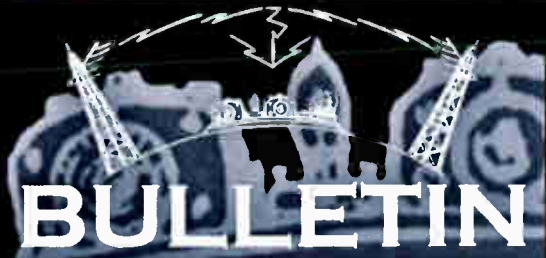


The
Indiana
Historical
Radio Society



BULLETIN

Volume 39

September 2010

Number 3



Arvin

Velvet Voice Radio

You can hear the difference!



Arvin means a good living in every room!

Arvin

Velvet Voice Radio

TOPS FOR TONE AND

COLOR

6 heavenly hues

- Cabon
- Flame
- Cherry
- Avocado
- Ivory
- Petal



A color for every room and every decorating scheme '1895



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The INDIANA HISTORICAL RADIO SOCIETY is a non-profit organization founded in 1971. Annual membership dues of \$15.00 includes the quarterly IHRS "BULLETIN." Radio-Ads are free to all members. Please include an S.A.S.E. when requesting information. Send applications for membership and renewals to Herman Gross, our treasurer as noted above.

The BULLETIN
A PUBLICATION OF THE INDIANA HISTORICAL RADIO SOCIETY
2 THIRTY-NINE YEARS OF DOCUMENTING EARLY RADIO

The Indiana Historical Radio Society Bulletin

September 2010

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In this issue:

Two Vintage Radio restorations by IHRS members are described in this issue. Jeremy Schotter rescues a Westinghouse console and Ed Dupart writes about a repair of Bakelite radios as a follow up to his article in the Summer Bulletin.

Recently, on ebay, an Antique Radio Classified January 1993 issue sold for about \$14.00 (included shipping). This is an exception to the \$3 to \$5 selling price of the back issues. The feature article in ARC volume 10 number 1 was “Arvin Metal Radios”. This well written article by Dan Howard describes Arvin metal radios manufactured by Noblitt Sparks, Columbus, Indiana for a period from 1938 through 1953. For years this issue of ARC, now well worn, has been my reference for Arvin Metal radio. I suspect other collectors of Arvin radios know the value of Dan Howard’s article. It was with this article in mind a picture review of Arvin Metal radio was assembled for this issue of the Bulletin.

In a closing article Herman Gross writes of his circuit troubleshooting experience in “Cure For A “Staticy” Radio.

An editor might be excused of a name misspelling once in an issue, but twice???? Lou Dvorak politely overlooked the error in the June 2010 issue of the Bulletin – thanks, Lou.

Fred Prohl, Bulletin Editor

From the President

It's been almost 2 years since becoming President, and its about time I put something here in our Bulletin. Several things in fact:

- 1 . Elections are coming up in the fall meet. I am willing to serve one more year, unless someone else really wants to hold the position. All the other positions would be open too.
- 2 . Our meets: we have been "loosing" money at all the meets other than the big Kokomo gathering. We may want to consider changing from four to three yearly meets to save a few dollars. Another idea would be to find some venues that would be less costly to us.
- 3 . Contests at the meet. We seem to be 'stuck' with the same contestants during the past couple of years. Nothing against those that have put in some really great entries, but we need to open the way for those others that may have some unique radios, and the stories behind them. One idea would be to make it a 'non-contest', with pictures and story in the next Bulletin. And your name in print!
- 4 . Any other activities for our meets? Any ideas are welcome
We can discuss these, and anything else that comes up in the next few weeks at the Greenfield meet.

Joe Farkas

Renew your membership for 2011 now!

If the date on your mailing envelope for this issue of the Indiana Historical Radio Society Bulletin is 12/10 or earlier, it is time to renew your membership. Please send a check payable to the *Indiana Historical Radio Society* in the amount of \$15.00 per year.

Send your payment to:

Herman Gross, IHRS

1705 Gordon Drive

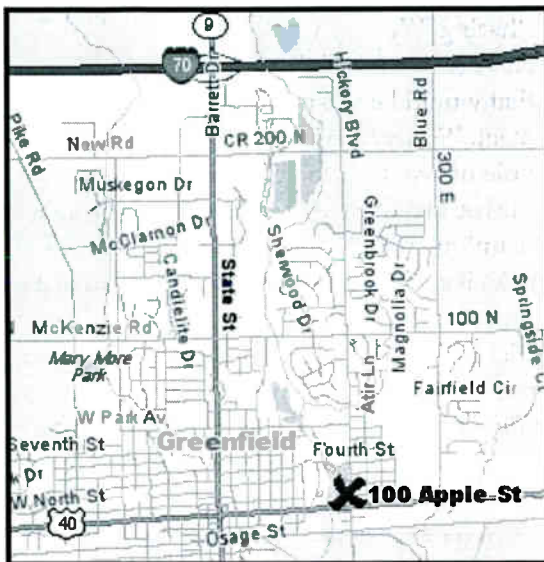
Kokomo, IN 46902.

Include your current mailing address, if not on your check, and your email address, if you have one. Membership questions? Contact Herman at hw144ihrs@comcast.net or call him at (765) 459-8308.

On Saturday, October 9, the Indiana Historical Radio Society will meet at the Riley Park Shelter, Greenfield

The Riley Park Shelter is located one block north of US 40 on Apple Street, Greenfield. Radio Swap space is available inside and outside the shelter building.

General admission is free. Swap N Sell vendor fee is \$5.00 for current members of the Indiana Historical Radio Society and \$10.00 for non-members.



Schedule of events:

7:00 AM Set up Swap N Sell of vintage radio equipment.

Set up indoors or out in the parking lot, first come first serve.

8:00 AM The IHRS Fall Foliage Meet officially begins

Tables will be available in the shelter for Display of Vintage Radio.

9:30 AM Silent auction entries in place in the shelter – bidding begins

10:45 AM Silent auction ends – buyers pay for items.

11:00 AM Lunch – If you are able, bring a dish to share along with IHRS provided meat service.

An IHRS Business meeting will immediately follow the lunch

Contact for the IHRS Fall Greenfield Meet:

Fred Prohl, (812) 988-1761 or email indianahistoricalradio@gmail.com

Information also at indianahistoricalradio.org

Westinghouse WR-334

Jeremy Schotter

Brand: *Westinghouse Electric Corp.* **Year of Manufacture:** 1937 **Frequency Range(s):** 540 - 1800KC, 1.8 - 5.5MC, 6 - 18MC

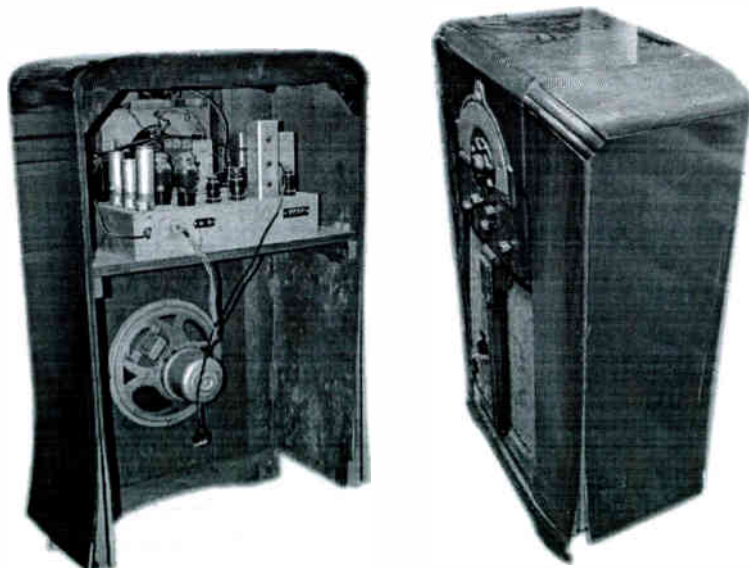
Tube Lineup: 5X4G Rectifier, (2X) 6V6G PP Output, 6C5 P.Inv., 6Q7 2nd Det/A.V.C., 6K7 A.F.C./Discim., 6K7 R.F. Amp

Tube Lineup: 6J7 A.F.C. Control, 6H6 Discriminator Rectifier, 6K7 I.F. Amp, 6A8 1st Det/Osc., 6U5 Tuning Eye

Schematic: Riders 12-13

May of 2009, in route to Kokomo, Indiana on a three hour trip to the Indiana Historical Radio Society Spring Meet, I recall thinking to myself that I had a fool-proof plan on how to avoid hauling home any large radios or consoles. I would make sure to leave my truck at home and drive my car. That way I physically had no room to haul anything home! As I would find out, like many well thought out plans in history, this one was destined for failure.

This miserable looking radio was propped up in the corner of the convention center room, next to the silent auction tables. It was attracting a great deal of attention from fellow club members and restorers. Not because of the miserable condition or low price, but because of the high



tube count, well built chassis with triple tuned IF, and the overall rarity of this radio. While many seemed to be impressed by this beast, no one was stepping forward to take it home. The radio was complete, but in several pieces, with several parts damaged. To summarize the eventual outcome, this radio just barely fit in the back seat of my girlfriend's Chevy Impala!

The restoration of the electronics on this radio began with a twist, but ended up being nothing more than routine later on. After a good cleaning of dust and loose debris from the chassis, the first repairs included replacing the filter capacitors and installing a new power cord, which I opted to use reproduction cloth-covered cord. On the first power up, I was greeted by a 60 cycle hum, and the B+ voltages were way off. As some point in time, the power transformer had been replaced, and it was a sloppy job at that. Many other capacitors, controls, and resistors had also been replaced over time. With a schematic in hand, I was quick to notice that the center tap on the power transformer was not connected to the proper place. The way everything was connected, the filter capacitors were essentially doing nothing at all!

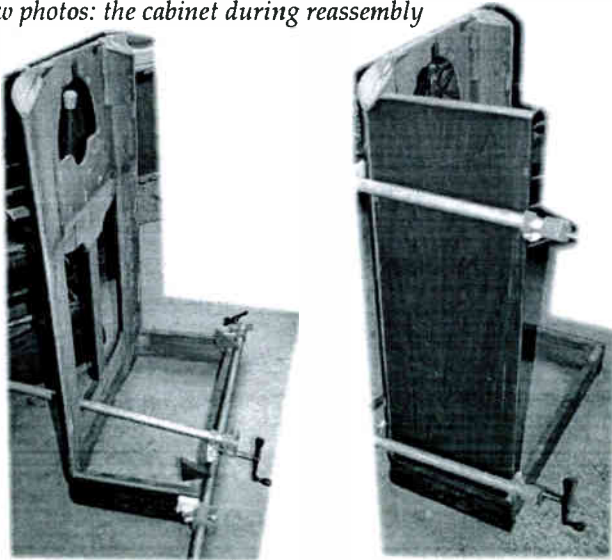
With the nasty looking repairs of the past, I decided to clean the wiring up and check out the rest of the power supply section. On the second power up, the hum was gone, but after several seconds of warming up, the ammeter on my power supply would begin to jump around. That is when I noticed arcing inside one of the 6V6 power output tubes. Testing both of the 6V6's on my B7K 747B tube tester revealed shorts in both of them. Further testing of tubes revealed three more with internal shorts, and the 6C5 inverter showing no grid emissions. All of the tubes in this radio were RCA branded with matching date codes. The large number of bad tubes seemed rather odd to me, the most that I have ever encountered in a radio. The mis-wired CT of the transformer must have been the cause. It had been connected to a point that shared a connection with the cathodes of the 6V6 tubes. Perhaps this created some kind of crazy voltages inside of the tubes, thus causing arcing and eventual shorts.

With the replacement of the bad tubes, on the third power up the receiver was working much better. The paper capacitors were then replaced, testing out the receiver after replacing two or three at a time. This way if I make a mistake, it is much easier to retrace my work and find the problem. Once the capacitors had all been replaced, the controls were cleaned and the alignment was checked. The resistor in the eye

Westinghouse WE-334 continued

tube base was way out of tolerance, so it was also replaced. Two small modifications were then made to the radio circuitry. A fuse was added to the hot side of the AC line voltage going to the primary of the power transformer. I also added a thermistor on the 120V AC. The thermistor is around 200Ω when cold, and once warmed up, drops to just a few ohms. With the addition of the thermistor, this supposedly decreases "thermal impact" of the tube filaments and other components by letting the voltage slowly rise. Another result of using a thermistor is that it knocks down the AC line voltage by a few volts, effectively causing the power transformer to run a little cooler. As you can see in the above photos (page 4) from before the restoration, the cabinet was in several pieces and needed quite a few repairs. Luckily, all of the pieces were accounted for, including some of the larger veneer chips. The cabinet restoration began by disassembling the remainder of the cabinet, and building it up from there. The sides, with a top layer of veneer and several sandwiched layers of a cheaper wood, had to be completely re-glued. The base was reattached/ glued to the front panel. The repaired sides were then attached, followed by the top. There were several veneer repairs needed, mainly on the curved section where the top meets the front panel. Due to the cabinet falling apart, there was a large crack present in the

Below photos: the cabinet during reassembly



curve. A combination of some veneer and stain-able wood filler was used to patch the various small chips and cracks in the veneer. I like to preserve the original finish if possible on a radio, but I had my doubts on this one. I used some mineral spirits and a scrubbing pad to clean up the cabinet once everything was glued back together and all other repairs were made. The cleaned cabinet looked rather promising, so I decided to try my method to touch up the old finish.

To blend in the chips/scratches/ bad spots in general, I wiped the entire cabinet down with "Special Walnut" colored stain. This was followed by wiping the cabinet off with a clean rag to remove the excess stain. The result of this looked very good. A few of the repaired areas required some additional touch-up using various colors of Minwax stain sticks. After the stain had dried overnight, it was time for some new lacquer. The entire cabinet was wiped down with a tack cloth, and final touch ups with the stain sticks were performed. Using a "Crittter" spray gun, I then coated the cabinet with several layers of thinned gloss lacquer. The cabinet was wet-sanded in between coats with 400 grit wet/dry sandpaper. The final coat of lacquer looks pretty good to me, so I didn't both rubbing it out or anything.

The final repairs included replacing the grill cloth, patching the hole in the tuning knob, and making a new dial cover. The knobs were all polished using some brown shoe polish.



Due to a very busy college semester, this project was drawn out over many months. It did however prove to be a good stress relieving pastime, a way for me to escape life for a while and work at the bench. I am very impressed with the performance of this receiver. The push-pull 6V6s deliver a powerful 10 watts of undistorted audio, along with a very selective tuning to make this a great DXer. With the initial purchase price and restoration costs, I probably have less than \$100 invested in this radio. That's a darn good price for a fully restored twelve tube Westinghouse! This one ranks high up in my list of great looking and performing radios, and will maintain a proud position in my radio room for years to come. (See page 16 of the Bulletin)

Jeremy Schotter, KC9GIC, maintains "Jeremy's Antique Radio's" at radiorestorer.com. This Westinghouse WR-334 article is one of many restoration articles documented on his web site.

The Emerson DL330

Another Basket Case

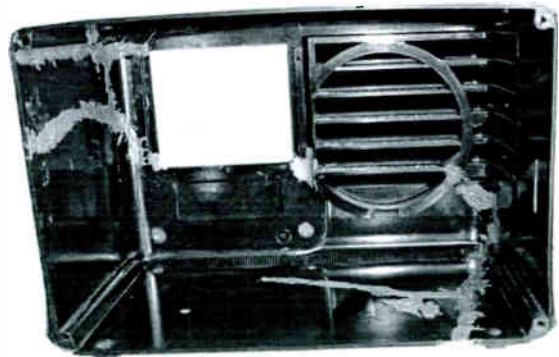
An Addendum to my Zenith Restoration Article

By Edward Dupart July 27, 2010

This radio belongs to John DenHartigh and was a radio he really liked, but somehow it got dropped and like most Bakelite radios, it broke. Boy, did it break! Over the years he would tell me about this radio and I told him I probably could put it back together. Amazingly, he saved all the pieces, but the problem was finding them. This year he found them in the process of getting ready for his big radio auction. He handed me the box and I told him it would probably be a winter project, but I looked it over and I decided to put this puzzle back together this summer.



I asked John what color he wanted and he said, "You decide", but I said, "It's your radio." He said, "It's your decision", and I said, "OK." Then all kinds of ideas started floating through my head. I remembered the 1968 Cougar a friend and I painted purple with a black top and then the 1950 Mercury with flames on the side came to mind. The flames were cool and then there was the 1962 Rambler Ambassador I painted bright metallic green with a white top. Ah yes, all the cars I painted, but I had to remind myself that this was a 1940 radio and that I should stick with 1940 colors, so the bright metallic colors were out and definitely the flames wouldn't look right on a radio, although, the flames would be different. So, I settled for an off white with black for accenting the trim.

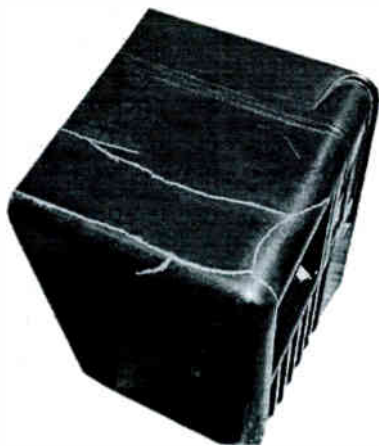


In a previous article I did on resurrecting a Zenith Bakelite radio that met a similar fate, I went into considerable detail on how I put a broken up plastic radio back together, so I won't go into all the same details here. Rather, I will tell you some things that I did differently.

I will have to remind you that this is a Bakelite radio and all kinds of paints and thinners can be used on this type of plastic with no adverse effects. If you are planning on restoring a plastic radio that is not Bakelite, make sure the chemicals and paints you use do not react with the plastic. Try a small test spot inside the cabinet to make sure it is compatible with the chemicals you are using. If you are not sure, there are many paints on the market that will work well on plastics. Testors makes a wide variety of brush and spray paints for plastic models and will work well on plastic radios.

On past radios and cars I have used Bondo, but Bondo can shrink, so I decided to use nothing but JB Weld. JB Weld is much harder and more difficult to sand so I used a small square orbital sander with a built in vacuum cleaner. This reduced the sanding time incredibly and eliminated any waviness. Of course, hand sanding with a block eliminates waviness, but the electric sander was so much faster.

Once I had the radio glued back together and the joints sanded, I took 409 to the entire cabinet and got all the years of tobacco stains, slime and goo off the cabinet. I have been using 409 for several years for cleaning cabinets, knobs and dial lens and it does a pretty good job at removing grease, grime and tobacco stains and it did a good job on this radio. There are other cleaners on the market, but this is easily obtainable for me in this area. You are probably wondering why I didn't do this at the very beginning. I did not want to contaminate the breaks in the plastic with any kind of cleaners and I didn't want to risk breaking off any tiny pieces along the breaks, so I just went ahead and superglued all the broken edges and the broken pieces fit together very well. Once the cabinet was superglued together, I then sanded all the broken joints, which removed any surface contamination and then I applied the JB Weld over the breaks.



The Emerson DL330 – continued

After the JB Weld hardened, then I proceeded to clean the rest of the cabinet. At this point, the cabinet is about as strong as when it was new and could take a lot of rubbing and scrubbing.

After all the cleaning, the cabinet is now nice and shiny, but there is a problem. Paint does not like to adhere to nice shiny surfaces, so I used 100 grit sandpaper to rough up the entire surface of the cabinet. Now, it's ready to be painted.

Since I planned on painting the radio white, I used a gray primer, although I did use the red oxide primer as a base. The gray primer seemed to fill better and it's a better undercoat for the white paint.

The paint I used was an auto body touch up paint that was acrylic enamel and required a clear coat on top of it and was stated as such on the can. Without the clear coat, I couldn't get much of a shine. This paint was available at Auto Zone and Advanced Auto.

Once the white paint and the clear coat had dried well, I taped it off using gentle release tape and old newspaper. Now I'm ready to put on the black trim paint. I used a cheap enamel paint from Wal-Mart, \$.97/can, that can be cleaned up with cheap paint thinner (mineral spirits). Why would I do this you ask? Cheap paint thinner won't touch acrylic enamel and most car paints require lacquer thinner for cleanup and I had to use lacquer thinner for cleanup involving the automotive white paint. This means I can apply the cheap black paint over the acrylic enamel (there is no reaction between the two paints) and if I need to remove a little excess black I can do it with the cheap paint thinner and it won't effect the white acrylic enamel underneath. Sometimes paint will bleed under the tape and will need to be cleaned up, which did happen with this radio. I just take a rag with some cheap paint thinner on it, not a lot, because I don't want it to drip on the radio, and wipe it over the black I want removed and presto! It's gone and it didn't mess up the white paint. Tricky, huh!?

After the radio has dried, I used white polishing compound and polished the entire radio, except the inside, which brought out a nice shine and it helped clean up and straighten the black edges and remove any black residue. I did paint the inside of the radio, but I did not polish the inside of it, but instead, I used fine steel wool to smooth the finish on the inside. I like rubbing my hand over the cabinet now. It is so smooth!

The usual question I get is how did I get the recessed script Emerson to be black? I took a black crayon and rubbed back and forth

over the script and then used a soft cloth to wipe off the excess. I like to have the crayon warm so that it almost flows in. I can warm it up with an incandescent light. I also use a white crayon on my early 1920's radio knobs and they come out looking great. Not on this radio, but on others, I have used a needle or a toothpick and dip it in black paint and very carefully fill the script with paint. This is tedious and takes patience. The crayon or furniture stick is fast and easy and looks good.

OK, some of you are probably wondering what in the world is a furniture stick? I call them high quality crayons that come in many wood type colors as well as black that can be used to fill in nicks and scratches on wood furniture. A pro can make a scratch disappear on a piece of furniture using a furniture stick.

Now that the cabinet is basically done, it is time to look at the bottom of the cabinet and get it's feet back on. I consider having rubber pads/feet and/or felt is important to keep the radio from scratching whatever surface it may be sitting on. The original rubber feet were still in good shape and had a round peg that would fit in the hole of the cabinet. I was able to remove two of them perfectly. To facilitate them going back in easily, I put a little oil on the rubber peg and twisted the foot in. The other two lost their rubber peg, so I glued, what is now, a flat round pad, to the bottom of the cabinet.

I'm almost done with the bottom of the cabinet, but I have one more thing to do. I like to glue a schematic somewhere on a lot of the radios I restore, so I decided to put one on the bottom of this one. There was plenty of area to put a useable schematic, plus it helped hide a lot of the JB Weld I had on the bottom of the radio. Elmer's glue works just fine for this purpose and is easy to cleanup.

The knobs and the clear plastic dial lens needed cleaning. They had years of tobacco smoke stains on them. The lens had that ugly yellow look, but was in very condition. So, out comes the 409 again. An old toothbrush worked great on both the knobs and the lens. The yellowish, brown goo just came rolling off and now the lens looks clear without that deep yellow tint and the knobs look clean. I took the white polishing compound to both the knobs and lens and that brought out the shine on both.

Normally, John restores his own radios electrically, but at the time of my doing the cabinet he was under enormous pressure to get the auction ready and the greenhouses cleaned out, so he gladly let me do the electrical restoration as well. Electrically, it was a typical restoration,

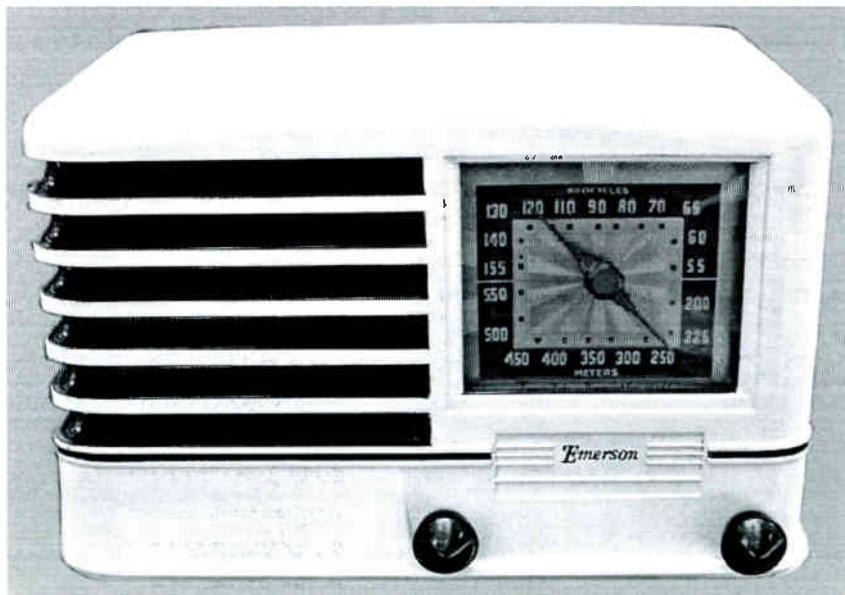
The Emerson DL330 – continued

change all the paper capacitors and the filter capacitor, all of which, were bad. All the resistors and tubes checked good, but the radio did a lot of crackling and finally the primary of the first IF transformer gave up the ghost and opened up.

The IF transformers in this radio used a spring type mounting tab instead of the usual two screws and nuts arrangement. So I decided to remove a good transformer from a common can and cut the length of the coil form down to size and put it in the original Emerson IF can. The locking pins, spacing of the trimmer capacitors were all the same, so it fit just fine in the original can. After aligning the radio and with its new capacitors, it sounded just fine on the bench.

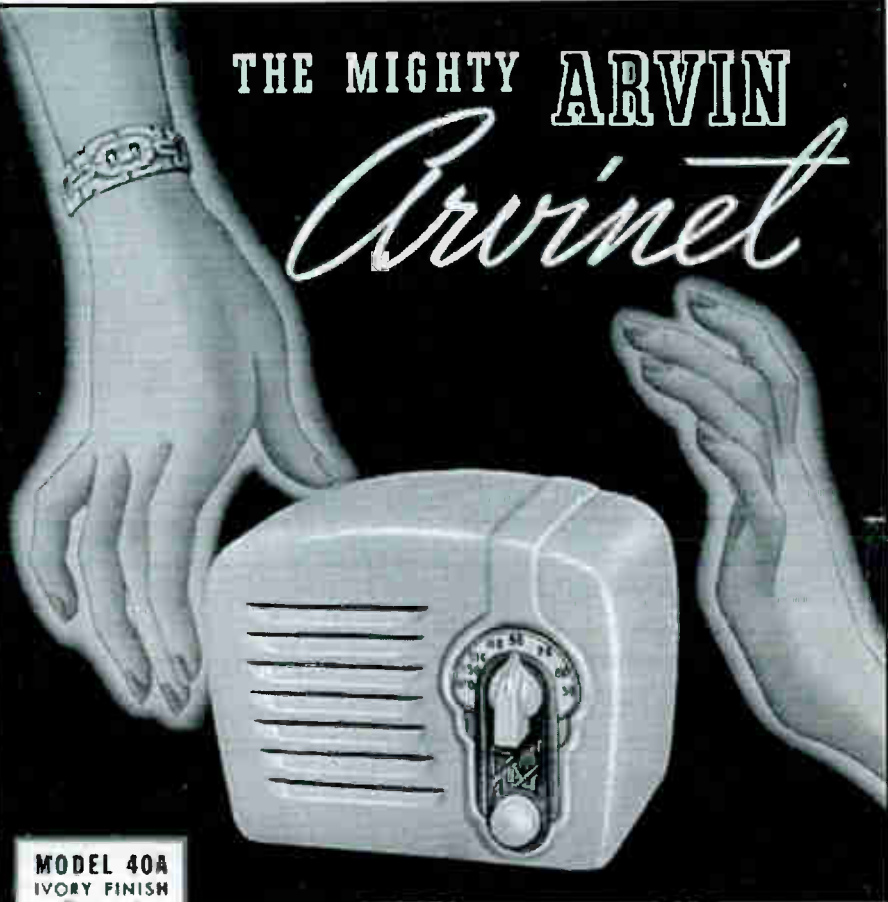
Finally, I can put it all back together. I thought this radio came out really well, even better than the Zenith I recently did. The black and white contrast, I feel shows what the cabinet designer really wanted people to see in his creation. The original all brown Bakelite cabinet looks so drab in comparison. I know if it was 1940 again and I was shopping for a radio, I definitely would prefer the painted version to the plain brown cabinet. *(See page 16 for a picture review of the Emerson restoration.)*

Ed



THE MIGHTY ARVIN

Arvinet



MODEL 40A
IVORY FINISH

Illustrated
3/4 Actual Size

\$695

LIST
WITH AERIAL

T.O.B. Columbia, Inc.

Approved by Underwriters' Laboratories

SMALL BUT MIGHTY

● Here's a small but mighty-fine-performing, low-priced radio that sells so fast you'll add up a pile of profits with the Arvinet in your store. Check these important features with any radio in the Arvinet price class—

Unbreakable Cabinet in ivory or walnut enamel.

Operates on AC or DC.

Four-Tube Performance with 2 new-type double-purpose tubes.

Power Output 1 1/2 Watts.

No Line Cord Resistor and no ballast tube.

See Complete Specifications on Reverse Side of This Sheet

Electro-dynamic Speaker for fine tone quality.

Attached Aerial 20 feet.

Compact Size, 6 1/8" x 5 1/4" x 3 3/8". Easily carried.

Attractive, Modern Design.

Swanky Suede Carrying Case only one dollar extra.

FACTORY SERVICE GUARANTEE FOR ONE YEAR FROM date of purchase, under these conditions:

Upon return of this Radio to the factory in the original carton, transportation prepaid with the sum of \$1.00, the factory will service the set, place it in first-class condition and return to you by Express, collect, with these exceptions:

1. The tubes are guaranteed for 90 days only, against defective material and workmanship. Tubes which are found to be defective after the 90-day guarantee will be replaced and new ones charged for at prevailing list price.

2. This guarantee does not apply, of course, if the radio, upon return, shows signs of abuse or tampering.

Defective sets on this one year Guarantee should be shipped to—

MOBLITT-SPARKS INDUSTRIES, INC.
COLUMBUS, INDIANA



Above is Jeremy Schotter's restored Westinghouse WR-334. (page 6)



- The cycle of repair from disaster to showcase – an Emerson restoration by Ed Dupart (page 10)



Set up outside or inside at the IHRS Summer Meet - Columbus



Below – A timely submission by email from Bill Arnold – a recently restored Silvertone – manufactured by Arvin.

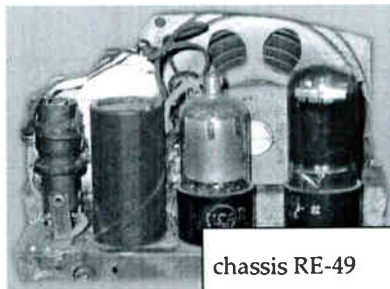


Arvin Metal Cabinet Table Radio 1939 - 1954

“Small but mighty!” “A radio for every room!” “Unbreakable cabinet!” “The Little Giant of Radio Land!”

With the exception of the war years, Noblitt-Sparks Industries of Columbus, Indiana manufactured small table radios with a metal case from 1939 to 1954. Manufactured primarily with the Arvin name, other names such as Kent, Silvertone, Fleetwood, Firestone, and Midwest are found with the Noblitt-Sparks metal case and chassis.*

The Arvin metal cabinet table radios pictured on the following pages are from the collections of Larry Ruble and Fred Prohl. Supporting literature includes: *Howard, Dan, “Arvin Metal Cabinet Radios, Antique Radio Classified, January 1993, (vol 10 – num 1) ; Noblitt-Sparks “Arvin” promo material; Beitman, M. N. “Most Often Needed ARVIN Radio Diagrams”, various years; Rider, John F. “Perpetual Troubleshooter’s Manual.”



chassis RE-49

1938, 39

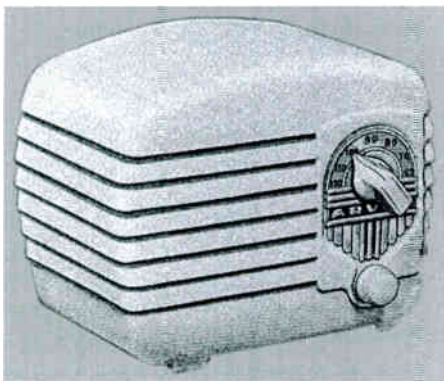
Model 40A,

chassis RE-49, 2 tubes

Colors - ivory (40A) and spotted walnut (40)
optional carry case

Dial foil may have “Arvin” or “Mighty Mite”





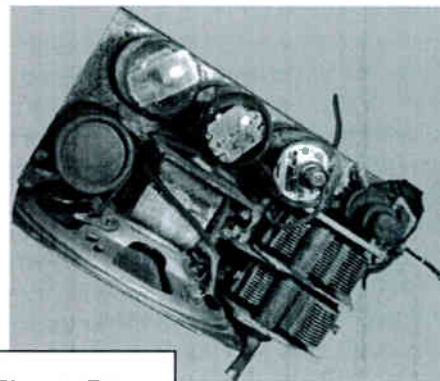
1938, 39

Model 402A

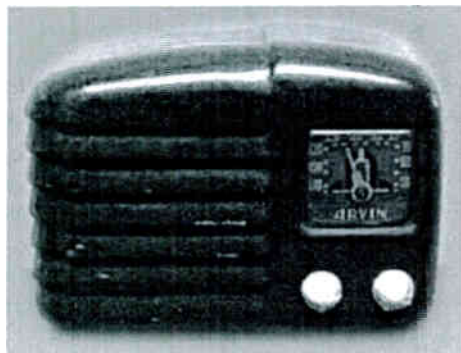
chassis RE-55, 3 tubes

Color – ivory and walnut

Chassis RE-55 on the right is from a Kent radio – manufactured by Arvin.



Chassis RE-55



1938, 39

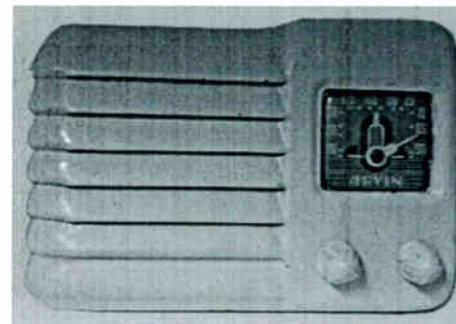
Model 502A

chassis RE-48, 5 tubes

Color – ivory and walnut

Left speckled walnut

Right a rare 502 flat top ivory set from the Larry Ruble collection.





1940, 41
Model 422
chassis RE-91, 4 tubes
Color – ivory and walnut

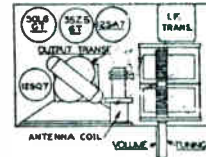
MODEL 422

CHASSIS RE-91

117 Volts AC-DC 30 Watts

For License Data and Patent
Notice, See Separate Notice
Attached to Receiver.

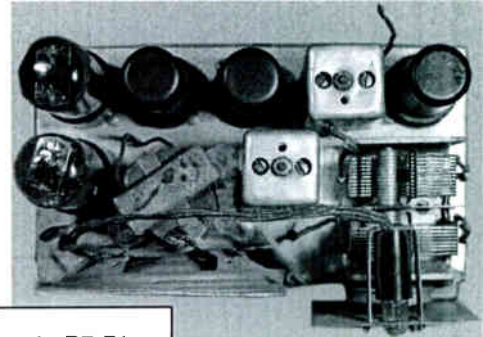
TUBE LAYOUT



Noblitt Sparks Industries, Inc.
Columbus, Indiana, U.S.A.
Member Radio Manufacturers
Association 29-5564



1940, 41
Model 522,
chassis RE-76, 5 tubes
Color ivory
Lighted dial



chassis RE-76



1940, 41
Model 524
chassis RE-99, 5 tubes
Color ivory



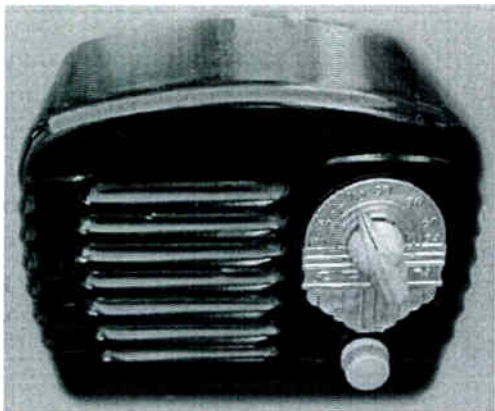
chassis RE-99



1946 reissue in 1948
Model 444
chassis RE-200, 4 tubes
1946 color - brown and ivory
1948 colors: banana yellow,
gardenia cream (light green),
geranium red, leaf green,
persimmon, and turquoise.

1947
Model 444M – brown
(444AM – ivory)
chassis RE-200M, 4 tubes
- Same as model 444 using
miniature tubes.
444H 444 with a handle





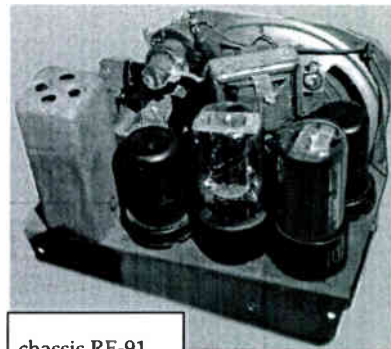
1947

Model 442

chassis RE-91, 4 tubes

– similar to model 402 (1939)

Color – black with silver dial plate



chassis RE-91



1948

model 242T

chassis RE-251, 4 tubes

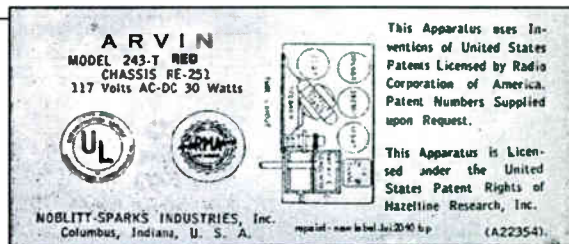
color - ivory

1948

model 243T (Same case as 242T)

chassis RE-251, 4 tubes

Colors: green, gunmetal gray, red,
yellow, and sand brown.

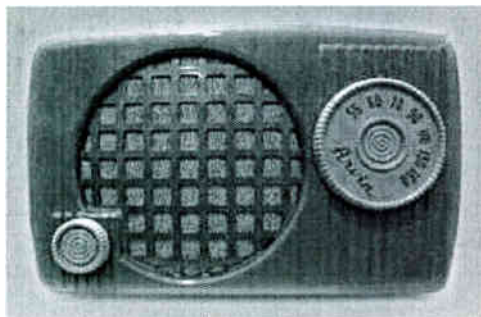




1949
model 341
chassis RE-274, 4 tubes
color - Sandalwood with
maroon knob




chassis RE-274

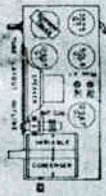


1950
model 440T
chassis RE-278, 4 tubes
colors: banana yellow,
burgundy, foxhunt red, ivory,
sand bronze, and willow green.

ARVIN MODEL 440-T
Chassis RE-278
117 Volts AC; DC - 50 Watts



NOBLITT-SPARKS INDUSTRIES, Inc.
Columbus, Indiana, U. S. A.



This apparatus uses inventions of United States Patents licensed by Radio Corporation of America. Patent numbers supplied upon request. This apparatus is licensed under the United States Patent rights of Hazeltine Research, Inc. C22926



1950

model 441T

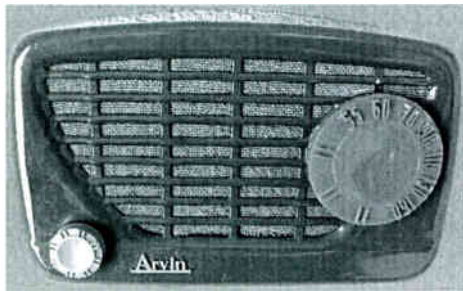
chassis RE-278, 4 tubes

Hopalong Cassidy design

Color – black or red

Prancing horse or rearing horse front foil.

Metal back has a saddle horn hook for the radio antenna.

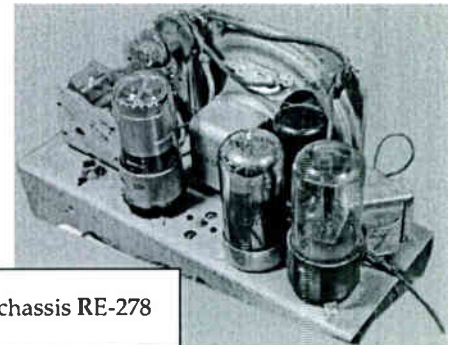


1951

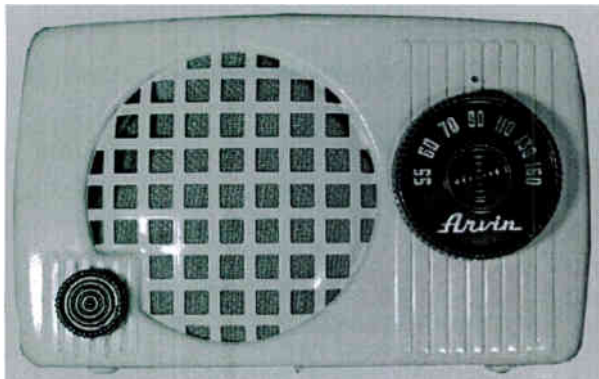
model 540T

chassis RE-278, 4 tubes

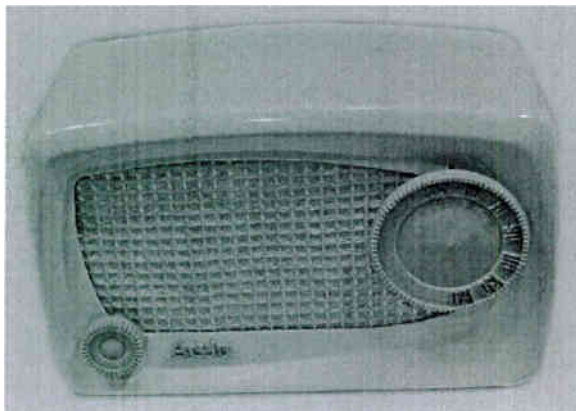
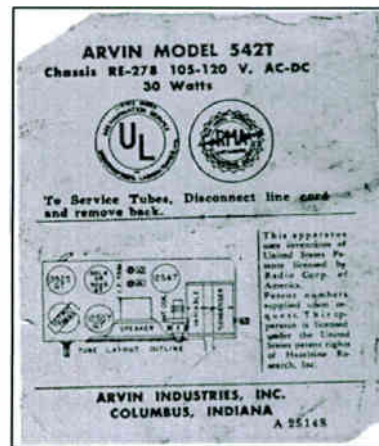
Colors avocado, cherry, citron,
flame, ivory, and pebble.



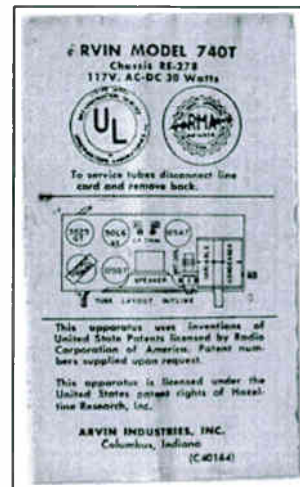
chassis RE-278

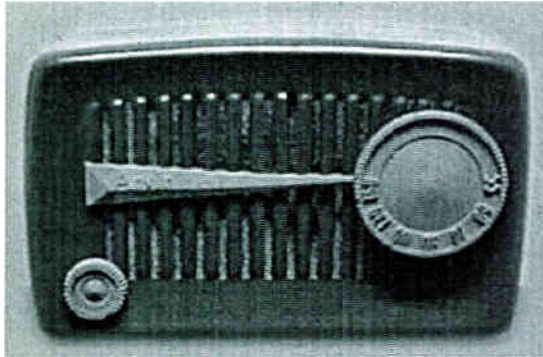


1953
 model 542T
 chassis RE-278, 4 tubes
 color – ivory with black
 and chrome lettered knobs.
 (Some knobs will have
 chrome centers as well.)



1953
 model 740T
 chassis RE-278/278-2, 4 tubes.
 colors: cherry, citron, coral,
 green, ivory, and tan.







1954
 model 840T
 chassis RE-278-2, 4 tubes
 colors: bittergreen, cherry, citron, corral,
 ivory, and sandalwood.
 Later production of the 840T models
 used the RE-278-2 miniature tube chassis.

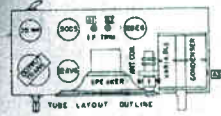
ARVIN

MODEL 840T CHASSIS RE-278-2

117 Volts AC-DC 30 Watts

To service tubes disconnect line cord.

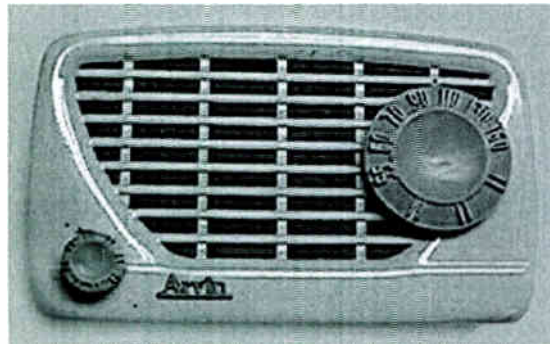


TUBE LAYOUT OUTLINE

This apparatus uses inventions of United States Patents licensed by Radio Corporation of America. Patent numbers supplied upon request. This apparatus is licensed under the United States Patent rights of Hazeltine Research, Inc.

ARVIN INDUSTRIES, Inc.
 Columbus, Indiana

C43361



1954
 model 842-1
 chassis RE-278-2, 4 tubes.
 color: ivory
 A reissue of model 540T (1951)

343T The Canadian Arvin.
 Same as the 243T with labeling to meet Canadian specifications.

ARVIN Model 343T

Any person installing or operating this receiving set without first having obtained a license from the Minister of Transport of Canada is liable on summary conviction to a fine not exceeding \$25.00 and the receiver set may be forfeited to His Majesty if order of the Minister for such disposition of the Minister may be given.

Enacted from the Radio Act 1930, Radio Regulations page 2, par. 66, c) as amended by the Canadian Radio Patent Act — passed 1935-1948 inclusive.

Made in Canada by
DESERONTO ELECTRONICS LIMITED
 DESERONTO, ONTARIO

CAUTION: Disconnect supply cord before removing chassis.



ARVIN METAL CASED TABLE RADIOS 1939 – 1954

(listed by chassis number)

Noblitt-Sparks Industries, Columbus Indiana

chassis number	model number	# of tubes	tube complement	Date of Introduction
RE-49	40A	2	25B8, 70L7	1938
RE-55	402A	3	25B8, 50L6, 35Z5	1938
RE-48	502A	5	12A8, 12K7, 12Q7, 50L6, 35Z5	1938
RE-76	522	5	12SA7, 12SK7, 12SQ7, 50L6, 35Z5	1940
RE-99	524	5	12SA7, 12SK7, 12SQ7, 50L6, 35Z5	1940
RE-91	422, 442	4	12SA7, 12SQ7, 50L6, 35Z5	1940(422), 1947(442)
RE-200	444	4	12SA7, 12SQ7, 50L6, 35Z5	1946, 1948
RE-200M	444M	4	35W4, 50C5, 12BE6, 12AV6	1947
RE-251	242T, 243T	4	12SA7, 12SQ7, 50L6, 35Z5	1948
RE-274	341	4	12SA7, 12SQ7, 50L6, 35Z5	1948
RE-278	440T, 441T, 540T, 542T, 740T	4	12SA7, 12SQ7, 50L6, 35Z5	1950
RE-278-2	740T, 840T, 842T	4	35W4, 50C5, 12BE6, 12AV6	1953

CURE FOR A "STATIC" RADIO

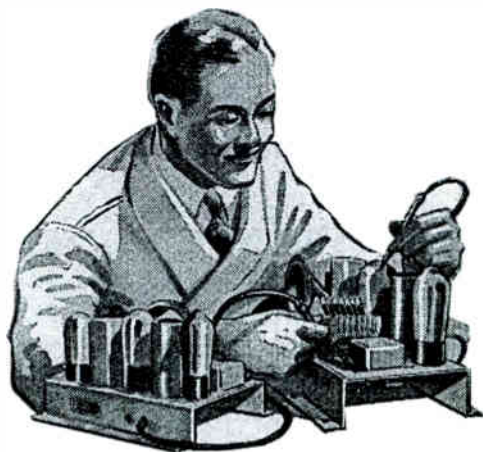
By: Herman Gross

AM listeners know what severe static sounds like when there's a bad lightning storm in their vicinity. Well, I encountered this same "static" problem with a Zenith G615 regardless of the weather outside. I had already, perhaps prematurely, recapped this radio and installed a new line cord that had been cut off by a previous owner. As the radio warmed up it emitted loud, continuous, irritating frying sounds. Drat!! No stations could be heard in the background. I could turn the noise down with the volume control so that ruled out any problem with the audio stages. Nothing I tried, including rapping on everything with my tube tapper, would make any difference.

I removed the antenna coil. No change. Tested all the tubes. No change. All voltages were within tolerance. I began to think this is one radio I'll never fix because I didn't know what to try next. Finally I disabled all circuits forward of the 12BA6 IF amplifier. No change! Things seemed to point to the 2nd IF x'fmr itself. Oh Boy! Most

reluctantly I removed the IF x'fmr and disassembled it being extremely careful not to break the hair-thin wires. A bit nerve wracking.

I discovered that the three capacitors, 2 tuning and 1 by-pass, were printed on a common quartz wafer at the bottom of the assembly. I couldn't see it very well because the thin wires restricted opening the bottom where the capacitor wafer made compression contact with the terminals....no solder. Knowing from past experience that silver can migrate as well as tarnish and cause shorts or intermittencies I decided to bite the bullet and remove the wafer. To do that I had to split it in two places. It was black in some places and dull silver in others but I made no other attempt to examine it. I was anxious to reassemble the x'fmr before I snapped one of the wires. A very delicate job.



With the x'fmr reinstalled I applied power and the radio was quiet! Did I screw something up?? I checked the audio stages with my mini 1kHz oscillator and they were still OK. I attached the antenna coil with clip leads and found I could receive the local radio station weak but clearly. Weak because the 2nd IF was completely detuned since I destroyed the tuning caps.

I was thinking about using a couple trimmer caps to tune the IF xfmr but they might be a mounting challenge so to start I figured discrete caps would get me in the ball park. I thought I'd "empirically" determine the correct tuning capacitance. Yes, cut and try. I arbitrarily chose a couple 100 pf silver mica caps and tacked them across the windings. Also used the same for the by-pass capacitor. Success! Several stations came in loud and clear and no static. But 100 pf was not optimum. Other values were tried and 110 pf caps seemed to be the best choice so I soldered them in place, using the shortest leads possible, and adjusted the core slightly for a nice peak.

The radio performed very well and that awful frying, "static", noise was gone. I buttoned up the radio and, giving thanks, called it a day.

Herman, 9/11/2010



On August 10, 2010 a message from radioinfo@indianahistoricalradio.org was emailed to the IHRS membership . The message announced two events for August 14 – the IHRS Summer Meet in Columbus and the DenHartig Radio Auction in Michigan. If you received the message – great! If you did not, and would like to receive emailed news from the Indiana Historical Radio Society, send your email address to radioinfo@indianahistoricalradio.org. Keep in mind some strict spam filters may require that you authorize receipt of radioinfo@indianahistoricalradio.org for you to receive messages.

Write!

Radio ads - Free to IHRS members. 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. If you cannot submit an electronic copy, we can scan in a typed copy.



Articles for publication. Radio history or restoration and repair of radio, your own radio collection; someone else's radio collection; your recent or memorable radio find; your experience at a radio event. Pictures are encouraged. We can scan good quality color or B&W prints. Sending jpeg pictures on CD-R works well. Fred Prohl



For Sale: Five console radios - almost complete with tubes, chassis, knobs . . . \$240.00 for all. Doug Blackford 317-750-5985 (9/10)

For Sale: Radios, crystal sets, many headphones, test equipment, and tubes from the J. Wisthoff collection. Partial list includes 4 slide tuning receivers, Aeriola Jr., Aeriola Sr, Crosley 50, Radiola III, Deforest, DT-600 "Everyman", British Thompson Houston wireless, the list of about 40 headphones includes Spitfire, Newcomb, WE, Sterling, N&K, American Bell. There is a large selection of 20's and 30's tubes. Will sell the collection by the piece or the entire lot. (A Waters/Conley "Phonola" child's phonograph is also available.) Joyce Wisthoff 219-663-4394 (9/10)

Information wanted: I am researching the first generation Delco farm radios (Models RA-3 & RB-3 and the unique dynamotor called the Electrifier.) designed to run from the 32 Volt Delco light plants. These sets are fully documented in the United Motors service manual but I have yet to find ANY advertising related to these particular radios and the Electrifier... I have the RA-3 and Electrifier and always want to properly document these artifacts for posterity.... Any information would be greatly appreciated. kd4hsh@juno.com For pictures go to: http://kd4hsh.homestead.com/delco_RA-3_1.html Robert Lozier, Monroe, NC (9/10)

For Sale: Radio's – Radiola model-18 w/ speaker, Brunswick model-5KR w/ speaker, Guild Spice Chest, Philco model-84, and Philco model- 89/19. Horn Speakers – AK-G, AK-L, AK-H, Western Electric 10-D, and Magnavox M-4 All items in good/excellent restorable condition - \$900 FIRM
Contact Larry Allen – Delphi, IN (765)490-5317 06/10

For Sale: DeForest DT-700. Very good condition. Wood case with lid. Instructions in the lid. \$750.00. Zenith 12-S-275 the Darth Vader set. Good original finish and grill cloth. Its been recapped plays good with all Zenith G tubes. 750.00. Call or email for pictures or more info. Scott Beard 812-466-9367 or Triodesb@aol.com 06/10

For Sale: Zenith Model 9-S-369, Nice large desirable radio. Needs some buttons, nice case. See picture on page 16 of the December Bulletin. Asking \$350.00. Also a Zenith model 10S669 \$25.00. Stephen Sommerrock, Greenfield, IN 317-468-1782 e-mail stsomm@aol.com 06/10

For Sale: Standard Signal Generator model 605-B quite heavy and appears to be working \$125. Two boxes of N.O.S. automobile radio parts consisting of power trans., signal seeking radio parts, IF trans., volume and tone controls, etc. all for \$150. Also cabinet for a Zenith 10S464 free to any club member that can use it. Bob Pote, 1181 Crestwood Dr., Greenwood, IN email mrzenith41@aol.com 12/09

For Sale: REPRODUCTION RADIO BATTERIES: I've developed replica battery solutions for most tube and transistor radios--batteries that have not been available for nearly thirty years. They look, they feel and they work--just like the originals! Plus, they are a reusable resource. Inside are holders for AA, C, D and 9-volt batteries. When the batteries wear out, simply remove them and install new ones. Contact Bill Morris at batterymaker@gmail.com or at 317-895-1334. 03/10

For Sale: Reproduction cabinet parts (wood). In stock parts; front panels, rear arch supports, base molding, for Philco models 20,21,70,90 (others per sample). Philco Colonial Clock top trim including finials, Grandfather Clock finials for Philco 570, GE H-91, Crosley 124 (others per sample). Almost any wood part available per sample, any make or model (per quote) (tooling charge may apply). Dick Oliver c/o Antique Radio Service, 1725 Juniper Place #310, Goshen, In. 46526. Ph. (574) 537-3747, e-mail- dolivears@aol.com 03/10

Interested in TV history? Want to see how it started? Try this Web site. www.televisionexperimenters.com You'll be amazed how far we've come. Pete Yanczer, 635 Bricken Place, Warson Woods, MO 63122-1613 03/10

On display at the IHRS Summer Meet, Columbus



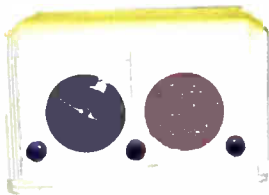
Bill Morris – 1949 British
“VIDOR” portable radio.



Michael Feldt –
presented a “Sterling”
cathedral radio.



Fred Prohl –
Arvin Metal
Radios – 243T



Larry Ruble – Shown above is a portion of
Larry’s impressive display of Arvin’s Rhythm
series of radios..