Oklahoma City, OK 73150

Report for the OKVRC Meeting of May 10th 2008

About twenty club members showed up May 10th for OKVRC's regular second Saturday of the month meeting at the Hometown Buffet in Oklahoma City. We began dinner in the main dining room

since our usual private dining room was still occupied by a previous reservation. They were gone and the room cleaned by about 6:15 and we moved in. By 7:00 PM everyone was well fed and ready for the night's program.

At 7:00 PM President Jim Collings called the meeting to order. Some club business was discussed first. Jim reviewed several auctions he had recently attended. Also, the rising cost of postage and printing the club newsletter is placing a strain on the club's modest financial resources. We are trying to keep the cost at \$12 a year, while continuing to send out the newsletter in paper form to those members who prefer that format. If you are willing to receive the newsletter in E-mail form (which provides all of the same content plus the pictures are in color and much sharper), just drop an E-mail to Dale McLellan at rxradio@aol.com.

Tonight's program was on World War II Troop Information Radios, often referred to as "Morale Sets". Once a nation joined the fighting in WWII, radios disappeared from store shelves as that nation's electronics industry switched to the production of military electronics. But many nations continued to produce broadcast / short-wave radios for entertaining troops via that nation's armed forces radio services. These sets differed from their commercial equivalents in that they were built to the same rugged military standards as actual military radio communication gear. They had to be resistant to vibration, moisture, salt air, insects, and other hazards that would quickly silence a commercial living room set. As a result, these sets while often ugly and heavy, were usually very well built from high quality components, and often still work today. They could be found in mess halls, barracks day rooms, officer / enlisted clubs, and on ships. Almost all could run on both battery and AC power, so they could also accompany troops in the field.

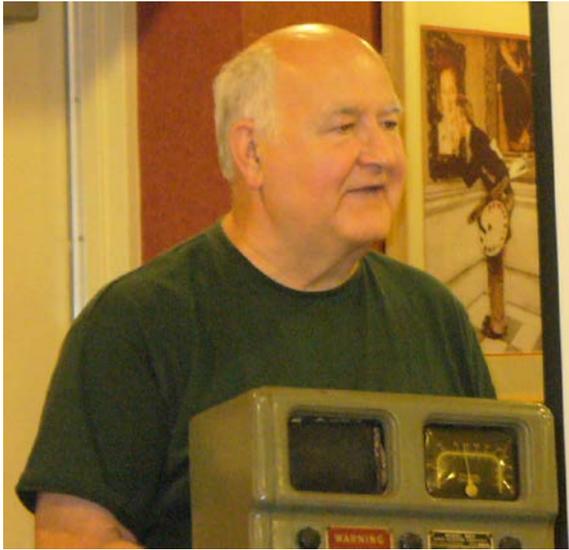
Club members Frank Karner and Tom Laszynski brought in some excellent examples of these sets for the club to enjoy. First up for discussion were two examples of the "Luftwaffe Officer's radio". This set was a high quality multi-band portable in an attractive case emblazoned with the Luftwaffe eagle. On one of the sets, the swastikas have been removed, since after the war, the swastika was banned in Germany. These sets were built to the same design by many German electronics companies, including Telefunken, Seimens, and in occupied Holland, by Phillips. The sets have interchangeable parts and use small metal tubes that are hard to come by today. The sets themselves are also rare and among the most sought after of the morale radios.

Frank also showed us a British troop radio. He pointed out that many of the British troop radios were actually distributed to civilian organizations, in order to keep the public informed during the blitz. The BBC's coverage of the war was known to be honest and objective, and was listened to throughout the world by military and civilians alike.

Tom then showed us several American morale sets, including a battery-only portable Templeton from 1945, an AC/DC/battery Hallicrafters from 1942, and a Crosley radio built for the US Navy. The most impressive was a Belmont that included some features found in better civilian radios, such as a tuning eye and station push buttons. It even had a set of spare tubes and some simple tools installed inside the case!

After the presentation on troop radios concluded, the evening concluded with a donation auction. One of our members graciously donated some new custom built components, including an antenna that picks up radio signals via house wiring, and a test bench isolation transformer unit. These and a stock of brand new radio cords were the most sought after. Also going to new homes were several radios, radio chassis, parts, tubes, a twenties battery sets cabinet, and some computer equipment including speakers and flatbed scanners.

Thanks to everyone who came to the meeting and especially to Frank and Tom for a terrific presentation. Hope to see you next month! Jim Tyrrell, Secretary, OKVRC





OKLAHOMA VINTAGE RADIO COLLECTORS (OKVRC)

The Oklahoma Vintage Radio Collectors (OKVRC) publishes the Broadcast News monthly for the presentation of historical information and enjoyment of club members and friends. Articles on subjects of interest to radio collectors, news of club activities, and restoration information are always welcome. Articles should be sent to the Broadcast News Editor, c/o OKVRC, PO BOX 50625, Midwest City, OK 73140-5625 or e-mailed RXRADIO@AOL.COM. Unless otherwise noted, articles can be reprinted freely, as long as proper credit and reference is given. Electronic copy of articles can be obtained from the editor of Broadcast News.

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MEMBERSHIP:

OKVRC Membership is \$12.00 per year. You are invited to join us in our celebration of Vintage Radio by sending your check to OKVRC, PO BOX 50625, Midwest City, OK 73140-5625.

As a service to OKVRC members, the month of your membership expiration date is printed on the mailing label. Below is a sample label:

Expires 10/09
John Q. Collector 1234 SW 56th Street Choctaw, OK 73123-1234

If your expiration date is highlighted, your membership has expired and you are in jeopardy of being dropped from the Broadcast News distribution list.

Ballast Tubes and Resistance Line Cords

From about 1933 many American (and some European) radios were designed to operate directly from line voltage. These were called AC-DC or "transformer-less" sets. The voltage for heating the tube filaments was supplied directly from the line. Since the mains voltage in America is 117 AC and the tube filaments required only about 6 or 12v (25, 35, or 50v for many rectifier and output tubes) a resistor had to be provided to drop the excess mains voltage to the proper value to operate the filaments. The problem was simplified by connecting the tube filaments in series so that each filament acted as a resistor, dropping the voltage somewhat for the remaining filaments. In most cases, however, the line voltage was greater than the sum of the voltages required to heat the tube filaments and so an additional resistor was required to drop the excess voltage.

Example: A typical five tube set of the mid-1930's used three 6.3v tubes and two 25v tubes connected in series. The total voltage drop was $(3 \times 6.3) + (2 \times 25) = 69v$. Line voltage is 117v, Therefore, $(117 - 69) = 48v$ must be dropped.

The resistor dropping the voltage often had to dissipate considerable power and so would become extremely hot. In many cases the resistor was built into the line cord, in the form of a resistance wire running the entire length of the cable ("resistance line cords"). Since the heat generated was distributed along the entire length of the cord, the cord became only moderately warm and so posed little danger. In other cases the resistor was built into a tube called a ballast tube. These were glass or metal tubes that looked like ordinary radio tubes and plugged into a socket on the chassis. They were often identified by a code, such as the following:

RMA BALLAST CODE

Example: type B-K-55-B-G

The first letter (B) indicates a ballast tube but may not appear. The second letter (K) indicates the type of pilot light used in the set:

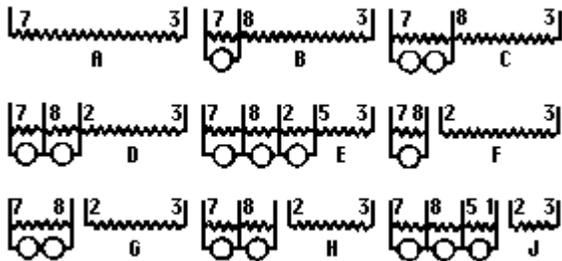
K - a 6-8v 0.15A bulb is used.

L - a 6-8v 0.25A bulb is used.

In practice, any type of bulb can be used without harm to the set.

- The number (55) designates the voltage drop in the resistor, including that for the pilot light.
- The letter following the voltage drop (B) indicates the circuit and base wiring (see below).
- The last letter (G) indicates a glass tube and may be disregarded.
An "X" after the lamp-designating letter indicates a four-prong base e.g. LX55H.

In the wiring diagram below the numbers stand for the prong connections of an octal socket.



With glass four-prong base ballast tubes, a much-used system was to have a number indicating the overall resistance.

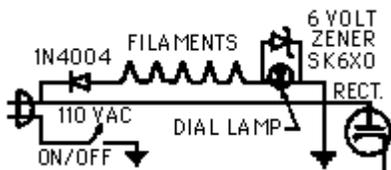
Example: type 185R4. The unit has an overall resistance of 185 ohms. To convert this to the RMA code multiply the resistance by 0.3 to obtain the voltage drop: $185 \times 0.3 = 55\text{v}$. The tube is equivalent to type KX55B.

The section of resistor across which the pilot lights are connected serve to provide an electrical path in case the lamps burn out. Also, it helps to absorb the surge in current that occurs after the set is turned on while the tubes are warming.

In the early 1940's tubes were designed with filaments that operated on higher voltages so that a set of these connected in series could operate off the line voltage with no dropping resistor being required.

Burned-out ballast tubes should not be replaced by resistors mounted in a set because a great deal of heat (15-25 watts) is generated.

In many cases the ballast tube or resistance line cord can be replaced with a silicon diode (e.g. 1N4004), with a zener diode (e.g. SK6X0) across the dial lamps to prevent them from burning out.



The power dissipated in a ballast tube or resistance line cord can be found by multiplying the voltage drop across them by the current drawn by the tube filaments.

Example: The five-tube set considered previously required a voltage drop of 48v. The current drawn by the tube filaments is 0.3A. The power dissipated is $(48 \times 0.3) = 14.4$ watts.

OKVRC CLASSIFIED ADS

Send all ads to editor OKVRC, Attn: editor, Broadcast News, PO BOX 50625, Midwest City, OK 73140-5625 Or E-mail directly to RXRADIO@AOL.COM

Advertising policy: Member's ads are FREE. Small donations will be accepted for non-member's ads.

- WANTED:** Military surplus TCS transmitter & Receiver plus cables. AN/ART-13 transmitter. Or, any "Gee Wiz" Military surplus junk! Call Tom Laszynski at (405) 741-1176 or e-mail me at k8jrm@arrl.net.
- WANTED:** Transmitters, Receivers, Ham gear, Boat Anchors Radio, Test Equipment, Tubes, Parts, you name it. Call Tom Laszynski at (405) 741-1176 or e-mail me at k8jrm@arrl.net.
- WANTED:** Any radio related German items. Especially WWII radios, tubes, and accessories. I'm a buyer also for Grundig, Telefunken radios and tubes from the 1950-1965 era. Frank Karner (405) 769-4656 fkarner@cox.net
- WANTED:** Chassis & Speaker for a Philco Model 37-610. Others fit this tombstone case, such as the 37-620 & 37-630, possibly other models. John H Reynolds, 590-2716, or jhreynolds8787@yahoo.com
- WANTED:** Junker microwave oven. No, I'm not crazy; I need the power transformer, diode, etc for a future vintage radio project. Tom Laszynski, (405) 741-1176 or k8jrm@arrl.net
- WANTED:** I'M YOUR BUYER for tube amplifiers- music, PA, any type! Also amplifier tubes, tube testers, etc. Frank Karner (405) 769-4656 fkarner@cox.net
- WANTED:** Briggs & Stratton (BASCO) radio items: Crystal radio, tube sockets, A-B-C power supplies, boxed parts, radio advertising and promotional items. Dale Boyce (414)353-0734 or radioman@wi.rr.com
- WANTED:** Someone to repair a broken bakelite case (some pieces missing). John Reynolds, (405) 590-2716 or email jhreynolds8787@yahoo.com.
- WANTED:** Bakelite case for Philco Boomerang model 49-501 deco radio. Cracked, nice or restorable...whatever condition you have! Frank Karner, 12432 Elizabeth Cove, Midwest City, OK. 73130. E-mail: fkarner@cox.net (405) 769-4656
- WANTED:** Parts for a 1925 SUPER ZENITH 27. This is similar to the Super Zenith VII, except for the AC power supply, meter. I need the AC power supply (Maybe there are 2 used?) and perhaps some small parts. THANKS! Frank Karner (405) 769-4656 fkarner@cox.net
- FOR SALE:** ANTIQUE RADIO RESTORATION VIDEOS. Volumes 1, 2, 3 and 4 are currently available. Check my web page for more details and special deals! Go to <http://www.bretsoldradios.com/>
- FOR SALE:** Magnet wire, 200C, all gauges 10-40 awg. Local (405) 745-9473. Toll Free- 866-745-9473. Mike LaPuzza
- FOR SALE:** Radio Chassis Holders. These maintenance stands hold a chassis while work on it. Small stand - \$37.50, and Brackets - \$2.50 Plus Shipping. Large stand - \$55.00 and brackets - \$2.50 Plus Shipping. Contact Steve Strong at (405) 634-7547 or e-mail Scstrong1@cox.net.
- FOR SALE:** Riders Troubleshooter Manuals, Vol. 1 thru 22. \$150.00 for all. Contact David Ward, 405-366-1323 or email merdavward@aol.com
- FOR SALE:** House wiring antenna networks, "Aircore" choke Baluns, Balun Isolation transformers and amateur 1KW "Aircore" 1 to 1, 1 to 4 and 1 to 9 "pigtail" weatherproof Baluns. L.W. Rousseau (405)842-0125
- SERVICE:** **FIELDING ELECTRONICS, INC.** We restore old radios both electronically and refinishing. Radios must be complete with knobs and dial glass/escutcheons. Fielding Electronics, Inc, PO Box 2601, Ardmore, OK 73402, Phone # 580-222-9408
- SERVICE:** Old Radio Restoration and Servicing: Dale McLellan, rxradio@aol.com or 405-330-1802, Edmond, OK

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