

The  
Indiana  
Historical  
Radio Society

**BULLETIN**

Vol 37

June 2008

No 2

**FREE!**

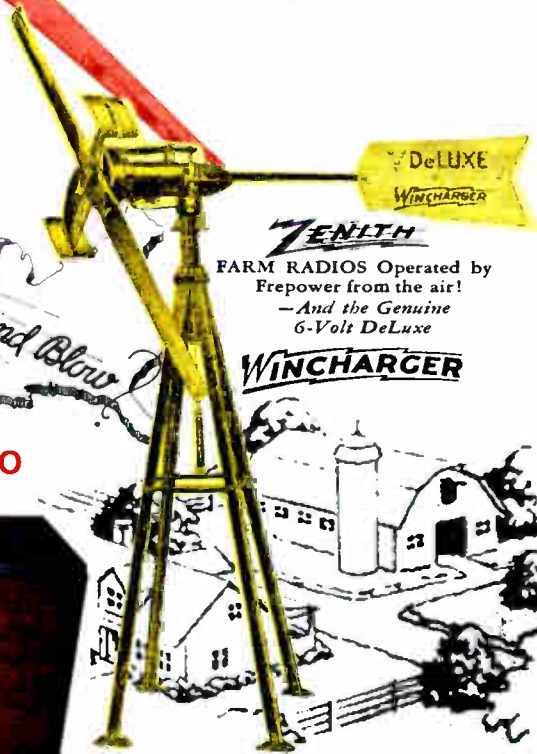
**ELECTRICITY WITH  
NEW SILVERTONE  
WINCHARGERS**

**NARD'S RADIONICS  
FARM RADIOS  
(AND OTHER MUSINGS)  
page 15**



IT'S FREE  
F.O.B. THE FARM  
SALES TAX PAID

**AIRLINE FARM RADIO  
page 7**



**ZENITH**  
FARM RADIOS Operated by  
Freepower from the air!  
—And the Genuine  
6-Volt DeLuxe

**WINCHARGER**



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## Responsibilities

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Applications and correspondence  
Dues, Financial, and Address  
Change. Please Notify  
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NOTE

News Articles, Radio Ads, Photos  
for Bulletin publication

Donations & Scrapbook Material

IHRS Museum Curator

**Bulletin Deadlines:** News, Articles & Radio Ads, 2/15, 5/15, 8/15, 11/15

**IHRS Web site address:** [www.indianahistoricalradio.org](http://www.indianahistoricalradio.org)

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 Indiana Historical Radio Society Bulletin – March 2008

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**In this issue of the Bulletin:** The cover theme of this issue of the Indiana Historical Radio Society Bulletin is Farm Radio. Andy Ooms returns to our pages to reminisce about growing up in South Dakota at a time when radio reception was transitioning from battery operated to AC.

Ed Dupart guides us through the restoration and modification of an Airline Farm Battery radio. Ed's article is representative of his technical talk at the IHRS 2008 Spring Meet. If you've not experienced the reward of fixing up a farm battery radio give it a try. "Fix up" battery radios are usually inexpensive and with Bulletin articles such as Ed's as a guide you can enjoy the quiet reception of your favorite station.

Enjoy the pictures of the 2008 IHRS Spring Meet – thanks to Ed Dupart and Joe Farkas (two very busy people at the Spring meet.)

Bill Arnold offers his view of our hobby in "The Way I See It" and your editor ends this issue with another "Survivor Radio." Enjoy – Fred Prohl

## PRESIDENT'S COLUMN

I'd like to start by thanking everyone who attended the Spring meeting in Kokomo. Attendance was up a little from last year with 71 people paying admission. We rented tables to 17 vendors and 33 lunches were sold. There were few items at the silent auction, but everything did sell. There was a lot of socializing and technical discussion by attendees and a good time was had by all.

Despite a serious knee problem, Don Johnston, one of our founding member, was able to attend and present the "Best of Show" trophy to Charlie Stinger. We all had the opportunity to visit with Don and Marilyn for a few minutes and we hope that they will be able to join us again at future meetings.

Please plan now to attend our 2 remaining meetings this year: Ligonier on August 9 and Greenfield on October 11. The meetings have been well attended in the past and we hope that, despite gasoline prices, attendance will continue to be good.

Remember that we have a contest at each meeting and that all members are encouraged to participate. The categories for the contests are found elsewhere in this Bulletin.

We plan on continuing to have a silent auction at each meeting. We are still planning on having a large auction at the Kokomo meeting next year. Anyone wishing to sell items at this auction should contact the vice president or myself by September 1 of this year so we can begin planning for this popular event.

We will be electing officers at the October meeting in Greenfield. Now is the time to let us know if you have any interest in running for club office next year. As of today, we need candidates for vice president and secretary for next year as well as volunteers to assist at the meetings.

I hope to see everyone at our remaining meetings this year and perhaps at other functions as well.

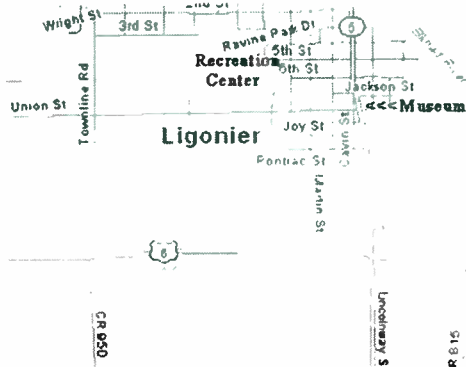
Mike Clark, IHRS President

### **A brief accounting for the 2008 IHRS Spring Meet:**

Johanning exhibition space, food service, insurance, and administrative costs for the 2008 Spring Meet equal \$1733. Meet income, excluding membership renewal, total \$1194 for registration, Swap N Sell space, donation jar, and Bulletin sales. The Spring Meet ran a deficit of \$539.00  
Herman Gross, IHRS Treasurer

On Saturday, August 9 the IHRS will meet at the  
**LIGONIER RECREATION CENTER**  
**LIGONIER** - home of the Indiana Historic Radio Museum.

The Ligonier Recreation Center provides a large amount of indoor and outdoor space for all IHRS meet activities. The center is located at 520 Union Street, several blocks from the Museum in Ligonier – watch for the IHRS direction signs.



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 is indoor or outdoor, first come first serve.

8:00 AM The IHRS Summer Meet officially begins

10:00 AM Contest entries in place for "Popular Vote Judging"

Contest Categories: 1 Portable tube radios 2 Cost me less than \$20.00

10:00 AM Silent auction entries in place – bidding begins

11:00 AM Silent auction ends – buyers pay for items.

11:15 AM Contest Popular Vote closes and ballots counted

11:30 AM **Lunch** – If convenient bring a dish to share. Col Sanders or something similar will be provided as well. Plan on Lunch!  
A donation can will be available.

An IHRS Business meeting will immediately follow the lunch

**Area Motels:**

**Kendallville** – 19 miles east of Ligonier

Holiday Inn Express

Economy Inn

1917 Dowling St

US Hwy 6 West

(260)343-0061

(260)347-3500

Motel listings continued on the next page.

## Summer Meet in Ligonier (continued)

More area motels:

### Shipshewana

16 miles north of Ligonier  
Country Inn & Suites  
1175 N van Buren St. (SR 5 N)  
(260)768-7780

### Shipshewana

der Rune Blatz Motel  
1195 S van Buren St. (SR 5 south)  
(260) 768-7750

### Shipshewana - Farmstead Inn

370 S van Buren St (SR 5 south)  
(260)768-4595

### Goshen

16 miles west of Ligonier  
Holiday Inn Express  
2309 Lincoln Way East  
(574)642-4388

### Goshen - Super 8

65440 US Highway 33  
(574)642-9944

### Goshen Inn

1375 Lincoln Way East  
(574)533-9551

### Contacts for IHRS Summer Ligonier Meet:

Fred Schultz, (260) 894-3092 or email [olradio@ligtel.com](mailto:olradio@ligtel.com)

Fred Prohl, (812) 988-1761 or email [indianahistoricalradio@att.net](mailto:indianahistoricalradio@att.net)

## **IHRS Contest Categories for 2008 – Prepare Now!**

*Summer Meet - Ligonier Community Center, Ligonier – August 9, 2008*

- 1 Portable tube radios
- 2 Cost me less than \$20.00

*Fall Meet - Riley Park, Greenfield – October 11, 2008*

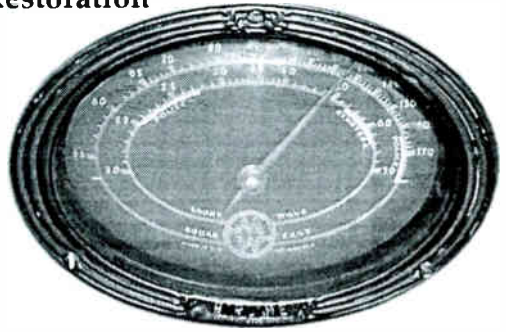
1. My Favorite radio
2. Amateur Radio Equipment – any vintage

Tables will be available at each meet for Vintage Radio Displays

# Airline 62-305 Farm Radio Restoration

## 2 volt to 1 ½ volt conversion

by Ed Dupart



When I was 12 my brother gave me my first RCA tube manual and I devoured that book, memorizing all the tubes in it. I was absolutely fascinated with vacuum tubes and I wanted to see the various radios and TV's that used them and the 2-volt tubes were no exception. I started fixing radios when I was 12 and I repaired many 1½-volt battery radios and probably more of the AC/DC battery versions as well, but I never got to work on or see a 2-volt radio. It wasn't until we moved to Indiana that I would get to see and own a 2-volt radio. After devouring the RCA tube manual, I knew there were similarities between the 1½ -volt and 2-volt tubes and always wondered about how well they would interchange with each other. Eventually I would find out when I purchased the following radio.

Sucker that I am for battery radios, I bought a 62-305 Airline farm radio off of E-Bay for \$10.50. He said the cabinet was rough, but it didn't look that bad in the picture and it had the original knobs and the escutcheon looked good. It had one short wave band and the chassis was clean with no rust. If it didn't have short wave, I wouldn't have bought it. I forgot to mention, the magnet for the speaker was missing. That would make for one ugly refrigerator magnet! Two weeks passed and then the radio arrived, well packaged. The top of the radio was not attached and the veneer in the front was cracked, so I definitely was in for some cabinet work. He was right, the cabinet was rough. On the feed back for E-Bay they like to know if it arrives in good shape and I knew it hadn't been damaged in shipping and he said it was rough, but I chuckled to myself, "Arrived in good shape?" I did give him positive feedback. As you can see by the cover picture, it is now in good shape.

I had one of these radios a few years back with the same chassis, but a different cabinet and it was a good performer and I used it in one of my seminars on how to set up 2 volt radios with today's available batteries. One of the reasons I bought this radio is that the IHRS wanted me to do

### Airline 62-305 continued

another seminar on farm radios and I thought this would be a good one for demonstration purposes. I also wanted to convert a 2-volt radio to a 1½-volt radio and it's a good thing I had that idea in my mind, because when I checked the tubes in this radio, I was in for a surprise. All the tubes were original and all the filaments were good and I was happy to this point, but then I found all the tubes had no emission whatsoever. Not only that, every tube was shorted! Now the hunt was on for 2-volt tubes. In the process of moving from Indiana to Michigan, I hadn't moved my 2 volt tubes up north, but I did have 1½ volt tubes. So, I was forced to make my conversion. I was able to find all the 1½-volt equivalents, so in the radio they went. I checked all the paper capacitors and they were amazingly good and in the process I could tell this radio had never been worked on before. Even though the paper capacitors checked good, I decided to change them anyway, because I wanted this radio to be reliable in the years to come. The original speaker was a 6" round speaker, but I had a 6" square speaker from a battery Philco that used a 1A5 for the output, so it was a perfect match electrically and the holes lines up! At this point I'm partly done with the electrical restoration, but lets take a look at the tube specifications, then I'll get back to the restoration.

Why even bother with this conversion? What are the advantages? First, lets take a look at the specs for theses tubes. The non-power tubes are rated at 2.0 volts at .06 amps and the 1½-volt tubes are actually 1.4 volts at .05 amps, including the 1A5. They are usually called 1½-volt tubes because they use 1½-volt batteries or multiples of 1½-volt batteries if the tubes are connected in series. Lets compare power consumption of the two types of tubes. The 2-volt tubes consume  $2 \times .06$  or .12 watt or 120 mw. The 1.4-volt tubes consume  $1.4 \times .05$  or .07 watt or 70 mw. The power consumption is cut almost in half! Lets take a look at the audio output tubes, which take more filament current, with the exception of the 1A5. The 1C5 and several other 2 volt AF output tubes require .12 amp at 2 volts and the 1C5 and several other 1.4 volt tubes require .1 amp at 1.4 volts. The 2-volt tubes consume  $2 \times .12$  or .24 watt or 240 mw. The 1.4-volt tubes consume  $1.4 \times .1$  or .14 watt or 140 mw. Again, the power consumption is cut almost in half! This means that the batteries are going to last a lot longer. Another advantage is that the 1½-volt tubes were designed to operate on 0 bias volts, which means C batteries aren't



necessary.<sup>1</sup> The 2-volt tubes required a negative bias voltage, which had to be supplied by C batteries or a voltage divider in the B battery supply, which is what this Airline 62-305 uses. To sum up the advantages, the 1½-volt tubes do not need C batteries and battery life is extended. Besides, I didn't have the 2-volt tubes to replace the bad ones with in this radio, but I did have the more common 1½-volt tubes.

The majority of the 2-volt farm radio tubes were introduced in the early thirties, the 1A4, 1C6, 19, 33, 34, etc. and they all had the big pins.<sup>1</sup> Around 1935-1936 octal versions, basically rebased older styles were introduced with the same 2-volt filament. Then, in 1938 the 1½-volt tubes were introduced by Sylvania.<sup>2</sup> Knowing the tube industry, I couldn't see them coming up with all new basings for the 1½ volt tubes, but for economics simply use the same basings that the 2-volt tubes used and I was right. Now to flip through the RCA tube manual and make some real comparisons and this is what I found:

2v Tube	Description	1½ v Tube	Description
1D7	Pentagrid converter	1A7	Pentagrid converter
1D5	Remote cutoff pentode	1N5	Sharp cutoff pentode
1F7	Pentode, dual diode	1H5	Triode, single diode
1G5	Power Pentode 550 mw	1A5/1C5	Power Pentode 115/240 mw

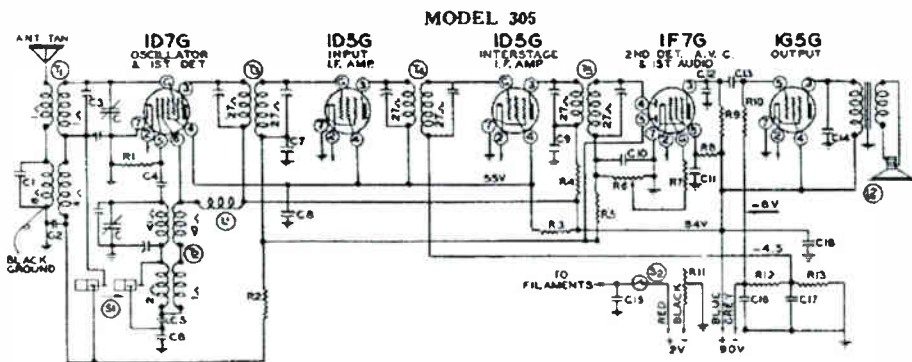
In making the conversion I wanted to use the commonly found 1½-volt tubes I have listed in the table and I also wanted this conversion to be as easy as possible with a minimum of re-engineering so that the average radio collector could do this without much trouble. The listed 1½-volt tubes are easy to find tubes that were used in so many portable radios of the late 1930's through the early 50's. I could have used a 1P5 (remote cutoff pentode) in place of the 1N5, but whoever heard of a 1P5? If you have one, use it! I knew there would be biasing problems with the 1N5 and that I would have to add a solid state diode to compliment the 1H5. The 1H5 is a triode whereas the 1F7 is a pentode, but the control grids of the tubes use the same pin, so it only means that the screen grid terminal will go to nothing and the radio will simply see a triode instead of a pentode. Maybe a little less gain, but not a problem. I also knew I wouldn't have as much volume because the 1A5/1C5 doesn't put out as much power as the 2-volt 1G5. I didn't have a 1C5 up north so I had to

## Airline 62-305 continued

use the 1A5, which works fine, but it won't rattle the windows. The 1A7 and the 1A5 worked perfectly with no modifications. I tried the radio without the 1N34A diode and it worked just fine and its purpose appears to be for delayed AVC. The tubes listed in the table are the ones I used.

After changing the tubes, adding a solid state diode (1N34A) from pin 4 of the 1F7 socket to ground and changing the capacitors, I applied

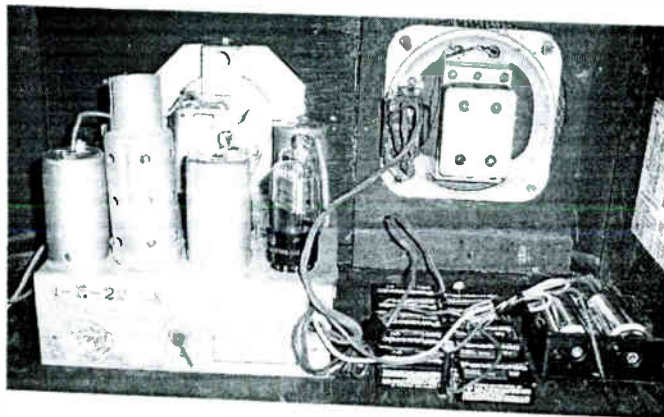
### MONTGOMERY-WARD & CO.



power to the radio and it worked, but it was distorted, especially on strong stations, which indicated AVC and/or IF stage biasing problems. The 1D5 is a remote cutoff tube made for AVC circuits and the 1N5 is a sharp cutoff pentode that is not as suitable for full AVC operation and the RCA tube manual told me so.<sup>3</sup> I thought this was odd, because the 1N5 was used in many radios with AVC circuitry and worked quite well. This radio has two IF stages and my immediate thought was that the second IF was being overloaded. I applied more negative voltage to that stage and it made it worse, so I shorted the ground end of grid side of the IF transformer to ground and now the radio was crystal clear! I looked up the specs and the 1D5 requires a minimum of -3 volts, whereas the 1N5 requires 0 volts and so the 1N5 was being driven into cutoff. Well, that was an easy fix, but when I turned the volume up all the way it was distorted again. I knew this had to be in the audio circuitry and taking a close look at the schematic I saw that the volume control wiper went straight to the control grid of the 1<sup>st</sup> audio stage with no capacitor in between. This worked great with the 1F7, but not the

1H5. I inserted a .01 mfd capacitor and placed a 1 Meg resistor from the grid to ground and that cured that problem. After cleaning and lubricating the variable capacitor, switches and the volume control, this radio performed beautifully and is very sensitive on both bands with a good clean sound.

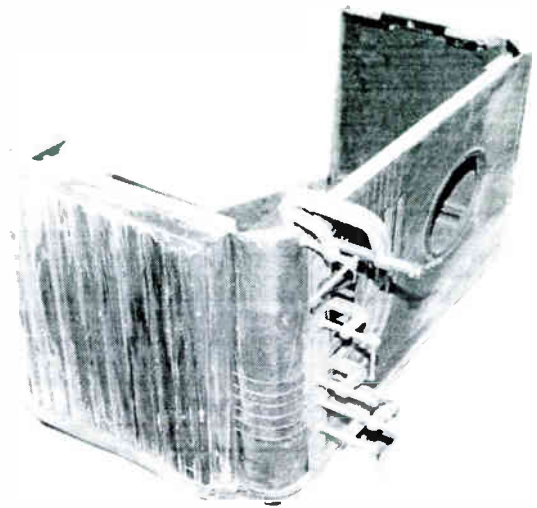
To sum up the changes done to the chassis, all I did was run the grid side of the 2<sup>nd</sup> IF stage transformer to ground, insert a .01 mfd capacitor between the volume control wiper and the control grid of the 1H5 and a 1 meg resistor from the same grid to ground. That's it!



Getting and setting up the batteries for this radio is not difficult. For the A battery I went to Radio Shack and bought a 2 D-cell battery holder for \$1.89 and modified it so that the cells would be in parallel, by cutting the wire connecting the two back negative, positive terminals in half. Then I ran a wire diagonally from the negative terminal to the other negative terminal and added another wire from the back positive terminal to the front positive terminal. Then I soldered the battery holder wires to the battery wires coming from the radio, using heat shrink to cover up the soldered wires. For the B battery of 90 volts, I went to the Dollar Tree store and bought 5 packs of 9-volt batteries, two per pack for a total of 10 batteries and 90 volts at a cost of \$5.00. I plugged all those batteries into each other to create a neat flat pack 90-volt battery. Then I took a bad 9-volt battery and removed the terminal from it and cut it in half. Then I soldered my battery wires onto the appropriate terminals and plug them into my 90-volt battery pack. Turn the radio on and enjoy it!

### Airline 62-305 continued

Now onto the cabinet, the real challenge. The top was completely off the radio, was warped, and much of the veneer was missing. So, I removed the rest of the veneer, took the top in the house and put it in front of the heat register and dried it out and that straightened the top out. Next thing to do was to find a piece of veneer for the top.

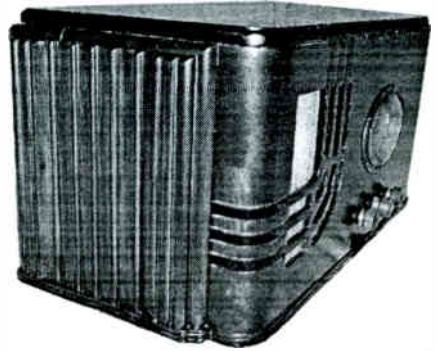


I had a door off of an old console radio that I was saving just for the veneer. I used a sharp wood chisel and pried the edges a little loose and laid the door on top of a small piece of wet carpet and left it there for a couple of days. In the meantime, I got out my pieces of steel and old wood files, glued the split veneer and clamped it with the small pieces of steel and files. After that was done I glued any other loose pieces of veneer, and then I removed all the old finish.

Now, back to my door. After it soaked up some moisture, I took a thin, sharp old wood chisel and separated the veneer from the solid base wood of the door. Once it was separated, I dried it off and glued it onto the top, which I had already glued to the cabinet. When the glue dried, it was time to trim the veneer. To trim the veneer, I use a utility knife with a new blade and I clamp a metal straight edge, such as a metal ruler onto the cabinet along the line where I want to cut. This results in a smooth, straight cut with no chipping of the veneer. Once the trimming was done, I proceeded to remove the finish from the new veneer and sand the top smooth. After the gluing and clamping and sanding are done, I applied wood filler to the entire cabinet to fill the open grain of the wood, then I put a coat of shellac over the entire cabinet. This makes for a good base coat and filler to apply the lacquer over. I generally apply several coats of lacquer with wet sanding with 600 sandpaper and steel wooling in between coats. Towards the end, I will apply the black lacquer and put some clear on top of that. When I get through the cabinet

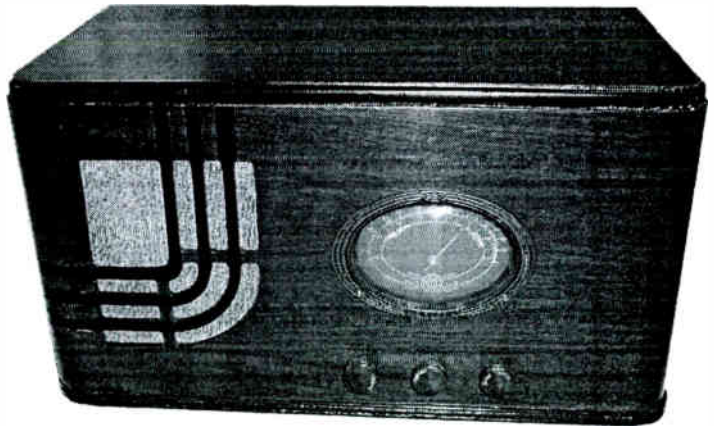
is glass smooth with a matte finish and no dust/dirt bumps. If you have painted a car, use the same process on your cabinet and you will get the same results.

OK, I put all this work into this farm radio and is it worth it? Not financially, but the radio is saved, is useful and will survive the M wave of an atomic bomb when our transistor radios will have it's PN junctions melted. I also now know that the 2-volt tubes can be exchanged with the 1½-volt tubes fairly easy and I love the clean sound of the tube battery radios. If I keep it, I may put rechargeable D cells in for the A batteries and build a transistor inverter that will convert the 1½-volts to 90 volts and have a solar panel to keep the A batteries charged. That sounds pretty green. Now, if only I could see 100 mpg out of my GEO instead of the crummy 50-mpg I now get.



1. 70 Years of Radio Tubes and Valves, by John W. Stokes, 1982 by the Vestal Press Ltd. ISBN: 0-911572-27-9 page 40, 59, 89
2. 70 Years of Radio Tubes and Valves by John W. Stokes, 1982 by the Vestal Press Ltd. ISBN: 0-911572-27-9 page 103
3. RCA Receiving Tube Manual, RC-20 page 86 listed under 1N5-GT (This information is in most of the older RCA Tube Manuals)

*IHRS member,  
Ed Dupart is a  
frequent  
contributor to the  
Bulletin as well  
as a presenter of  
radio repair and  
restoration  
seminars at IHRS  
radio meets.*



# The Indiana Historical Radio Society 2008 Meeting Schedule

Summer Meet - Ligonier Community Center – August 9

See page 5 of this Bulletin

Fall Meet - Riley Park, Greenfield – October 11

Winter 2009 – Hornet Park, Beech Grove – February 7

## - - - - Regional Events of Interest to Members - - - - -

**Radiatorama at Voice of America - June 27&28 - Cincinnati, Ohio**

Friday PM, 6 - 9, fellowship. Saturday, swap meet at dawn. Vendor raffle (prizes!) and donation auction by Rich Estes. No registration or seller fees. Indoor and outdoor set-up areas. Just north of Cincinnati - 1/2 mile east of I-75, exit 22, Tylersville Road. The Voice of America grounds are on the north side of Tylersville Road on Crosley Lane  
Contacts Bob Sands 513-858-1755, or Bob White 513- 385-8291

**Dayton Antique Radio Club (SPARK) August 2, 2008 – Dayton, Ohio  
Annual Swap Meet and Auction of Vintage Radio Equipment.**

At the Holiday Inn, South side of Dayton. 7:00 a.m. – 12:00 noon  
Free admittance – Free set-up to sell. At 10:00 a.m. a raffle of working radios (a Philco, Crosley, Stewart Warner, and RCA). The site is just south of the city of Dayton. Take I-75, south of Dayton to exit 50A, Dryden Road. The Holiday Inn is west of I-75 on Dryden Road.  
Contacts: Ed App 937 865 0982, Dan Casey 513 265 8466,  
or Jeff Bothwell 937 854 7106 jbohtwell@butlertownship.com

**Mid South Antique Radio Club**

For information contact Allen Ferris 502 543 8233

**Antique Radio Club of Illinois Radiofest 2008 July 31-August 2**

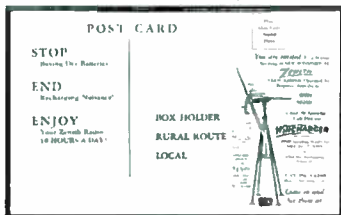
Willowbrook Holiday Inn Conference Center  
7800 S. Kingery Hwy (Rte 83), Willowbrook, Illinois [www.antique-radios.org](http://www.antique-radios.org)

**Michigan Antique Radio Club Extravaganza 2008 July 10-12**

Holiday Inn South, 6820 South Cedar Street, Lansing, MI  
[www.michiganantiqueradio.org](http://www.michiganantiqueradio.org)

**AWA-Antique Wireless Association [www.antiquewireless.org](http://www.antiquewireless.org)**

The original and largest historical radio group. The AWA publishes a quarterly Old Timer's Bulletin. Membership is \$20 per year.  
Write to: Antique Wireless Association, Inc.Box E, Breesport, NY 14816



## NARD'S RADIONICS FARM RADIOS (AND OTHER MUSINGS) by ANDY OOMS

*("Nard's Radionics" was originally published in the Summer 2000 issue of the Arizona Antique Radio Club News. Andy, an IHRS member, provided the following for the Bulletin – printed in two parts.)*



As I have previously written in an article for this publication, since the age of 4 (which age I achieved in 1942), I have been interested in many forms of radio. These forms include short wave listening, AM Dxing, current AM and FM programming, antique AM, FM, and short wave sets, old time radio programming, and just plain listening.

You may notice that there are no technical aspects of the radio hobby in my list. That is because I claim no technical expertise, and my electronic knowledge is very limited, especially in comparison to the technical abilities of those of you with careers as engineers or electronic technicians. Just plain listening is what I do best. This is in spite of the fact that, as we all know, or at least as many of us believe, current medium wave (AM band) and FM broadcasting is nowhere nearly as interesting as broadcasting could be, nor as interesting as I believe it once was. Negative aspects of today's programming include narrowcasting demographics focus, satellite music instead of live local or network talent or programs, sound-alike and mediocre music, and apparently a targeted audience ranging from the 6th through the 10th grades. All right, I admit it; my age is showing.

I know that many of you are as fascinated by radio as I am; I don't claim to be unique at all in that respect. Also, I defer to those of you who have more technical knowledge than I do. And note that I write as I remember; if it appears that I have made an error in historical or electronic fact, when the reader begs to differ, then the reader is probably right.

During my high school years in South Dakota, I had a small used radio sales and repair business operated out of my home. My timing was good as in those early 50s most radio repairs involved soldering loose connections, replacing line cords or speakers, fine tuning variable condensers (now probably called capacitors), or replacing tubes.

### Nard's Radionics continued

All of the above I could do. I did not get into the science of understanding circuitry or make the investment required for obtaining the test equipment necessary to determine faulty caps, resistors, transformers, and condensers. I could read a schematic, but not well or willingly. Note that transistors are not mentioned; they had been developed by then, but were not yet part of household electronics items.

Another reason that the early fifties were good for my little business is that in the late forties, the Rural Electrification Agency began bringing 110-volt AC current to most farms in South Dakota and probably throughout western rural America. Line current had been



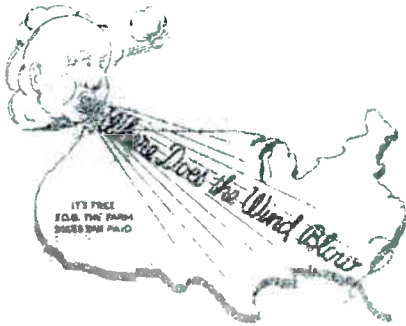
on the farm in the more populated east for some years before then. Until about 1948, my uncles, aunts, and cousins living on farms near my town did without normal electricity. Looking back, that seems surprising to me. At the time however, it was not in the least noteworthy. Even in town, we did not have indoor restrooms at home, school, our small-town businesses, or local churches. My grandparents lived in town, but did not have running water. They used a hand pump in the kitchen sink, which drew from a rain water cistern outside. Our household bathroom was installed in 1950, when I was in 7th grade. Running water indoors was generally limited to kitchen sinks and washing machine hookups. Within that context, not having 110 volts AC on the farm didn't seem remarkable.

Farmers without access to AC electricity coped in various ways. Some of my relatives used kerosene or white gas lamps. The gas lamps had fragile mantles; the kerosene lamps used sturdy wicks. Stoves were wood, kerosene, or gas. The gas stoves and lamps needed pre-lighting pumping to produce the required pressure; consequently there seemed to be an element of risk of explosion or fire when using them. That risk was largely theoretical, if the equipment was used properly. The stoves were also used in many homes in town that had electricity, although at least the option of electric stoves existed. Needless to say, on those farms,



flashlights, batteries, and gasoline engines were critically important items. There was no natural gas available in that area.

Some farms had wind-charger systems. South Dakota has a fine supply of wind; after centuries of use of this resource, no signs of depletion are yet evident. Wind-charger systems delivered 32 volts direct current, which was used to charge batteries. It is likely more accurate to state that the systems delivered electricity, which was stored in batteries that delivered 32 volts DC.



From the 20s until the early 50s, Sears Roebuck and Montgomery Ward catalogs had many pages of farm radios. Farm radios were not shoddy or second class as to features or style. Some were

Drawing from the Wincharger Corporation sales manual.

From the 20s until the early 50s, Sears Roebuck and Montgomery Ward

catalogs had many pages of farm radios. Farm radios were not shoddy or second class as to features or style. Some were consoles; many were multi-band, meaning, in those pre-FM days, having short-wave capability; and most had handsome Bakelite or wood cabinets. Most had a place of honor in the living room, and had big speakers with full tones meant for listening by the whole family in larger furniture-filled rooms. These were either 32-volt DC sets, or battery-operated sets. In those days, A, B, and sometimes C, batteries were required. In the pre-solid state era, batteries were fairly heavy, large, expensive, and had a short life. Home battery chargers were unknown to most people.

Under those conditions, pre-electrification radio usage for those not fortunate enough to have a wind charger system was generally limited to big non-portable sets used for full-attention listening to specific programs. Batteries were too costly to waste on mere background sounds, so listening was rationed. Frequently listening was limited to prime time (an unheard of phrase at the time) evening network programs with the entire family as a living room audience. Another typical listening habit was local news, farm markets, and weather reports with the volume turned up loud enough to hear while eating breakfast or lunch, in kitchen or dining room.

Why was the advent of rural electrification good for my fledgling amateur business? With 110-volt capability, farmers suddenly found new uses for radio. All day listening to soap operas by housekeepers

## Nard's Radionics continued

while trying to keep up with homemaking chores, long an indulgence of town and city dwellers, became an economically feasible activity on the farm. All day listening with battery sets had been prohibitively expensive. The family children, of all ages, could listen for hours at no noticeable cost, so radios for bedrooms and common area rooms additional to living rooms became desirable.

Usually however, the second radio on the farm, after the family living room set, got sent to the barn. Almost all of the farms in the area were general, producing meats, grains, eggs, and milk. So, one or more members of virtually every farm family spent from one to three hours (depending on number of dairy cattle, and depending on whether a new-fangled milking machine had already been purchased) every morning and every evening, 7 per week, 52 per year, in the barn. Appropriate programming for these occasions was available as well as the ever important markets and weather in the morning; polka bands, *Amos and Andy*, *One Man's Family*, or *The Lone Ranger* (obviously dependent on who controlled the dial) in the evening as a transition from work time to leisure time.

My uncle Hans, a Chicago radio shop owner, gave me a car trunk full of working used table model sets to take back to South Dakota on one of our annual trips to visit our relatives. Those radios, more than a dozen, became the nucleus of my used radio business. I placed an ad under the barber shop mirror for \$4.00 per year reading:

### **NARD'S RADIONICS USED RADIOS FOR SALE RADIOS REPAIRED**

The business name came from my childhood nickname derived from Bernard, my middle name. Radionics is a name that caught my attention I guess, probably from seeing it in *Popular Mechanics*, *Popular Electronics*, or *Popular Science*. Actually I don't remember where that word came from.

So, I sold those radios to farmers for their barns. I accepted trade-ins of AC radios, but also wound up with some 32-volt DC windcharger radios. As can be imagined, their value plummeted immediately upon 110-volt

### **6-Volt Convertible Radios**

Operate on a 6-Volt Storage Battery When Hi-Line Comes. Flip a Switch and Plug In



Take advantage of the convenience of our 6-volt radios at one of these Special Low Rates: \$12.95 - Windcharger or a Gen. O.P. or as little as \$4.00 - as much as \$6.00



7 MATCHED TUBES    3 TUNING BANDS    6 PUSH BUTTONS    \$39.95 CASH \$4 DOWN

hook-up. I sometimes think of all those radios, many of them new and beautiful, that got dumped probably after years of sitting on some shelf in some shed while their owners waited futilely and hopelessly for some practical use for them. Nowadays, a collector could be interested in them, demonstrating them with shop power supplies, but then I was not a collector and tended to be practical. If you couldn't plug it in the wall, who would want it and why keep it? Nevertheless, I used to hate it when a particularly beautiful model with lots of bands and lights came to my attention and it was of no practical use to its owner or me.

That business jump start created by my uncle's radios led to my buying future radio stock from people who were willing to sell their used radios. One enjoyable source of stock was the occasions when I would be offered two radios, non-working, with the condition that if I fixed and returned one, I could keep the other. That was particularly delightful on those occasions when both were repairable by me, and I could choose which one I wanted to keep.

When my South Dakota grandparents died, I inherited their highboy style Atwater-Kent, at a time before my business years. It became my bedroom radio for 5 or 6 years, although table models came and went through that room also over the years. Shortly thereafter at an estate sale in town, I bid on another highboy, possibly also an Atwater-Kent. I got it for \$5.



Atwater Kent  
Model 60

That kind of amazed me: that I could actually buy and own an adult piece of furniture, especially one that could provide so many hours of enjoyment. I don't remember what happened to the second old console, but I presume that I sold it relatively soon, as I don't recall having two around at the same time for any length of time. It is now coming back to me that it was in my garage for awhile, the garage being my summer version of the basement workshop. But I still remember the warm big sounds of those big wooden consoles with their 12 or 14 inch speakers. Mellow booming describes the sound to me; no one wonder the idea of putting radios in barns came to mind. A big console with a big speaker was perfect for a big, busy, noisy barn.

Let me digress here and insert what I believe I know about some of the radios that I was involved with for a period of time as differentiated

### Nard's Radionics continued

from the several dozen that merely passed through my hands. Back then, no one I knew cared about older versus new radios. I didn't either. There was no antique or classic radio interest as far as I know. People cared for performance, price, sound quality, and looks; age was not very important, as even the very oldest radios were relatively new and not yet very rare. So I do not know the model numbers of the radios from my youth; I remember other details about them, so I am going to estimate what the model numbers were here by data I have obtained from publications. Tube numbers I knew and cared about; model numbers were not important to someone who wasn't using schematics.

The first radio I was cognizant of was the late 30s model (I won't guess at a model number) Zenith console in our living room. It was multi-band, had pushbuttons, and a black rectangular dial. It had good performance and tone. When I was younger, I was not allowed to select my own listening times and programs, and about the time I was old enough, I started getting my own sets in various other rooms and didn't hang around our living room much. So although I remember enjoying listening to that Zenith with other family members at a young age, I never actually personally operated it to any degree.



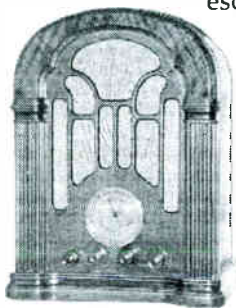
The store radio  
a Philco 51

The Atwater-Kent I had from my grandparents was probably a 60, made in 1929. The cathedral Dad had in his store was a Philco 51; a good radio but relegated to the nearest station, KORN, Mitchell, SD, 1490 on the dial. Our fluorescent lights and refrigerator and freezer motors wiped out other signals. But KORN had a good daytime signal from 40 miles away, and had the right mix of local programming, music, after school serials, and baseball games, so I didn't mind the situation. On a slow day though, I kind of wished for a set that I could tune around some and listen to Sioux Falls, Sioux City, Omaha, and other exotic metropolises.

When I was about 15, someone cleaning out their basement, attic, or garage offered me a RCA Radiola 60. Naturally, I took it. That was the oldest looking radio I ever had. It had a flip open top, and a long row of tubes. The speaker was separate, a round metal one. That became my basement shop radio for my last two years of high school, and although I took it for granted, it was a wonderful set. It had a great tone, looked

good, and was real nice for flipping open and seeing all the glowing tubes at work. That began a long time practice of mine of taking chassis out of cabinets and seeing the works and the glow when I had a radio on. I had radios operating out of their cases for months. Naturally, the advent of transistors took the fun out of that habit.

When I was about 11, I became the owner of an Atwater-Kent 206, produced in 1934. Many a night, I listened to Texas, Oklahoma, New Mexico, and Mexican stations with it and my head under the blankets to escape detection. I would wake up sometime after midnight,



Atwater Kent  
Model 206

bring the radio into bed, listen for an hour or two until I fell asleep, and wake-up again around 5 or 6, at which point it was acceptable to get up and start listening openly again. The 206 was quite heavy and one day I was charged with forbidden listening as the imprint of the base on the flannel sheet showed up during the following day when Mother changed the bedding. It also got hot under the blankets with all those tubes, but I thought that was a small price to pay for listening to the magic.

My business included town customers as well as rural ones. As the population of Corsica, SD was 450, my burden of entrepreneurship allowed me time for high school, working in my Dad's general store before school, during lunch hour, after school, and from 8 am to midnight every Saturday. We were closed Sunday. I have no complaints about that fairly heavy store schedule, as I thoroughly enjoyed being treated as an adult member of the community.

I still remember many customers, what kind of car I put their groceries in, what brands they were partial to (Wheaties versus Pep; Post Toasties versus Kellogg's Corn Flakes; Folgers versus Butternut coffee; Luckies versus Camels) who they were related to, and some of their shopping idiosyncrasies. I periodically return to that area, and enjoy visiting with some of the former customers, and they certainly seem to enjoy reminiscing with me.

Our store closed in 1956 as Dad had decided that he was tired of the long hours, and intended to get out of the store as soon as his youngest child graduated from high school. He felt that working there kept his high school kids out of trouble (who had time for mischief? actually I found a little time for that occasionally) and stated that as the sole reason

### Nard's Radionics continued

for not selling it. I heard him say that occasionally, but it didn't register until he sold it the month after I graduated from high school. I guess he meant it. He enjoyed working for a supermarket chain in another city thereafter; 40 hours instead of 70 per week, and no sleepless nights about the state of the business made his life a whole lot more enjoyable.

I also found time for a little fishing, pheasant hunting, rabbit hunting (the local creamery, a business dedicated to buying milk, eggs, and chickens paid 5 cents for cottontails and 25 cents for jackrabbits, which they in turn sold to a mink farm near the next town) trying to keep a car running, and church activities. But 3 or 4 nights a week found me in the radio shop, messing with electronic gear unless I had a guest in which case we played carom (up to 36 games one night; the winner needing a two game advantage; the final being 19 games to 17. I remember the score, but not who won, which may be evidence that I lost).

My repair business was aided by going to the local radio storeowner, and using his tester for the tubes from the non-working radios I needed to repair. He didn't seem to mind, probably because I bought any needed tubes from him, and I was undoubtedly his highest-volume tube customer. He didn't pay much attention to my business otherwise, and was not my elmer (electronics mentor). As time passed, I needed to buy tubes less often, as sets I parted out eventually yielded a large supply of used tubes and knobs and other items.

Eventually, I read ads for electronics catalogs in *Popular Science*, *Popular Mechanics*, *Science and Mechanics*, and *Mechanix Illustrated* magazines. I ordered catalogs from Allied, Newark Electronics, Lafayette, and Burstein-Applebee, plus a couple other companies, names forgotten. I studied them thoroughly and dreamed of all the stuff I didn't have and in fact wouldn't know what to do with even if I did have it. Some of the things I remember ordering include a long-playing record of zither and cimbalom music for my mother's birthday as she enjoyed unique items. I ordered a contact microphone and amplifier that attached to a guitar sounding board to upgrade a local guitarist as acoustic guitar players were beginning to want to emulate steel and electric guitar players. At least once I ordered whatever I could afford whether I needed it or not. I ordered some items I needed, and had 4 cents left, so I ordered a 4 cent reducer for downsizing a dial light socket to work with

smaller base bulbs. I can't imagine doing that now, but I did and my order probably totaling \$10 worth of items included the socket reducer I never used. I am unaware of anyone ever using such an ingenious item, but I had 4 cents left over and knew of no more worthy cause of non-designated funds than electronic gear of any kind. If 24 cents had been available instead, I would have looked for, found, and ordered something more expensive in order to use it up (or maybe I would have ordered 6 unnecessary socket reducers).

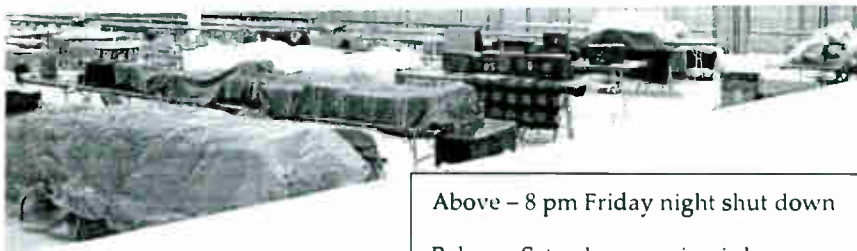
Although I got out of the radio repair business upon graduating from high school in 1956, Allied and Burstein catalogs, addressed to Nard's Radionics Service followed me to college in Grand Rapids, Michigan and after college and after Army service in Germany, they followed me to Indiana. As recently as 1966, I bought an electric alarm clock for about 3 bucks from Burstein when I was living in Indianapolis. I used that clock every workday until 1994, and it still works, although it is now parked on a closet shelf. It followed me and my jobs and family to Anchorage, Detroit, and Los Angeles. But my perusal of the catalogs and my usage of them dropped dramatically (one clock in 10 years) and naturally they stopped coming. I have no idea when the last ones came. Are Burstein and Allied still in business? My catalogs of choice nowadays include Antique Electronic Supply (the Arizona tie-in for this article), Grove in North Carolina, and Universal in Ohio.

My general pricing policy was very simple as I was kind of rule driven in all my habits. I charged \$1 plus parts for any repairs. Some repairs were simple and quick, loose wires or variable condenser adjusting for example. Some I spent hours on, looking for faulty connections or other problems not readily identifiable. Either way, I charged \$1. Some I worked on for hours or for several evenings, but could not fix due to my lack of training or test equipment. Those I returned at no charge. If the repair required one of my used tubes, I charged \$1 for the tube, regardless of style, rarity, or new price. If I had to buy a new tube, I resold it for 10% over my purchase price; I don't think I charged any labor for tube replacement, only jobs.

The selling price for my radios was \$5, unless the pricing formula mentioned above for the needed tubes needed to bring the radio to working order called for more. The radios were all used; and except for needed tubes had cost me little or nothing.

.....  
"Nards Radionics" will continue in the next issue of the IHRS Bulletin  
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# IHRS Spring Meet 2008 - Kokomo



Above – 8 pm Friday night shut down

Below – Saturday morning is busy



Fred and Andy Schultz enjoy the Friday night pizza



Vic Hightower and Bob Sands  
Charlie Stingers helpers!



Tim Kaiser and - - truly enjoying the photographer's humor.

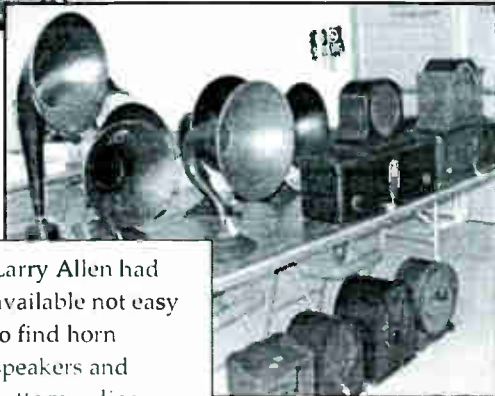


Jean Decker and Jessica Crock with a very nice selection of radios.





Mike Feldt with an Indianapolis made "Gaynola"



Larry Allen had available not easy to find horn speakers and battery radios.



Ed Dupart presenting a tech topic on Farm Battery Radios. See page 7 of this Bulletin. IHRS hopes with Ed's recent move to Michigan we don't lose his "Radio" expertise at meets and contributions to the Bulletin!



Bill Morris was prepared and raring to go with a "1950's Battery Radio" presentation when he was called away to an at home emergency. Everything is ok - Bill will save his talk for another Meet.



Don Johnston presents the Founders' Award to Charlie Stinger for his "Old Equipment" Contest entry.

## THE WAY I SEE IT

By Bill Arnold  
Washington, Indiana

I usually go to a dozen Radio related shows in a year. I sell radios that I have restored at these but at others I just go to buy radios and see what others are selling. This gives me a chance to pick up some projects to work on. Of course, sales have not been the greatest for me partly because I have higher dollar radios and partly because I am not seeing any new collectors getting into the hobby. The older collectors seem to already have much of the stuff I have for sale and would buy things at a reduced price but that would mean I would have to lose money. I am not trying to make a lot of money but do know that I have to make a little when I sell radios or otherwise I can't make expenses.

Of course, it looks like I am going to have to cut out some of the shows next year. I have been noticing the crowd has been down the last couple of years and that I have my radios longer that I used to. I keep waiting for things to improve but so far, it has not been good. I know that if others are not selling, they will quit going to the shows. Without sellers, we will not have a swap meet.

I don't know what the answer to all of this is or otherwise I would fix it. It is the same thing with the other hobbies. I also belong to the Model A club and they are not seeing younger folks getting into the hobby, either. I suppose there are a couple of things we can do about all of this. We could try to encourage younger ones to get into the our hobbies and hope the economy gets better. The problem with both of these theories is the fact that we may not get younger ones to collect what we have treasured all of these years. After all, they may well have totally different tastes. As the older collectors die off and collections become available, there may not be anyone out there that really wants the older stuff. I am seeing that right now in the battery sets of the 20s. A few years ago, these were highly collectable. These days most of the younger collectors do not want to hook up batteries or power supplies, they would prefer something that just plugs in.

What I am seeing for sale in estate auctions are radios that are not desirable to the younger folks. If you think you can save this stuff for your kids, they may well think it is junk. I would like to think someone

would take care of my stuff when I am gone rather than have somebody sell it for a dime on the dollar just to get rid of it. Maybe the next generation would rather have the money or something else instead of old radios. If you don't believe me, just ask some of them if they would like a radio when you are gone. They may have never told you what they think of your collection but it is a good bet that it doesn't mean as much to them as it does to you. Of course, I wouldn't want to discourage any older or newer collectors and I am not about to suggest what they collect. After all, we all collect a little something different and I try to stock a variety of stuff.

I seem to get the project radios, or the ones needing repair. This serves an important service to the collector that does not have the knowledge or skill to fix up his own stuff. Of course, some just have no desire to do it, either. At least I know that when I get one fixed up, it goes to another collector instead of the dumpster. I can feel good about saving another old radio. To me, that is just as important as saving the good ones.

Now, just because I have a tendency to buy the rough radios doesn't mean they stay that way. I like to do my own work inside and out. If the radios are in good condition, they do not really need a full restoration. Some of the really bad ones need to be fixed up before they get worse. I suppose that is a judgment call. Some would rather leave a radio original even though it has some flaws. It does get to the point that certain ones need to be fixed.

I like my radios in my collection to look nice but there are original ones that I prefer leaving alone. Of course, I am talking about the finish. I do put in modern capacitors for safety. It also prevents damage. I would never want to leave questionable filters in a radio when it only costs a few cents to do the job right. It is a good bet that if your old radio has the original filters and it overheats, you should have replaced them before it got to this point. It is just common sense to put in new filters if you are going to play the radio. Anyone that works on his own stuff can tell you this.

If you replace the capacitors with the modern counterparts, it makes the radio more reliable and you don't have to take it apart and fix it periodically. I like my radios to be reliable and as long as the modern components are under the chassis, they are hidden. Some collectors prefer stuffing new capacitors in the old container but I don't do that.

### **The Way I See It continued**

I like to be able to see what I have replaced. After all, the next guy doesn't know what you've done if you hide the work.

I generally restore everything I sell. Some prefer just replacing the components that need replacing. While that sounds good, it does not make the radio play better than replacing all of the old wax coated capacitors with new ones and it is just a matter of time until it needs to be taken apart and repaired again. There seems to be a big difference between a re-capped radio and one that has just been repaired with the bare minimum of component replacement. I feel as though mine are more reliable. That may be a matter of opinion, as well. I do know one thing, I never have to take something apart the second time by using this method.

I also try to play mine on the bench for a few hours to make sure everything is as it should be. Sometimes radios develop problems once they are repaired and now is a good time to isolate these problems before it is put back in the case. After all, you really don't want to drag around some of these heavy old radios any more than is necessary. Of course, there is another thing. I eliminate complaints because you should have replaced a component that cost pennies. I hate to hear some one cry because you were too cheap to do the job right. There are different opinions as to what should be replaced as well. I like to think I replace stuff before the set has problems.

Who knows what the next few years will be like for the collector. I am guessing it will be different than it has been in the past. I can see the trends in old radio collecting and as we lose our older members, we will be seeing some newer radios. Not all of this is bad but newer than some of us prefer. What I see the Antique shops is not old to me but is old to someone in his 20s. I guess it is a matter of perspective.

I enjoy the hobby and hope to be able to be active for a long time. I did not grow up with many of the radios I now own but I am learning to appreciate the knowledge that has gone into the development of these things. They were originally sold to the consumer and not really intended to be displayed and treasured as we do our prized radios. Even the radios that I do not collect do have some historical significance and should be preserved. I like to have a couple older examples in my collection just to show people what radios looked like in the early days. To the radio collector, it is something to be saved and kept for future

generations to see. I think we all share that in what ever it is we collect. Even some of the older folks do not remember seeing some of the sets I have.

I like to preserve the old radios for the younger ones to see. Many times the neighborhood kids ask me what these old relics are. One little boy wanted to know if my old Zenith console radio was a Jukebox. One other time I told one of them it was an old AM radio. He asked, "Are you sure that isn't FM?" I told him I was pretty sure it was only AM. He had never heard anything that sounded that good. Now wouldn't that be a shame if these kids were never exposed to any of this?

Of course, all of what I have said is mostly my opinion and others may look at the hobby in a different way. This seems to be the way our hobby is heading and it may not be what any of us want. From what I can tell, few of the younger generation is interested in what I have.

I try to support the Radio clubs by setting up and selling at the meets. It is true that I can't help with registration and sell radios at the same time. I also like to contribute articles as I can to help out the publication. I believe this is the heart of our organization. If we do not have articles written about the experiences you have, we do not have a good publication. There are many who can not get out that rely on this as a means of staying in the hobby. Just about anyone can jot down a few things about what the hobby is to them and what they are currently doing. This is my way of helping out the club. I would like to see others pass on some of that.

I would like to see the radio hobby grow and gain new members. I would like to see younger collectors coming into the hobby. We need the growth as we lose our older members. We need younger members to get involved in the operation of our clubs. You have to wonder where the hobby going to be in the next 10 years. I am willing to talk to anyone interested in radios and pass on any techniques that I have learned. This is one way we can keep up the interest in the hobby. I can't say that it will generate more interest with the younger folks but we can only hope to see more of them. This is just the way I see it.....

*Photofact, a database of repair manuals for consumer electronics is available for patrons at the Indianapolis-Marion County Public Librar. The Photofact database can be accessed at [www.imcpl.org](http://www.imcpl.org). A valid IMCPL card is required. E. E. Taylor*

## A correction for "The Apex 7A" Article March 2008 IHRS Bulletin

During the March 2008 Bulletin assembly of Ed Dupart's Apex 7A restoration article some words were lost. Ed was describing his procedure for trouble shooting a "dead" receiver. The following is what he intended to say about testing the superhet's oscillator:

*"The oscillator worked because of the negative voltage on the grid and it interfered with a close by AM radio, which is one of my quick checks for the local oscillator.*

*If you have never done this trick, take two AM radios, tune one to a weak station and tune the other one across the dial and you find that it will block or make the station howl or whistle. Now, I took my signal generator and tuned it to the IF frequency and sure enough, I could hear the signal coming through, but I could tell the audio section had a problem because of the distortion, -- -- -- "*

John F. Rider, in his book "The Oscillator At Work" describes a similar technique for confirming a working and accuracy of the local oscillator this way:

*"- - - it is possible to check the oscillator frequency by using an auxiliary all-wave receiver, coupling the antenna lead loosely to the receiver under test, and rotating the all-wave receiver tuning condenser over each band until the oscillator signal is picked up. A tuning indicator of some type is a desirable accessory for the all-wave receiver used for this purpose, since the oscillator signal is un-modulated, but a thump will be heard in the speaker if the radiated oscillator signal is strong enough."*

Readers of Ed's radio servicing contributions to the Bulletin appreciate his instructive approach.

Hopefully inserting the missing words corrects any confusion for you, the reader.

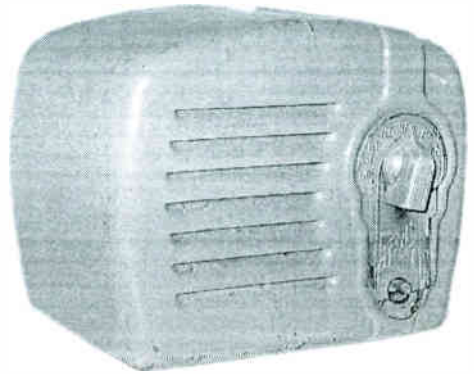


*Dedicated to Janet (2  
years old)  
Who so kindly kept  
her mother busy  
while her father  
stayed away nights  
with  
superhetrodynes.*

*John F. Rider - 1934*

## Survivor Radio – Model 40A Arvinet

At some time in this little radio's past, someone cared enough to paint it blue. The two tube metal cased Arvinet appears to have spent a large part of it's life in an auto repair shop. The chassis and case are free of rust due to a protective layer of oil and dust. So what to do with this little survivor? Strip and refinish?



Maybe – maybe not. The roughly painted radio has the character and presentation of a survivor that provided years of listening pleasure for it's owner. While debating the future of the blue Arvinet I remembered reading about another Arvin two tube radio – the 'Mighty Mite'. The "Mighty Mite" is the same chassis and case as the Arvinet – just a different name. The following story of a true radio survivor is found in Coke Coons' book Arvin, The First Sixty Years. This is the story:

A. L. Jellin,  
Electrical Artificer,  
Royal Navy  
CM 64819

H.M.S. Stapford,  
Bolners, Scotland  
Noblitt Sparks Industries,  
Columbus, Indiana, U.S.A

Home Address  
36 Meon Road  
Acton,  
London, W3, England

Gentlemen:

I am writing you about my radio set which is one of your 1939-40 models. The cabinet has written on it Arvin "Mighty Mite."

Now, the point is, I'm in trouble with it. The service mechanic tells me that one of the coils has been burnt out. After seeing the coil I'm inclined to agree with him. It's in an awful state. After searching the whole of London, and the best part of England and Scotland as well, I find it impossible to purchase these coils. So you are my last resort and I am asking you if you can sell me a new set of coils, that is, of course, if you still have any in stock.

Now, I'd like to tell you a little story relating to this radio. I bought it in July 1940 in the east end of London for 59/6d (2 lb. 19 shilling, 6 pence). That same month I left England for Egypt and took the radio with me. I used it on the ship's main

110D.C., and in Bombay, India it played on 100 V.D.C. It played all day and half the night there while I was in barracks awaiting passage. Then on the next ship it went on DC 16 V again, still O.K., and none the worse for wear.

On reaching my final destination I was drafted to a cruiser, H.M.S Gloucester and so was the Mighty Mite. I played him every time I had a chance and took him ashore once in Athens, Greece and tried him on 220 A.C. and he was still a good one. Now, my ship was in action at the Matapan battle and so was your Mighty Mite. But he stood up to it well and after the battle was over I went in search of him and found he'd been blown from one side of the radio room to the other (concussions from shells falling near the ship). But he was still as chirpy as ever when I tried him again.

Shortly after that I left the ship and went up into the western desert with the Army and of course, I took the little fellow along with me but I didn't entertain much hope of being able to use him as there aren't many electric power lines up there. But in one town there was a radio dealer and he had a big 150 V drycell battery for sale made up of dozens of national carbon cells. So I bought this battery and took it back with me to camp and secreted myself in my tent with "sonny boy" and went to work with this battery. I tried him 100 V. at first and he played lovely and I heard the news every day for weeks after.

Well then he got in the way of a kamseen (dust or sand storm to you) and he was smothered in dust and sand. I thought that was the finish of him that time—but no, after I'd cleaned him out, blew him with a pair of bellows, away he went as good as new.

Well then I was drafted home to England again. This was September, 1942, but just before that he was in an air raid in Alexandria and had a lot of paint scratched off but no other damage. He was getting used to being kicked around by this time but he still had another 20,000 miles to go yet. Will he make it? I'll say he did. We used him on the troop ship in Durban and Cape Town (South Africa) and Trinidad (British, West Indies) and on one other trooper, and finally he made it to Glasgow where I used him in the hospital where I was sent on arrival. Since then my wife and I have carried him all over the country and we have moved a few times, believe you me. When he did conk out I didn't look at him myself as I usually do, I took him to a service mechanic (?) and it's possible he burnt that coil out while using his test prods.

So there is the story of the "Mighty Mite." I could have sold him again a dozen times for as much as 10 lb. anyway. If you could possibly help me out with two more coils, I would be very grateful as my wife and I are very much attached to the little fellow.

If any extracts from this letter are of any use to you, just go ahead and use it, and let's have plenty more Noblitt-Sparks creations after this war is over.

I remain,

Yours sincerely,

A. L. Jellin, EA 3/CRN

*Noblitt-Sparks had the coils and sent them to Mr. Jellin*



A picture of A. L. Jellin's 'Mighty Mite' was not included and is not really necessary. We frequently see survivor radios at radio meets, auctions, and flea markets. The survivor will be radios that have been decorated, patched, and repaired in ways to keep it doing what it was designed to do – look nice (to the owner), and provide music, news, and talk.

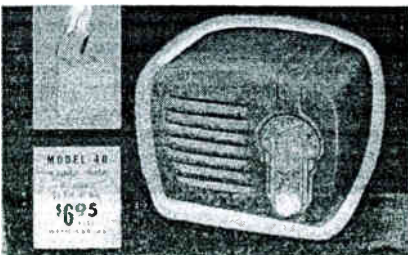
Another Arvin "Survivor With A Story" on my shelf is a 1949 Arvin metal cased model 341T. This radio I will not strip and paint. It was rescued from a Naval Facility discard pile (scrap heap). Part of the story is "Jack and Anna are still an item, but something did not go right with Lyle and ?" Only the decorator can tell us the significance of =S= given to each cutie on the radio top. This radio is a keeper "as is".



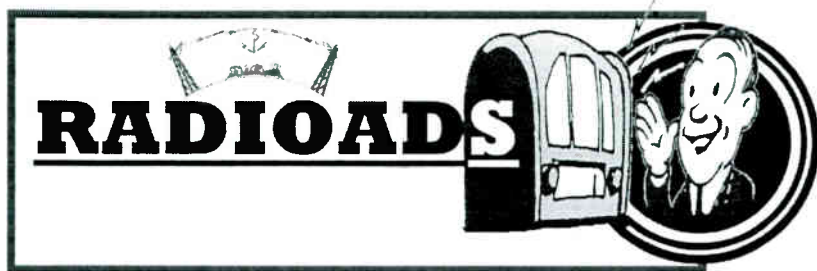
So what should I do – care enough about the two tube survivor and leave it as it is – or care enough to restore it to its original color?

Fred Prohl

The 1938-39 Arvin 40 and 40A were sold with the color option of ivory or walnut with brown specks. The Arvinet and Mighty Mite are the same chassis and case.



Reference: *Arvin, The First Sixty Years, History by Coke Coons, 1982, Arvin Industries.*



**Wanted:** Red Lion radio desk. The type with an Atwater Kent radio and speaker below. Would be interested in anything from excellent condition to fixer upper. With or without radio. Scot Beard 812-466-9467 or [Triodesb@aol.com](mailto:Triodesb@aol.com) 12/07

**For Sale:** New Cartridge style Grid leak for Areiola Sr, \$4.00; 1947 Admiral 7T10-C White, \$35.00; 1932 Aetna \$65.00; 1948 Aircastle 5050, \$35.00; 1947 Airline 05BR1525B, \$45.00; 1932 American \$65.00; 1932 Avalon, \$65.00; Coca Cola bottle, NIB \$25.00; 1933 Crosley 4C1, Walnut, \$65.00; 1950 Crosley 569B, Black, Needs restored, Hums, \$35.00; 1934 Crosley 5M3, \$115.00; 1953 Crosley E20-GY, \$55.00; 1950 Crosley 10-137, Charteuse, \$125.00; Emerson unknown bakelite, Doesn't work, \$20.00; 1948 Farnsworth GT-051, White, \$125.00; 1935 Grunow 470, Walnut, \$100.00; Jackson Tester, Wooden, \$12.00; 1930'S Lincoln clock, cathedral, \$35.00; 1948 Magic Tone, Walnut, \$45.00; Peerless Headphones, \$15.00; 1930 Pfansteihl, Walnut, \$225.00; 1942 Philco, 42PT95, Walnut, \$50.00; 1930 Philco 20, Mahogany, \$250.00; 1931 Philco 70, \$350.00; 1931 Philco 90, Walnut, \$500.00; 1924 RCA 103, Tapestry speaker, One with Original grille cloth, one restored, \$175.00 each; 1949 Zenith 7H920, Brown, \$45.00; 1942 Zenith 6D2615, Walnut, \$55.00. All radios have been restored unless otherwise indicated. and are ready to play. All radios are subject to prior sale. Contact Bill Arnold 1 Cindy Kay Dr, Washington, Indiana 47501 or call 812-254-1702 before 10:00 PM Eastern time or email: [bbarnold1@excite.com](mailto:bbarnold1@excite.com) 05/08

**Wanted:** I am putting together a radio collection of the RCA radios in which industrial designer John Vassos is attributed for cabinet design. The majority of these are the chrome framed consoles and tombstones from the 1936 era. Also, I am looking for the Vassos-designed RCA bakelite models from the 1939 era as well. Thank you for your help. Bob Snively, Richmond, IN Phone; (765) 935-3746 E-mail; [totallytubular@aol.com](mailto:totallytubular@aol.com) 03/08

**For Sale:** Zenith 9S262 \$350 , Philco 39-116 with mystery control ( The Worlds Fair model ) \$250 , Silvertone 4587, \$250 , . Arvin " Hopalong Cassidy" radio , black \$350 , Zenith 5S218 \$125 , Westinghouse H-125 " little Jewel" \$95 , Zenith D7000 T/O \$150, Airline 93BR-508A \$110, Airline 93BR-508A \$85 , CBS Columbia 2160 , \$55 and Pair of NOS Zenith 6L6 GB tubes \$30 for the pr. Contact Bob Pote , (317) 881-5721 in Greenwood , IN. or e-mail [mrzenith41@aol.com](mailto:mrzenith41@aol.com) 11/07

**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](mailto:dolivears@aol.com) 03/08

**For Sale:** A Next to your Radio micro watt AM Transmitter. Transmit frequency is fixed at 1000KHz. Send audio to your AM radio from a cassette player, FM tuner, XM Satellite, CD player, or MP3 player when placed next to your receiver. Includes an additional stage of gain for a phonograph turntable and a 1000Hz test signal. The price of \$58.00 includes a player to transmitter cable. Price does not include shipping or batteries (2 D cells). Fred Prohl, 3129 Lanam Ridge Rd., Nashville, IN 47448 812-988-1761 [fprohl@att.net](mailto:fprohl@att.net) 05/08

**Interested in TV history?** Want to see how it started? Try this Web site. [www.televisionexperimenters.com](http://www.televisionexperimenters.com) You'll be amazed how far we've come. Pete Yanczer, 635 Bricken Place, Warson Woods, MO 63122-1613 03/08



## Write!

Radio ads - 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. Please, type all ads before submitting them. 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

**Old Equipment Contest  
Spring Meet 2008**

To the right is Charlie Singers fantastic "Doron Brothers" display. Appropriately Charlie was awarded the Founders Award for "Best of Show"



Mike Feldt - Silver Marshall



Ed Taylor - Reproduction Crystal Set "Rastus"



Tom Williams - TO-3000-1



Bill Morris - Motorola



Pete Konshak - Zvezda



Mike Jones - Test Equipment



Bob Sands  
Philco "Butterfly"



Tom Williams - Crosley