BULLETIN

Indiana Historical Radio Society

PRESERVATION FOR POSTERITY

Vol. 33 Winter, 2003 No 4

The Outlet Company, Providence, Rhode Island.
See inside for details!

OFFICERS

Indiana Historical Radio Society
PRESERVATION FOR POSTERITY

Officers	Responsibilities
Terry Garl, President 54980 Dawn Drive Osceola, Indiana 46902 (574) 679-4280 e-mail: teg53oscin@aol.com	Activities, Business, Administration, & Publicity
Bill Morris, Vice President 3545 Rock Maple Drive Indianapolis, Indiana 46235 (317) 895-1334 e-mail: bmorris@mw.net	Sites and Dates of Meets
Fred Prohl, Secretary, Treasurer 3129 Lanam Ridge Road Nashville, Indiana 47448 (812) 988-1761 e-mail: indianahistoricalradio@att.net	NOTE → Applications and Correspondence Dues, Financial, and Address Change. Please Notify Immediately of Change of Address.
Edward Dupart, Editor 1441 N. Church St. - Cadiz New Castle, Indiana 47362-9172 (765) 533-6272 e-mail: edupart3@hrtc.net	News, Articles, Photos, Radio-Ads
Dr. Ed Taylor, Historian 245 North Oakland Avenue Indianapolis, Indiana 46201-3360 (317) 638-1641	Donations & Scrapbook Material
Fred Schultz 1246 Lincolnway South Ligonier, Indiana 46767 (260) 894-3092 e-mail: olradio@ligtel.com	IHRS Museum Curator

Bulletin Deadlines: News, Articles & Radio Ads, 2/15, 5/15, 8/15, 11/15
IHRS e-mail Web site address: www.indianahistoricalradio.org

The INDIANA HISTORICAL RADIO SOCIETY is a non-profit organization founded in 1971. Annual membership dues are $15.00/year or 2 years/$25.00, which includes the quarterly IHRS "BULLETIN". Radio-Ads are free to all members. Please include a S.A.S.E. when requesting information. Send applicatins for membership and renewals to Fred Prohl, our treasurer as noted above.

IHRS ACTIVITIES for 2004 Our 33rd YEAR

IHRS Winter Meet at Indianapolis – February 14, 2004

Holiday Inn Southeast, 5120 Victory Drive, I-465 Exit 52 at Emerson Road. All activities are inside. Registration is $5:00 per member/family, Swap N Sell tables are $10.00 each. Tables can be reserved in advance by pre-registering with treasurer Fred Prohl. Set up, 6-8 pm Friday. Doors open at 7:00 AM Saturday. **Two popular vote contest categories: 1.** AC/DC table radios **2.** Table Radio "I received as a gift!" . **Motels:** Holiday Inn, 317-783-7751, Red Roof Inn, (across from the Holiday Inn) 317-788-9551 or 800-733-7663, Super 8, 4530 S. Emerson Ave, 317-788-0955 or 800-800-8000. Meet information: Fred Prohl, 812-988-1761 or Dr. Ed Taylor, 317-638-1641.

IHRS Spring Meet at Kokomo – April 30 – May 1, 2004

IHRS Summer Meet in Elkhart – September 11, 2004

IHRS Fall Meet in Greenfield – October 9, 2004

Other Club Activities

MSARC For information contact George Freeman ralogeum@aol.com

NARC ACTIVITIES -2004

For NARC meet info contact: Jim Thompson, 612-822-4000 or Kip Wallace, 612-544-2547, KipWallace@dl-inc.com

ARCI ACTIVITIES - 2004

All meets at Elgin, IL, RAMADA INN, 345 River Rd. 847-695-5000.
Info: Tom Klienschmidt 847-255-8128 or Art Bilski 630-739-1060, OLDRADIO@NTSOURCE.COM

MICHIGAN ANTIQUE RADIO CLUB

February 14, 2004 Farmington Hills, Michigan
Info: Oran Sauder murrellr@ameritech.net (248) 437-4413 John Reinicke – john.reinicke@fanucrobotics.com (248) 626-4895

Join the AWA-ANTIQUE WIRELESS ASSOCIATION

THE ORIGINAL AND LARGEST HISTORICAL RADIO-COLLECTOR GROUP The AWA publishes a quarterly Old Timer's Bulletin.
Membership is only $20 per year. Write to: Antique Wireless Association, Inc. Box E, Breesport, NY 14816 http://www.antiquewireless.org

IHRS Business News

IHRS Business Meeting – October 11, 2003

IHRS President, Terry Garl, opened the meeting at 12:35 pm.
Reports: The minutes of the IHRS Elkhart meeting and the treasurer's report were read and approved.
Discussion: Initiated by Shirley Gross, members discussed the pro and cons of meet fees. The Indianapolis Winter meets for the past two years and the 2003 Kokomo meet did not meet expenses. The discussion included increasing registration fees and or vendor table fees; charge full cost of food; policing of all attendees to insure everyone paid appropriate fees; ask that all attendees be current IHRS members; and loss of attendance due to higher registration and or vendor fees. Marilyn Johnston placed a motion to select a six member "fees committee' to consider the discussion suggestions concerning IHRS meet fees and plan a fee structure for the IHRS 2003 meets. The motion was passed by a majority of the attending members.
Shirley Gross, Don and Marilyn Johnston volunteered for the responsibility. The remaining members are meet chairman, Ty Gregory, Glenn Fitch, and Fred Prohl
Discussion: The need for a Public Relations person in IHRS. *Discussion:* The lack of contest entries in this meet. Michael Feldt volunteered to serve as the 2004 Fall meet contest chairman.
Annual Election: The IHRS 2004 officer candidate list was presented. Nominations were requested from the members. Fred Prohl nominated Herman Gross for the position of secretary. Herman accepted the nomination. A motion was made and passed to unanimously accept the candidates as presented.
The 2004 IHRS officers are:

President – Terry Garl
Vice President – Bill Morris
Secretary – Herman Gross
Treasurer – Fred Prohl
Editor – Ed Dupart
Historian – Dr. Ed Taylor
Museum Curator – Fred Schultz, Marcella Schultz

A thank you was given to Glenn and Ramona Fitch for their work in setting up the meet and to those who provided food for the "pitch in" lunch.
The meeting was adjourned at 1:25 pm.

Respectfully submitted by Fred Prohl, IHRS Secretary

Fall Foliage Meet – The Greenfield Report

The following is an income/expense report for the Fall Foliage Meet in Greenfield:

Fifty-one family registrations -$255.00
Donation auction - $71.00
Donation jar - $49.60
Total income $375.60

Expenses were:

Facilities - $125.00
Food - $49.98
Insurance - $123.30
Misc. - $13.50
Total expense $311.78

Fred Prohl, IHRS Treasurer

2004 *IHRS* DUES

Your Indiana Historical Radio Society membership is now due if your mailing label reads 12/03.

Please send a check payable to the ***Indiana Historical Radio Society*** in the amount of $15.00 for a one-year membership or $25.00 for a two-year membership.

Send your payment to:
Fred Prohl, IHRS
3129 Lanam Ridge Road
Nashville, IN 47448

Please include your current mailing address, if not on your check, and your email address, if you have one.

Questions concerning your membership should be directed to Fred at fprohl@att.net or call him at 812-988-1761.

IHRS Museum Notes

Museum winter hours: Saturdays – 10 AM to 2 PM

More IHRS Museum Notes

WNRL is now on the air! We will be running test for the next several days and then go to a full time schedule.

Early test show our range to be about 20 miles. Future plans are to go on line with the station permitting it to be picked up worldwide. A picture of the ground breaking is included.

From left are West Noble School Supt. Bruce Hippensteel, City councilman John Lutton, former Ligonier Mayor and councilman Glenn Longardner, present Ligonier Mayor Gary Bishop and Museum Curator Fred Schultz, The second picture shows WNRL tower being lifted into place.

The Museum had another great October with around 600 visitors. As is usually the case over half of the visitors were from out state.

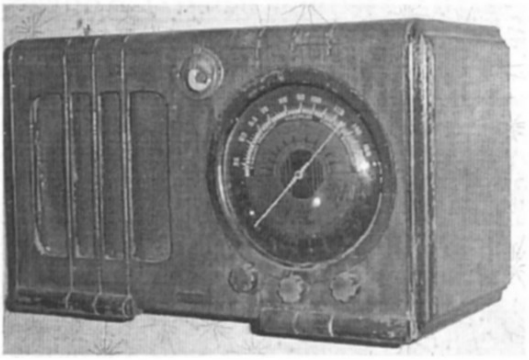
Our museum rewiring project is under way with arrangements being made to rewire most of the showcases.

Remember if you have radio or radio related items to loan or donate we will be changing our display again this winter.

Fred Schultz Curator

The tower going up for WNRL

Picture Gallery



A Clinton 3 band radio made in plant "A" in Chicago with a very colorful red, green and gold dial. Courtesy of John Fouse, Jr.

Comments from the Editor

Ed Dupart

I want to express my appreciation to all those who helped by contributing articles and pictures to the Bulletin this past year. For articles: Dave Mantor, Bill Arnold, Peter Konshack, Fred Prohl, George Freeman, Dwight Farringer, John Foell and Fred Schultz. For pictures: Brian & Linda Strout, Jim Sabo, Don Gardner, Steve Hilty, Dr. Ed Taylor, Mike Feldt, and my appreciation to anybody I missed. Without contributions, this Bulletin wouldn't be what it is.

Please use e-mail or regular postal mail for sending articles and information to me. If you want to send me articles on a 3 ½ or 5 ¼ floppy, that's great, too. I can work with virtually any word-processing program for DOS or windows designed for IBM compatables. Please send computerized pictures in a BMP, JPEG or TIFF format. Pictures can be incorporated with the article done in Microsoft Word or WordPerfect. If you don't have your pictures computerized, send the photo to me, preferably 35mm. Polaroids lose detail when I scan them. If you want your pictures and articles returned to you, please let me know. Sorry, I'm not set up for Mac or Apple. Typewritten articles are fine, too, because I can scan those into my computer.

Send me a photo of your favorite/ unusual radio and I will put it in the Bulletin.

Upcoming articles: repairing transistor radios, replacing 3-6Kv capacitors in 3" to 9" early TV's and the LaVelle's museum.

Let the club officers know what you think of the color and the use of it in this Bulletin and any suggestions you have. Ed Dupart, IHRS editor

IHRS Member *email* Address

Shortly following the mailing of this issue of the "Bulletin" your treasurer will send a test email message to your address on record. If you receive the message no action is necessary. If you do not receive the test message, and would like to receive periodic information on IHRS radio or member news via email, send an email request to indianahistoricalradio@att.net We will add or correct your email address. The treasurer's record of IHRS member's email is considered privileged and will not be abused. Email messages to IHRS members have been limited to 3 or 4 per year. In the event of an IHRS member requesting the email address of another member it has been our policy to honor the request.

Fred Prohl, IHRS Treasurer

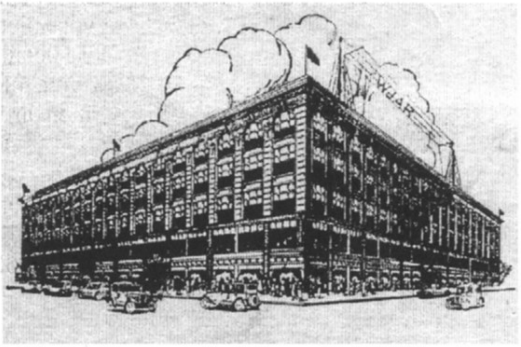
Articles

The Santa Cover – WJAR

Fred Prohl

The "Hello! Merry Christmas" Santa cover of this issue of the Bulletin is from a late 1920's children's book. The book was provided by The Outlet Company, Providence, Rhode Island. The Outlet Company launched station WJAR in 1922 and WJAR-TV in 1949. WJAR is still on the air. The Outlet Company, opened in 1894, was promoted as New England's largest department store under one roof. "The company decided to redirect its energies exclusively toward the broadcast media in 1980." The Outlet Company's flagship store in downtown Providence was closed in 1982.

Information credit to: the Rhode Island Historical Society (web page rihs.org)



The Outlet Company building with WJAR antenna.

Dave's Service Bench

By Dave Mantor

Old Radios Can Still Be Found

Every hobby needs new input and new enthusiastic members. As in any particular following, collector radios also need the young, inexperienced or new "blood" to generate the necessary enthusiasm that fuels the continuation of the hobby.

There is one inherent problem, however, that can add to the frustration of new collectors – the diminishing source or in business terms, more demand – less supply which means higher stakes to get started. After being a collector of Shelby cars for a number of years, my problem of continuation with them

became rather obvious as the dollar stakes went up much faster than my dollar intake. In other words, I was priced out of the hobby and I finally sold out what I had left. This is the unfortunate end result for any hobby as prospective collectors lose interest.

The chances of finding another old Shelby tucked away in a dusty old barn are just as nil as finding an old Crosley Pup or Model 10 breadboard sitting in an abandoned farmhouse. There may be some of both examples waiting out there, but the odds are mighty high and in the meantime, new collectors become frustrated and leave for other pursuits. In other words, don't count on the treasures that may be waiting for you. Which brings us to the subject of this issue's topic from Dave's Service Bench: **"Old Radios Can Still Be Found."**.

Rummage sales are an invaluable source of old radios. Whenever my wife goes rummaging which is most Saturday mornings during the warm weather, my parting admonition to her is "watch for any old radios." Ever so often, she'll find one. I'll go to look at it and interestingly enough, it follows me home. The huge advantage for shopping at yard sales or however they are labeled is the usually lower price. However, if the ad for a sale includes the words "old radio," go early as someone may beat you to it. Oh, the joy of the chase. One particular find was a Philco Model 118 console that one fellow had decided to start work on. It is missing its speaker but it still had its chassis and tubes. With patience and a little work, it could be restored to its former glory.

Several years back and during the James Dean Festival here in Fairmount, I remember seeing an IHRS member leaving with a treasured radio from one of the local antique stores. I shop around in them here and in other towns as well, but generally, with a few exceptions, I don't buy radios from antique stores because of the overly inflated prices. I'm sure you have noticed how the price goes up because it looks old. Unfortunately, antiquers don't realize that most price guides set their prices on radios that if not working, at least have all its tubes and no rodent population. The radios are there – just "buyer beware."

I have followed the tack of placing inexpensive ads in the classified sections of local newspapers. This has also been done by several other IHRS members, and the reports are encouraging. However, again watch for those who believe "if it's an old radio, it's gotta be priced according to the gold standard." Generally, it's a good source. Don't forget the Bulletin's classified ad section as they often feature good buys on a regular basis.

Rummage and yard sales, antique stores and newspaper ads – all are good ways to find old radios. But there's another source that usually is the cheapest way to obtain yesterday's electronics, but you may just have to do some digging - literally. The old neighborhood dumps, junk that has been set out for the trash

man, scrap heaps and old yard buildings often provide a supply that will not tax your budget. But resourcefulness must be your constant companion.

Example in point: an elderly neighbor lady decided to have her dilapidated barn cleaned out. I'd often heard rumors of the treasures in there, but as I watched when I would drive by on occasion, nothing showed up that interested me. We supply her with some of our garden surplus every year and this summer was no different. It's gratis to her, but she always asks if there is anything she can do for us. This year the light bulb lit up in my mind, and before I could stop myself, I asked her if she'd found any old radios in her attempt to clean out the old barn. Nothing in the barn, but she said she thought there might still be one in the little metal building that sits at the back of the property surrounded by weeds. Sure enough, when the boards were taken away from the opening, there sat a worse-for-wear old radio sitting on 8-inch spindled legs. Covered with dust and other things, I got it out and carted home a Victor Radio, Model R-32. Surprising to me, for no larger than it is, it is heavy. No tubes, but everything else looked to be there. I'd like to give this radio to a new collector within IHRS who is dedicated to restoration and not to profit. Hopefully, it will find a new home with someone. Any serious takers?

However, some stories have sad endings. My sad ending is about a Model 157 cathedral. Another pile of rubbish – another opportunity. I stopped and asked the owner if she knew if there were any old radios in the pile-up. Just one – at the bottom. Just one condition, it was up to me to get to it. I always use gloves, as one never knows what you may uncover when you're moving old debris. Sure enough and at the bottom, sat an old rusty chassis with part of the cathedral's front still there and dragging the speaker along. The tubes were all there, but any hope of ever bringing it back to life was dashed away. It's at home now in my shop. I plan on cleaning it up the best I can and then it will sit on a shelf, there to remind me to keep looking for old radios.

No one knows for sure just when the old radio supply will run out. We may find certain treasures that can be resurrected and returned to their former glory. But then there may also be another Model 157 cathedral that needs to be allowed to come to an honorable end. No doubt many will still end up in landfills, but **keep looking**! They are there waiting just for you.

Keep a good thought, give a smile and have a great day. Dave Mantor - merrijoy@comteck.com

The "What Is It" is a pin-plug used for headphones and test equipment leads.

Ed's Tech Tip©

Replacing the 6U5/6G5/6E5 with a 1629/VT-138 in a Series String Radio

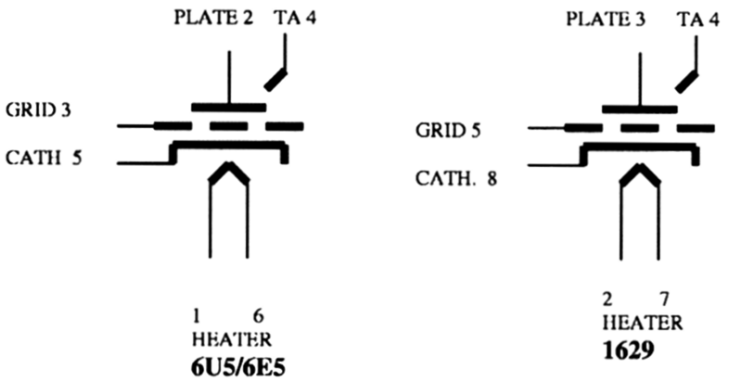
Many of us have 1629 tuning eyes lying around, if not on the bench, then in old test equipment that we don't use and can't seem to sell. Well, here's a use for those good 1629's. Replace the 6U5/6G5/6E5 in your series string radio without having to modify the radio and here's how. Before I get into the how do you do it, lets look at the specs of these tuning eyes. The 6U5/6G5/6E5 have 6.3 volt filaments at .3 amp and the 1629 has a 12.6 volt filament at .15 amp. The 6E5 and the 1629 are more sensitive than the 6U5/6G5 in that less AVC voltage is required for eye movement. In some cases where I have replaced a 6U5 with a 6E5, I will have overlap of the eye on strong stations. This won't hurt the tube, but may be annoying to a purist. Changing the 1 Meg plate resistor to a higher value can control that and that can be done by placing a resistor in series with the 1 Meg resistor in the adapter. The 1629's heater is 12.6 volts at .15 amp and so it will require a resistor put in parallel with the heater to consume the extra .15 amp and to maintain the 12.6 volt drop across the heater. The extra 6 volts needed for the 1629 doesn't pose a problem for these reasons. Generally, our line voltage is higher than in 1938 and the 6 volts are divided up among the rest of the tubes, forcing them to run with a little less heater voltage. Actually, this is good, because it will make the tubes last a little longer. Here are the steps to do the conversion:

1. To find the value of the shunt resistor divide the 12.6 volts by the excess .15 amp current. 12.6/.15 = 84 ohms Closest commercial value is 82 ohms.
2. To find the power rating of the resistor, multiply 12.6 volts by .15 amp and double that amount. 12.6 * .15 = 1.89 watt 1.89*2 = 3.78 watt. Closest easily obtainable value would be a 5 watt unit.
3. Resistor needed is an 82 ohm 5 watt resistor, but I would prefer to use a 10 watt unit.
4. Obtain a bad 6 pin tube. Wrap a rag around it and break the glass to the point where there are no jagged pieces. Wear safety glasses and gloves when you do this.
5. Using needlenose pliers, clean out the rest of the glass and dried glue in the base.
6. Unsolder the wires going to the pins and using a solder sucker, remove the rest of the solder. The pin should be clear of solder and ready to accept new wires.
7. Run jumper wires from the 6 pin socket to the octal socket. See the chart.
8. Place the 82 ohm resistor from 2 and 7 of the octal socket or 1 and 6 of the old 6 pin tube base. If this is going to be a permanent installation, you can

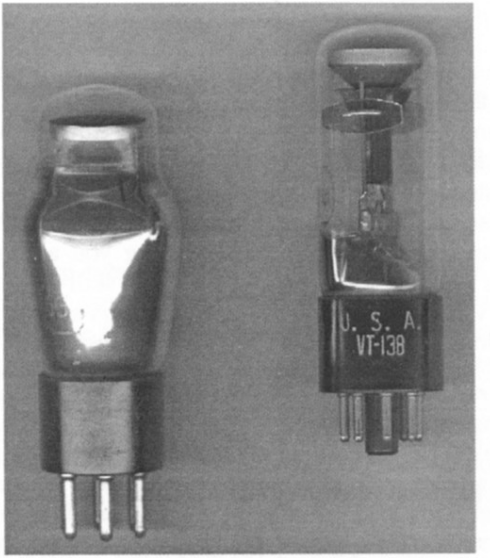
place the resistor under the chassis, as long as it's connected across the heater of the old tuning eye.

9. A problem I ran into is that when I went to Radio Shack to buy an 82 ohm 5 watt resistor, was that they didn't have any. So, I bought their 50 ohm 10 watt resistor and pulled a 39 ohm 3 watt resistor from a junk TV and put them in series. The adapter I made is using these two resistors and is pictured in this article. I'm also showing you a shrunk up adapter that consumes a lot less space, but requires more skill in building.
10. A junk TV could be a good source of resistors and any combination can be used, as long as they add up to 82 to 90 ohms. 3 to 5 watt units will work fine. Of course, the more resistors you put in series, the more space will be consumed. I see a lot of 24 ohm 5 watt resistors in junk TV's and two of them and a 33 ohm resistor in series adds up to 81 ohms. A 50 ohm resister and a 33 ohm resistor add up to 83 ohms. So there are a lot of possibilities if you can't find an 82 ohm resistor.

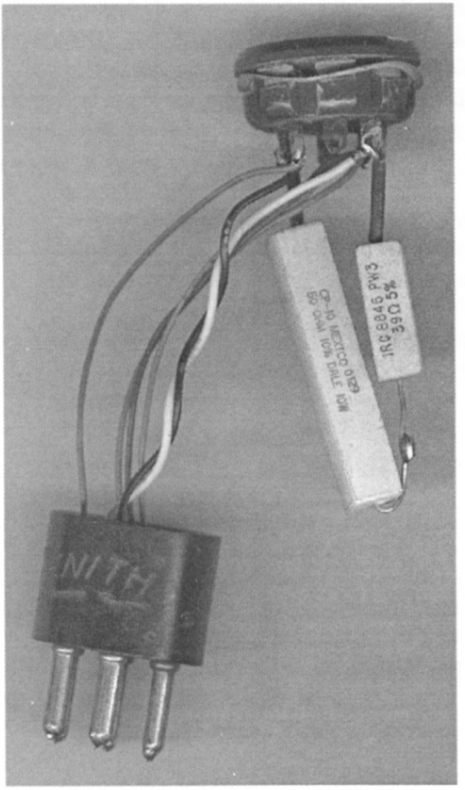
	6U5/6G5/6E5	1629/VT-138
HEATER	1	2
HEATER	6	7
GRID TRIODE	3	5
PLATE TRIODE	2	3
TARGET ANODE	4	4
CATHODE	5	8

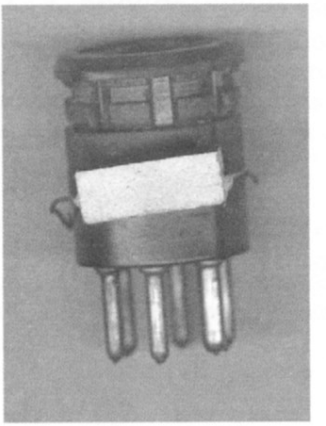


In conclusion, I was able to replace the 6U5 with a 1629 in my Detrola 212 without removing the chassis or performing any modifications to the chassis and the 1629 works great! Performing this conversion for a transformer operated set will be covered in a future article.

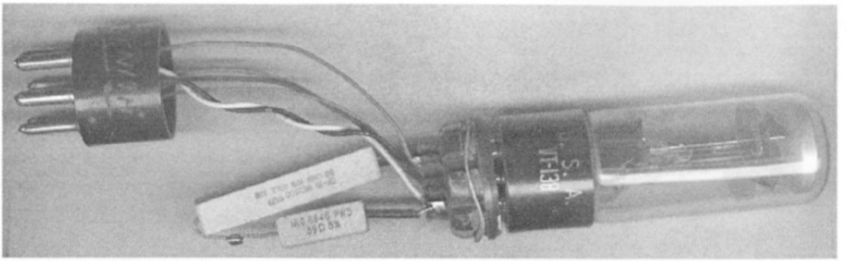


6U5 1629

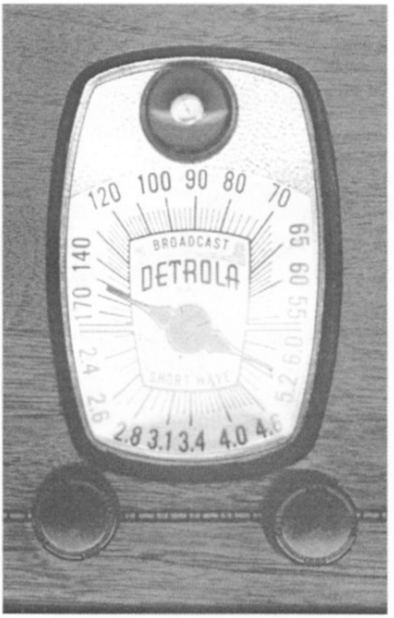




Compact adapter above and spreadout adapter to the left as used in my Detrola 212.



Adapter with the 1629 plugged in.



Front and rear views of the Detrola 212 with the 1629 tuning eye.

Restoration of a Belmont 6-D-111

By Peter Konshack

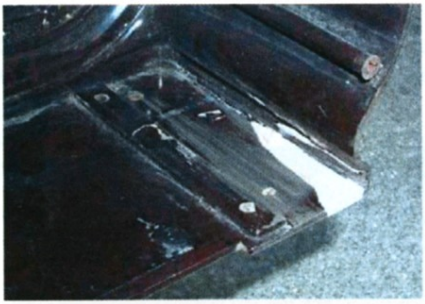
I found this Belmont 6-D-111 at the James Dean Festival in Fairmount, IN, in September, 2001. I was excited to find this radio, because these are fairly expensive to buy. The radio was only $20! However, there were some serious problems with the radio. Someone had drilled a hole in the front of the cabinet and installed a tone control (side note: the knob from the tone control was the perfect match for an RCA 128 I have to restore - excellent!). Also, the radio had been dropped at one point and the bottom edge on one side was cracked, with a portion of the Bakelite missing. Undeterred, I bought the radio. I decided to repair the Bakelite and paint the radio white, a common color for this radio.

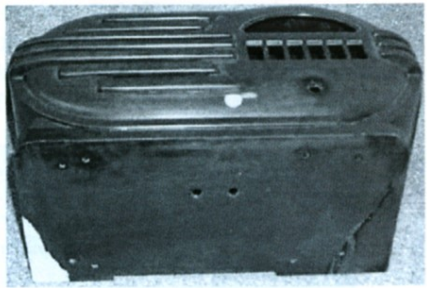
Belmont as found

Cabinet Restoration

I began the restoration of this radio by removing the knobs, chassis, and the dial cover from the radio. Once the radio case was empty, I washed it carefully. I decided to use a different method for fixing the chips in this radio. I wanted the patches of the radio to be completely invisible, which meant no interior (or exterior) supporting material could be used. To temporarily support the area, I used a piece of duct tape to cover the damaged areas, then slathered on bondo. In previous restorations, I used a piece of clear plastic as a support, glued to the

case with epoxy. This time around, the plan was to use a piece of duct tape as the support, then remove the support after the bondo had cured.





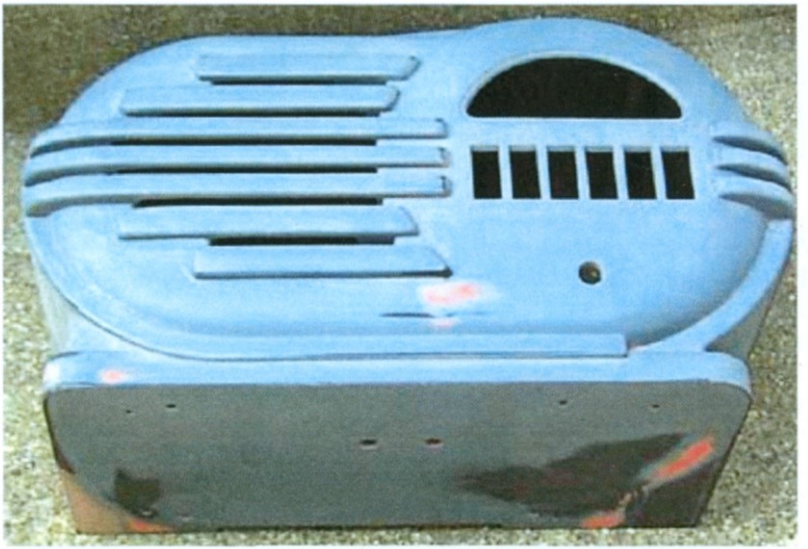
Detail of patched areas

While the bondo was hardening, I knocked it down a bit with an X-acto knife. You can "shave" the bondo down to size, which minimizes the amount of sanding later. Once cured, I sanded both areas down so that the patch fit closely into the chipped area. I then removed the duct tape patch. Bondo and Bakelite do not adhere well together. Once the duct tape was removed, stress lines appeared around the edges of the patch when the case was flexed. This was not good - it would cause the paint to chip and crack if the case was mishandled. I had expected this would happen. While flexing the case, I slowly dripped epoxy into the cracks, which appeared. This helps to adhere the bondo patch to the case a little better. Once the epoxy had cured, flexing the case showed no stress lines between the bondo patch and the Bakelite case. I was now ready to prime the case.

Primed cabinet

The photo on the bottom of pg. 17 shows the case after priming. The case was primed with a plain Krylon primer. Once the case has been primed, you can go back and look for details that you may have missed during the repair process.

After priming, I could see a few places where the repair was still visible. These places were either sanded down more, or if they were too low, they were filled in with glazing putty.



Glazing trouble spots

The photo above shows the case with glazing putty applied to some of the bad spots. Glazing putty is another automotive body compound, which you should be able to find at any automotive, or hardware store. It can fill small imperfections, and is easily sanded. Once you have filled and sanded with the glazing putty, another quick coat of primer will show you if the repair is successful. You continue these cycles until you are happy with the result.

Primed damaged area

The photo on the bottom left of pg. 18 shows the bottom edge of the case, in the damaged area. As you can see, the repair has been blended in and is invisible. This was a tricky repair because the missing Bakelite spanned two sides. Therefore, to get a straight edge across the bottom, it was important to sand using a flat surface such as a sanding block. Once the final primer coat has been sprayed on, it is time for the finish coat. The primer coat was sanded down and carefully cleaned. I usually use a 400-grit paper to sand down the primer, which leaves a very smooth surface for the finish coat to adhere to.

The cabinet being painted

The photo above shows the case being painted. I'm still using spray cans to do this work, but someday hope to get a compressor and professional equipment to get better results. It is possible to get very good results using spray cans, but it is undoubtedly harder. I laid on several thick coats of Krylon "Antique White", making sure not to get any runs. Despite my best efforts, I did have one small run on the case. This was wet-sanded out after the paint had cured, then another finish coat was added. Notice that the hole drilled in the front of the case is now completely invisible! With this radio, I also sprayed the inside of the case. Normally, a white painted Bakelite radio is brown on the inside. However, I didn't want my bondo patch to be visible, so the inside of the case was painted

white as well. While this doesn't look exactly correct, I believe it is better than having the orange bondo showing.

The photo above shows the completed radio. I happened to have a few of the pushbuttons in white, so I used those instead of painting the brown ones. I think they look more realistic, as the pushbuttons and paint on these radios don't tend to match 100% - they may have at first, but with age they are not identical anymore. If you see a radio where the pushbuttons and the paint color match exactly, it is likely that the buttons have been painted.

Once the paint was cured, the case was wet sanded with 600 grit paper, then 1500-grit paper. I do this in the sink with the water running - be careful not to sand too hard, or you will go through the finish coat. Then, the case was finished using white automotive rubbing compound and polish. The end result is quite pleasing. There is no evidence of either repair, unless you count the fact that the inside of the case is painted as evidence. Only time will tell how well this repair will hold up. I am a bit uneasy that the lack of support may cause the Bakelite repair to fall out, but we shall see. Check back in a few years - I'll let you know!

What is it? Look elsewhere in the Bulletin for the answer.

THE FARM RADIO

By Ed Dupart

This is a follow up article from the one I had in the last Bulletin on the 2 volt radio and where to find 2 volt batteries.

Until 1937, when the Rural electrification Act was passed, electricity was not available in the rural areas of the USA. Even into the 1950's there were areas that did not have electricity and even today, I can show you places in the UP of Michigan that still doesn't have electricity. So, manufacturers back in the 1920's through the 1950's provided the rural customer with home radios that were battery powered. Of course, in the early 20's and up to about 1927 the radio customer didn't have much choice, except to use batteries. What radio manufacturers did in the 30's to the 50's was provide the rural customer with a nice looking radio that looked as well as the AC counterparts, or sometimes better.

Some companies used a cabinet that was designed for AC use, but built a battery chassis that utilizes the same case. The brown Bakelite® case Airline is an example of this. The AC version had a tuning eye in place of the on/off switch on the battery version. The small Bakelite® Airline would make a good kitchen or bedroom radio. The wooden Airline radio is much larger and was made especially for battery operation, with plenty of room for the batteries and maybe extra batteries. This set was made for the living room and also has a short-wave band. Console battery radios were also available and at one time I had a beautiful Airline floor model. This particular model was available in AC or battery versions.

Most manufactures built battery farm radios, but some seemed to cater more to this market than others do. Ones that come to my mind are Airline, Silvertone, Tatro, Firestone, Zenith and RCA. Note also that Airline and Silvertone were big in the mail order business and was convenient for the rural customer.

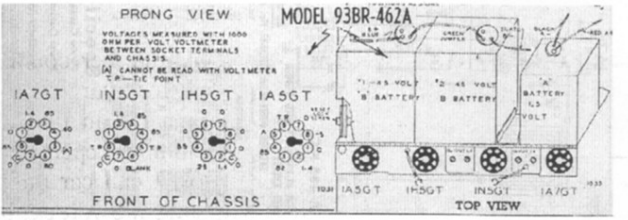
There were what I consider three classes of farm radios: 2 volt radios, later to be 1.5volt radios, 32volt radios, Wind-charger or 6 volt car battery radios. I am not considering the 01A which reigned king in the 20's, but did find its' way into a few early 1930's radios. The first battery tubes designed for farm radios in the 1930's used 2 volt filaments and used a special battery or used 3 volts with a ballast or dropping resistor for the filaments. The 2 volt radio used a B battery(s) with voltages of 22½, 45v, 90v and 135v. Many radios used a single 90v battery. The later 1.5 volt radios used common 1.5 volt cells, but also required the B battery. Some batteries included the A, B and sometimes the C battery in one massive unit. The 32volt radio used 32 volts for both the filaments and the B battery. The filaments were wired in series with dropping resistors and the 32

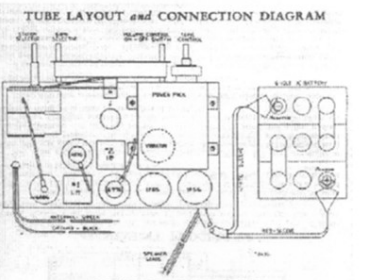
volts were used directly for the B supply. The farmer could have a 32 volt generator to run the appliance directly and/or for charging a 32 volt battery bank, which could be stored in a building other than the house. I mention appliance, because there were 32 volt vacuum sweepers, 32 volt washing machines, etc. The last class of battery radios, I call car radios with a fancy cabinet. These radios were designed to operate from 6 volt car batteries and had vibrator power supplies in them. The vibrator in conjunction with a transformer would step up the 6 volts to a typical 150 volt level for operating the plate supply. Many of these radios used special low drain tubes that had 6 volt filaments/heaters. The car radio in a fancy cabinet used a Wind-charger to keep the battery charged, or the farmer could use his car to charge the battery, or take the battery into town and have it charged for a fee. The Wind-charger was hooked to a car generator (not in the car) and so when the wind blew that would charge the battery. My father–in-law's parents had a Wind-charger and they were guaranteed one hour of use, per week, for the radio, so they had to plan their radio listening very carefully.

Probably the weakest point with the farm radio, besides the batteries, were the speakers used before about 1938. The speaker magnets were weak and the earlier speakers didn't use the traditional voice coil arrangements that were used in the AC sets, and so these sets lacked good bass response, but didn't sound too bad. Actually, the large wooden Airline pictured here sounds fairly well. The 1940 Bakelite® Airline pictured here uses the more modern speaker and sounds about as good as its' AC counterpart, just not as loud. At low volume levels, I enjoy listening to a battery radio with its very clear sound and absolutely no AC ripple.

The Detrola radio pictured was a car radio in a fancy case, but I converted it to an AC only set, which was fairly simple to do. It was based on an AC set to begin with, but they eliminated the 42 and the 80 and replaced them with two 2 volt AF output tubes and added a separate vibrator supply. I just changed it back to an AC set. The vibrator sets, when operational, do work quite well.

Airline 93BR-462A
1.5 volt Farm Radio





ALINEMENT PROCEDURE

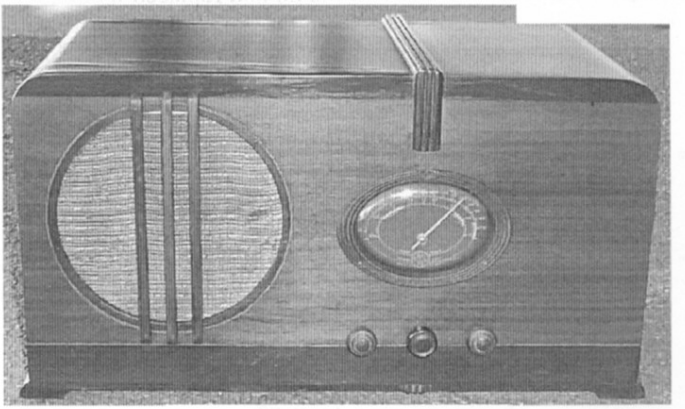
Connect a high impedance AC voltmeter across loud-speaker terminals. Volume control should be set a few degrees back of maximum volume position. Use a weak signal from generator, strong signals tend to cause improper adjustments.

IF. Connect generator ground to receiver ground. Using .1 mfd condenser in series with "high" side of generator, apply 456 kc signal to grid of 6S7G and adjust second IF transformer; some but first IF, applying signal to grid of 6D8G. (See above diagram for location of tubes and transformers.)

RF. (See circuit diagram for location of trimmers.) Using 200 mmf condenser in series with generator, feed 1725 kc signal to antenna lead and adjust oscillator top frequency. Set generator at 1400 kc, tune receiver to signal and adjust broadcast antenna trimmer. Set generator to 600 kc, tune receiver and adjust padder. The tuning condenser should be rocked back and forth through the signal while the padder is being adjusted in order to obtain perfect alinement.

Using 400 ohm resistor in series with generator, set band selector in short wave (right) position, feed 15,600 kc signal to antenna and adjust oscillator trimmer—screw trimmer down tight and unscrew to SECOND peak. Set generator to 15,000 kc, tune receiver and adjust antenna trimmer—screw trimmer down tight and unscrew to FIRST peak, rocking the condenser back and forth through the signal while the adjustment is being made. Above procedure for alinement at 15,600 kc must be followed exactly to insure proper tracking. A "dead spot" at about 13,000 kc will result if antenna and oscillator are not set in proper relation to each other.

Detrola 144 AM & SW,
A Car Radio in a Fancy
Case
Type Farm Radio



Airline AM & SW 2 volt
Farm Radio

The Greenfield Meet, October 11, 2003

The Greenfield meet was held on a beautiful day with no rain and pleasant temperatures. The meet was well attended with a lot of radios to look at. We elected officers and had much discussion after eating an excellent pitch-in lunch. My thanks to all who brought food and helped in the setup and cleanup of the meet. Unfortunately, we didn't have enough entries for a contest, so Fred Prohl and I simply displayed our entries. I had the Farm radio display and Fred had a nice console on display. The pictures provided are courtesy of Dr. Ed Taylor and Ed Dupart.

Fred Prohl's console

Ed Dupart's Farm radio display

Relaxing after lunch

Marilyn found something interesting!

On the right is Peter Konshak and his radios. He had a neat 32v farm radio on the left side of the table.

Mike Feldt examines something of interest. It was here that I found a nice 136 Truetone/Detrola.

RADIOADS

These ads are free to IHRS members. Please limit them to 100 words. Unless we are advised otherwise, we will run ads for two issues. The exception would be where services, etc. are being listed. Please send your ads to the editor at the address shown on page 2.

I'm also offering a postage size picture ad service. It's not guaranteed, but if space permits, I will put it with your ad. See the example of Fred Prohl's ad below.

For Sale: PORTO BARADIO, white, complete with glass, no cracks, some handle warpage. Radio works. $140.00 Fred Prohl, 3129 Lanam Ridge Rd, Nashville, IN 47448 (812) 988 1761 or fprohl@att.net [9-03]

Wanted: 21EP4 picture tube - prefer Zenith or Rauland but will take what you have with non scratched face and good emission. State condition and price. Ship or I can pick up. John Foell, 6130 Deer Track Cove, Auburn, IN 46706-9323. (260)-627-0127 evenings, (260)-429-8202-days. Email to John_D_Foell@raytheon.com [12-03]

Wanted: I am wondering if any one has a power transformer that can be used in a Grebe—Garod 511. The original unit is mounted above and through the chassis with horizontal laminations (4—1/2" by 3—7/8"). The following specifications are required: ***Primary*** 120VAC, 60CY ***Secondaries*** 860VC1 (approx.) to deliver 43OVDC to the filter at 150 MA, 5VAC at 3A ---(5Z3), 2.5VAC at 3A --(two 45's), 6.3VAC at 3A -- (nine 0.3A heaters) Also **Wanted**: I wonder, does anyone have any information on a Thordarson power transformer with the nameplate model No of 5604?. It is a vertical mount, and has HV, 5V and 2.5V secondaries. By "heft", I would guess it is good for about 100VA. This is an older unit, and I believe its revised Model No would be 56R04. Thanks, Harold H. Hunt hehunt@adamswells.com [12-03]

Wanted: Past issues to fill out my Popular Electronics collection -12/56, 4/57, 10/59, 11/59, 2/60, 3/60, 7/60, 10/60, 4-7/61, 9-11/61, 2/63, 4/63, 4/64, 8/64, 10/64, 12/64. Also, I'm looking to find any issues in the late 60's and early 70's that included John T. Frye's story "Mac's Service Shop." I have some already, but I don't know when it started or ended. The 6/71issue of "Electronics World" are also on my "Must Find" list. Dave Mantor, PO Box 1, Fairmount, IN 46928-0001. merrijoy@comteck.com [9-03]

Wanted: R.F. choke, Zenith part 20-135, for Zenith chassis 1204, as shown in Rider 8—41. Richard Ender, 806 Lee St., Milan, MI 48160. (734) 439-2545

For Sale: Now Available: A replacement for the UV99, our V999R replaces your UV99, our V999 operates the filament on 1.5 VDC. Both use a 5676 proximity fuse, subminiature tube. Our price: $15.00 plus first class shipping. James Fred, 5355 S. 275W, Cutler. IN, 46920, phone (765) 268-2214.

For Sale/Trade: See our new website for beautifully restored radios. Choose from deco tabletop models to gorgeous consoles. Always open to reasonable offers. Check us out at: www.tubularradio.com Actively collecting Zenith and other high-end 30's wooden sets. Bob Snively, Richmond, Indiana
Phone; (765) 935-3746 E-mail; totallytubular@aol.com

Wanted: Any information about Marconi No. 3574 receiver (made by "MWTC, Ltd. London") using carborundum, valve, and perikon detectors. Needed for restoration project. George B. Clemans, 851 West Wooster St., Bowling Green, OH 43402. (419) 352-7198, clemans@bgnet.bgsu.edu.
For Sale: Philips Radio tube books. I am currently reducing my stocks of my book "Illustrated History of Philips Radio Valves to 1935" and am offering signed copies to fellow IHRS members for $10 cash including air mail postage. Please reply to Fin Stewart, "Cockerdale", 380 Bulga Rd, Wingham, N.S.W. 2429, Australia.. email address cockerdale@bigpond.com

FOR SALE: Reproduction Philco cathedral cabinet parts and reproduction cabinets for model 20, 21,70, 90. Grandfather clock finials: Philco 570, GE H-91, Crosley 124. Philco Colonial Clock top trim and finials. Rider's Radio Index, 1 through 23 -$20.00 ppd. Books, SASE for list. All plus shipping. Philco cabinets, front panels, see page 22 in Volume 29, #4 the Winter edition. Other parts, inquire. Call or e-mail for details. Note new phone # and address. Dick Oliver c/o Antique Radio Service, 1725 Juniper Place, #3 10, Goshen IN 46526. New phone # (574) 537-3747, e-mail dolivears@aol.com

FOR SALE: Photocopies: Hallicrafters 8-22, Zenith 1000-1, Radiola III, 18, 60, 100A, 103, Majestic 52, and other radio, tube, and Test Equipment manuals. Also some Novelty radios. LSASE for list. N.I.B. Western Electric 421A-$55 postpaid. **WANTED:** Speaker/output xfmr. assembly for RCA 5T1. Herman Gross, 1705 Gordon Dr. Kokomo, IN 46902. (765) 459-8308, e-mail = w9itt@mindspring.com

Wanted: Philco 512 Mandarin Red radio w/212 Red speaker or 514 Nile Green radio with 214 Green speaker or 513 Labrador Grey metal radio with 213 matching grey speaker. I prefer the Red model.
Bob O'Friel, 7631 Cape Cod Circle, Indianapolis, IN 46250-1844 Phone,
(317) 849.4028

Interested in TV history? Want to see how it started? Try this Web site. You'll be amazed how far we've come.
http://pyanczer.home.mindspring.com/Tour Note: all lower case except the upper case "T" in tour.
Pete Yanczer, 635 Bricken Place, Warson Woods, MO 63122-1613

FOR SALE: Federal Book: Limited supply again available. 64 page booklet describes Federal Tel. & Tel. Radio-from the beginning in 1921 to the end in 1929. Over 60 illustrations including pictures of early Federal RF and audio amplifiers as well as all early radios. Many federal parts are pictured and described. The article and speech by Dick Scramberger, the Federal expert, are included. All Federal models are listed with the year and month introduced, cost new, and description. The Federal Broadcast station, WGR first in Buffalo is included. There are two pages of references for more Federal information. This booklet contains more Federal information than exists in any other single spot. Good Quality printing. Please send $7.95 (Including S&H) to Larry Babcock, 8095 Centre Lane, East Amherst, N.Y. 14051

Wanted: Wood cabinet for Atwater Kent Model 33 receiver.
Ray Andrejasich (317) 846-6977.

Wanted: MYSTERY SCOPE Any information will be appreciated on a 5-inch 'scope made by Television Equipment Corp, of NYC, model TEC601. This unit is heavy and very well constructed. It appears to be of early 50's vintage (octals and miniatures) and was intended for TV servicing. This is a candidate for a possible fun restoration project.
Harold E. (Hal) Hunt 1209 Canterbury Dr Decatur In 46733 260-724-9700 (leave message) hehunt@adamswells.com

Wanted: Whitley Electronics Murasonde Amplifier, built in Columbia City Indiana in the late 50's early 60's. Also need a large potentiometer (2 1/2 inch diam) used for filament control in early battery receivers (1922.) Knob (1 3/8 inch diam) and brass shaft (½ inch diam). The knob is same as a trimmer control on a Westinghouse RADA.
Fred Prohl (812) 988-1761 email fprohl@att.net

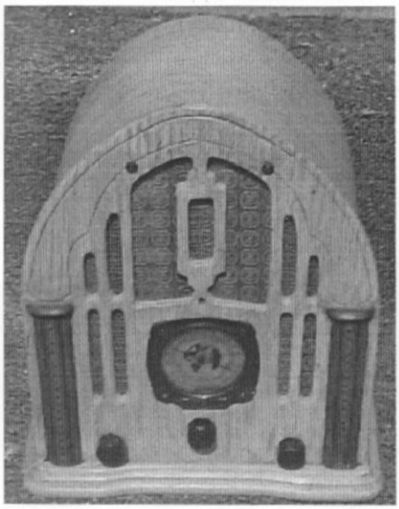
Wanted: RCA 8T table model with a tuning eye and 3 bands. Can be rough.
Ed Dupart 765-533-6272 e-mail: edupart3@hrtc.net

The Elusive Detrola 4J

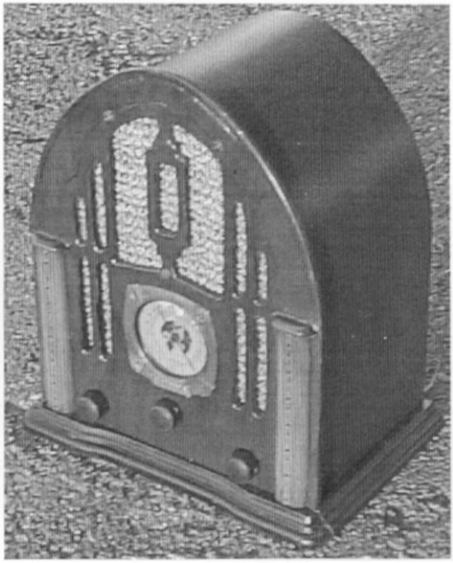
By Ed Dupart

Well, at least it was elusive for me to find, but one of you out there may have a dozen of them stashed away. When I was a teenager I had one of these radios and it was on a shelf above my bed. While it was not a good performing radio, I loved looking at the dial at night and it did sound good on the local stations. About 1972 the radio quit working and I stripped it of parts and threw it in the trash. Why I did that I don't know, because I kept so many of my other childhood radios. It wasn't long after that, that I regretted throwing it out and so for the last 30 some odd years I have been looking for another one. Not too many people have one and those that did, didn't want to part with it. Finally, in September of 2003, I found one on e-bay. Actually, two of them. One out in Washington, which happened to look identical to the one I threw out and one near Detroit. I purchased the one near Detroit, which was complete and worked, but had been antiqued (painted) to cover up the rough cabinet. It took a lot of work, but it is presentable, not perfect, but presentable. It is very close to the original colors.

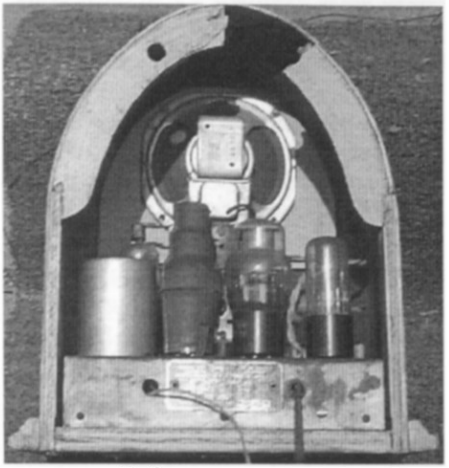
Detrola and Climax of Cleveland must have bought their cabinets from the same people, because a Climax that I have is virtually identical dimension and trim wise to the Detrola 4J, as well as a Belmont that I have. The front panels are different. In a later Bulletin I will picture them side by side.



Before, with the paint job.



Back to the original finish.



Before

After

STANDARD WARRANTY

This [illegible] and tubes were carefully tested and [illegible] It was [illegible] an approved container and left our factory in perfect condition. Should it arrive in a damaged condition claim with carrier at once.

We warrant each new radio receiver manufactured by us to be free from defects in material or workmanship under normal use, our obligation under this warranty being limited to making good at our factory any part or parts thereof which shall within ninety days from date be returned to our factory, carefully packed and transportation charges prepaid.

This warranty will not apply if this card is not returned with set, or if serial number has been effaced or tampered with, or if in our judgment set has been misused, abused or connected otherwise than in accordance with these instructions.

OPERATING INSTRUCTIONS

1. SETTING UP RECEIVER. This receiver is designed to operate on 105 to 125 volts, 50-60 cycles, A.C. power supply. Do not connect to any other source unless designated on license plate. Set the attachment plug properly in light socket. See that all tubes are properly inserted in sockets, per chart shown below. Connect aerial and ground as designated.
2. TUNING IN SIGNAL. Turn on power switch by turning volume control knob to right. The pilot lamp will light, indicating power supply to receiver. Continue to turn volume control in clock-wise direction as far as it will go and allow an interval to heat points of operation. Set band switch either to right or left, depending on the class of reception desired. In the left-hand position, broadcast stations on frequencies between 550 and 1500 Kilocycles will be received. When the band switch is thrown to the right, stations operating on frequencies ranging from 1500 to 4800 Kilocycles will be heard. Next, turn the station selector knob slowly until some station is heard clearly and reduce the volume to below desired intensity.
3. The four tubes used in this set are as follows: 1—No. 280 Full Wave Rectifier; 1—No. 77 Radio Audio Amplifier; 1—No. 78 Detector; 1—No. 42 Audio Amplifier.

SERVICE SUGGESTIONS

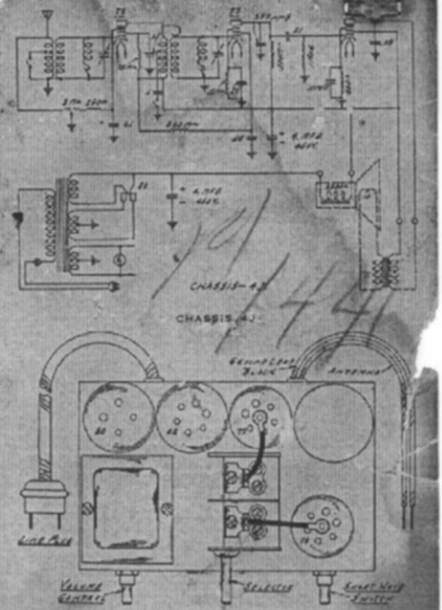
In changing tubes always remove the plug from light socket. Make sure all tubes are pushed firmly into their proper sockets and that clips are always fastened to caps on tops of tubes.

Be sure that aerial and ground are properly connected. A thirty to fifty-foot aerial is recommended for best operation.

To remove chassis from cabinet, first remove knobs. Then remove four screws from bottom of cabinet holding base. Remove screws holding speaker in cabinet and remove speaker and chassis as one unit.

SCHEMATIC DIAGRAM

MODEL 4J



DETROLA RADIO CORPORATION
DETROIT, MICHIGAN
Licensed under Patents of
Radio Corporation of America and Associated Companies
Model 4J Part No. 1565

Detrola put instructions and a schematic on the bottom of many of their mid-thirties radios. This Detrola 4J is a good example of this.

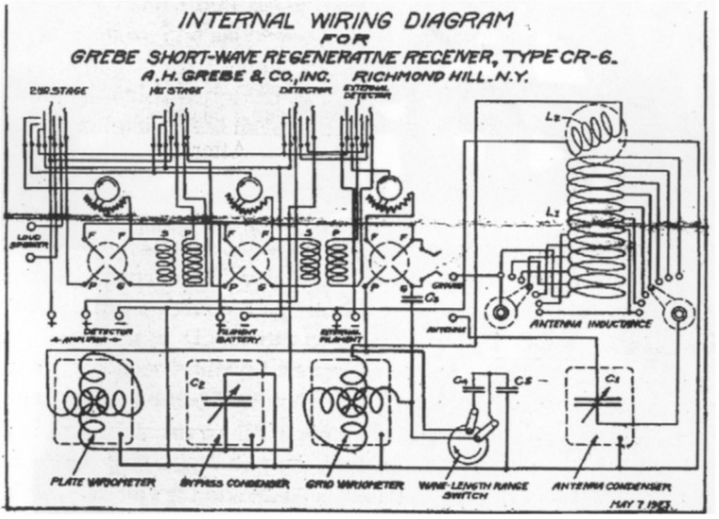
Picture Gallery

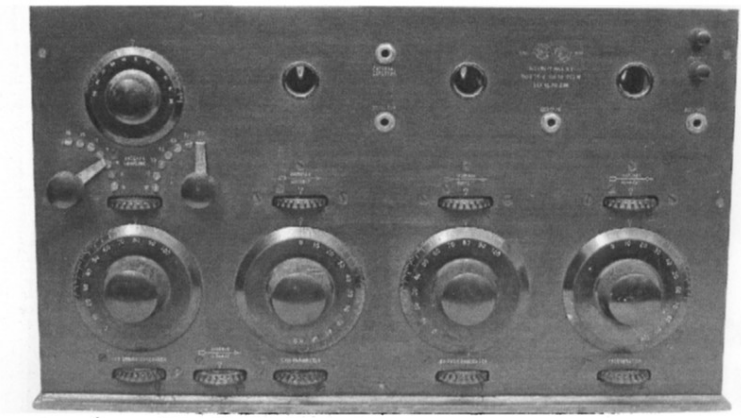
Oh! Those Beautiful Insides!

The Eye Pleasing Architecture of a CR-6

Fred Prohl

The pictures on the back cover of this issue of the "Bulletin" tell the story. Grebe circuit designers had as much interest in visual aesthetics as well as layout and construction. The graceful curves of the vario-couplers, the proportionate size and placement of circuit components, and even the circuit drawing are a testament to the artistic skill of the designers.





The Grebe Type CR-6 Receiver

"Oh! Those Beautiful Insides!"

The Grebe Type CR-6 Receiver