

Vol. 31

Summer, 2002

No 2



How to Repair Cracks in Plastic Radios.
The Above Pictured Meck had One!

See inside for details.



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Responsibilities

Activities, Business,
Administration, & Publicity

Sites and Dates of Meets

NOTE

Applications and Correspondence
Dues, Financial, and Address
Change. Please Notify
Immediately of Change of Address.

News, Articles, Photos,
Radio-Ads

Donations & Scrapbook Material

IHRS Museum Curator

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

IHRS e-mail Web site address: www.indianahistoricalradio.org

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

IHRS ACTIVITIES for 2002. our 31th YEAR

Northern Indiana Summer Meet at Elkhart *August 24*

Saturday 8:30 AM

Meet at the High Dive Pavilion, 500 East Beardsley Avenue, Elkhart, Indiana. Registration is \$5:00 per member/family. Swap and Sell in the East lot. **Old Equipment Contest** with categories such as: 1920's Radios, Tube Radios, Transistor Radios, and My Favorite Radio. Included is a silent auction, pitch in lunch, and an IHRS business meeting. **Motels:** About a doz. motels North and South of I-80/90 at SR-9 (Cassopolis) Exit 92. Super-8, 345 Webster Ave., 574-264-4457. **Red Roof Inn**, 2902 Cassopolis St., 574-262-3691. Info: Ty Gregory, 574-264-0257 or Terry Garl, 574-679-4280, ihrselk98 aol.com.

Fall Foliage Meet at Greenfield *October 12 - Saturday 8:30 AM*

Meet at the Riley Park Shelter, Greenfield, Indiana.

(One block north of U540 on Apple Street.) Old Radio Equipment Contest. Includes an indoor/outdoor Radio Swap and Sell, a pitch-in lunch and IHRS election of officers.

Note: Registration for the above meetings begins at 8:30 AM, Swap and Sell in the parking lot is usually active at 7.00 AM.

Other Club activities

MSARC ACTIVITIES

20-July MSARC Summer Meet, Louisville, KY. Derby City Antique Mall.

Info: Allan Ferris, (502) 543-8233. Contest categories:

Crystal Sets (home brew)

Cathedral Sets, wood (AC-AC/DC)

Table sets, plastic or metal, tube (AC-AC/DC) (no catalin or wood)

Phonographs (no wind-up) & tape/wire recorders (tube, pre 1966)

Accessories

Radio MFG & Broadcasters in MSARC Area

Ugly Radio

Miscellaneous

11-Nov. MSARC Fall Meet, Lexington, KY

Central Kentucky Vocational Technical School

Info: Joe Vittow, (502) 839-5444. Contest categories:

Battery sets pre-1931 (all styles)

Table sets, Repwood, tube (AC-AC/DC)

Television sets, tube or transistor

Novelty sets, tube or transistor

Microphones

Radio MFG & Broadcasters in MSARC Area ~Ugly Radio

Miscellaneous

NARC ACTIVITIES -2002

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

ARCI ACTIVITIES - 2002

All meets at **Elgin, IL**, RAMADA INN, 345 River Rd. 847-695-5000.

Info: **Tom Klienschmidt** 847-255-8128 or **Art Bilski** 630-739-1060,
OLDRADIO@NTSOURCE.COM

MICHIGAN ANTIQUE RADIO CLUB

MICHIGAN July 12-14 EXTRAVAGANZA '02

Lansing, MI — Holiday Inn South Convention Center, 6820 5. Cedar St. —
(517) 694-8123 Theme: Crosley

Info: Don Colbert — www.antiqueradios.com/marc
donsradio@aol.com — (313) 274-1948

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Write to:

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<http://www.antiquewireless.org>

Comments from the Editor

Ed Dupart

For anyone calling northern Indiana, beware of the new area code numbers! Also, those with ads need to inform me of area code changes!

I appreciate the articles and pictures that have been sent to me. Keep it up. Remember, this is your Bulletin and with your contributions this publication can be even better!

I will welcome all suggestions for improving the Bulletin.

Please use e-mail or regular postal mail for sending articles and information to me. If you want to send me articles on a 3 1/2 or 5 1/4 floppy, that's great, too. I can work with virtually any word-processing program for DOS or windows designed for IBM compatibles. Please send computerized pictures in a BMP, JPEG or TIFF format. Pictures can be incorporated with the article done in Microsoft Word or WordPerfect. If you don't have your pictures computerized, send the photo to me, preferably 35mm. Polaroids lose detail when I scan them. If you want your pictures and articles returned to you, please let me know. Sorry, I'm not set up for Mac or Apple. Typewritten articles are fine, too, because I can scan those into my computer.

I will be looking for pictures of unusual radios from inexpensive to expensive radios that you normally don't see at shows for a picture gallery in the Bulletin.

Send me a photo of your favorite radio and I will put it in a place for favorite radios.

If I make a mistake, please forgive me, but please let me know so I can correct it.

If you haven't been to the IHRS museum in Ligonier, Indiana, why not plan a visit? This could be a good mini-vacation for anyone that likes radios. There are a lot of other attractions in the area to see. Contact Fred Schultz for more information.

(260) 894-3092 e-mail: olradio@ligtel.com

Have a happy and safe summer.

Ed Dupart

IHRS Business News

IHRS Spring Meet, Greenfield, May 2002 Meet Chairman and Treasurers Report

The success of an IHRS meet is not possible without the assistance of many. A special thank you to Shirley Gross for her attention to the registration table. A special thanks also goes to Ramona and Glenn Fitch for Ramona's contributions in the kitchen and Glenn's in the auction ring. Volunteering in the many other tasks; setting up and cleaning tables, helping with registration, auction setup and operation, chairing contests and displays, and the grand finale "*cleanup*" we had Bill Morris, Alex Whitaker, Terry Garl, John Jones, Fred Schultz, Edna Yanczer, Bob Pote, Michael Feldt, Bob Snively, Bob Dobush, Ed Taylor, Ed Dupart, Carol O'Friel, Herman Gross, and many others who assisted when the needed. Thank you all!

There were 96 paid family registrations for a total \$480.00. Forty of those registered requested 55 table setups totaling \$550.00. Sixty-six purchased a lunch sticker, total of \$198.00. Additional credit includes: donation jar, Friday evening pizza, and coffee cup sale totaling \$113.55. Total meet income \$1341.55.

Meeting expense: The 4H building rental was \$350.00. Food expense (Friday pizza, Saturday morning coffee and doughnuts, Saturday lunch) totaled \$312.25. Insurance, advertising, and miscellaneous expense was \$407.05. Total expense was \$1069.30.

The auction totaled \$4566.50 in sales. Of the total, \$27.00 came from IHRS donated items. \$200.00 of the remaining total was reimbursed to IHRS for advertising. A Freed Eismann NR7 from the George King collection was donated to The Indiana Historical Radio Museum.

Fred Prohl

NEW WEBSITE! ***alsantiqueradios.com***

Check out the new web site of IHRS member Alex Whitaker. Alex, a member of our organization for over 10 years has served as secretary, vice president and president. His collecting interest centers on Zenith and E. H. Scott. However, like many avid collectors, Al is interested and knowledgeable in all aspects of collecting, documenting, and restoring vintage radio. His web site displays

some of his radios with high-resolution detail. Professionally presented, the pages provide a beginning for future development.

In addition to showing off good-looking Zenith's, Al's intent for the web site is to let the world know he likes to buy, sell, and service vintage radios. His service specialty is pre-WWII Zenith and E. H. Scott, and 1930 through 1955 automobile radios.

So at your next opportunity take a look and bookmark *alsantiqueradios.com*.

Fred Prohl for the *indianahistoricalradio.org*

In Memorandum

MONDAY, Indianapolis Star MAY 6, 2002 Sent in by Dr. Ed Taylor

Indiana native Paul Klipsch pioneered fine audio systems

Associated Press

LITTLE ROCK, Ark. — Paul W Klipsch, an Indiana native who pioneered high-quality audio systems with the company he founded in Hope, Ark., died Sunday. He was 98.

Born in Elkhart, Ind., in 1904, Klipsch became enamored with audio as a boy after his mother moved the family phonograph into a corner and the sound improved, according to a company spokesman.

An engineer with patents in acoustics, ballistics and geophysics, Klipsch founded the company that bears his name in 1946.

The company is now headquartered in Indianapolis.

Klipsch created a corner, horn-loaded speaker design that is still in production. The sound moves from the speaker and uses the walls of the room to effectively extend the horn, creating a rich sound that can emulate an orchestral setting.

Klipsch was stationed at the Hope Proving Grounds during World War II. While in the Army there, he worked to refine the design of his folded corner woofer, the prototype of the "Klipschorn."

He settled in Hope, where, after the war, he bought a building at the old proving grounds and manufactured his first Klipschorn. The building is now the Klipsch Museum of Audio History, with the current manufacturing plant nearby.

Klipsch Audio Technologies makes specialty speakers for the home, including systems for computers and commercial outlets, such as cinemas and Hard Rock Cafe. The company makes other electronics-related products as well.

The son of a mechanical engineer, Klipsch built his first speaker at age 15, using a set of earphones and a mailing tube, a feat a company biography notes was accomplished a year before the first public radio broadcast. Klipsch went on to graduate from New Mexico State University (now home to the Klipsch School of Electrical & Computer Engineering) and received a master's degree in electrical engineering from Stanford University.

In 1981, he received a Doctor of Laws from New Mexico State.

After receiving his undergraduate degree, Klipsch designed radios for General Electric Co. and later maintained electric locomotives in Chile for the company. After leaving Stanford, he worked in Texas as a geophysicist for an oil company. In the Army, he attained the rank of lieutenant colonel.

Klipsch patented his loudspeaker design in 1945.

Over the years, Klipsch received numerous honors, including his 1984 induction to the Audio Hall of Fame, and, in 1977, to the Engineering and Science Hall of Fame. The latter recognizes people whose work improved the human condition, and its roster includes Orville and Wilbur Wright, Thomas Edison and George Washington Carver.

Company spokesman Joshua Hall said Sunday that Klipsch had remained an important part of the firm.

"He was a tinkerer all his life," Hall said.

The company is now run by a cousin to the founder, Fred S. Klipsch.

Articles

The Barbershop Radio

By Edward Dupart

Starting in the early 1950's my mother would have me walk to the nearest barbershop in Detroit and get my haircut. The first few times she would walk with me, but after that I was on my own. At six years old it was scary, but fun at the same time. By the later 50's I was interested in old radios and I was riding my bicycle all over the city. Instead of walking to the barbershop, I was riding my bicycle, and had discovered barbershops housed some very interesting radios.

From the late 50's to the early 70's I would get my haircuts at a variety of barbershops, depending on which radio I wanted to see. By the 60's I was driving, but I found the bicycle to be a good means of transportation in the big city and it was good exercise. Besides, I enjoyed riding the bike and still do.

Many of the barbershops I frequented were owned by barbers who were in their 50's to 60's and seemed like very old people to me at the time. Now, it doesn't

seem very old at all. My, how our perspective of time changes as we get older! A lot of these gentlemen started their businesses in the late 20's to early 30's and the rage at the time was radio and they would equip their barbershop with a radio. Usually, it was a high quality floor model radio. Many were Atwater Kent's, Philco's and Majestic's from the late 20's to the early 30's, but there were some middle 30's sets with short wave. One shop had a cathedral. These radios were between 25 and 35 years old when I was getting my haircuts back then.

When I went to the barbershop, the barber usually knew I wanted to hear the radio, and how I enjoyed hearing them! I would listen to the buzzing of the clippers, the clip-clip of the scissors and the mellow bass sound of the radio, so typical of the radios of that vintage. I remember so many people, the barbers included, would set the tone control so that the high frequencies would be filtered out and the bass sound would be accentuated. I think the people were so sick of the tinny sound of the horns used on early radios and phonographs that when the new improved speakers were introduced they saw to it that they didn't listen to a tinny sound again! I didn't always get to listen to the station that I liked, but I still liked to listen to whatever they had on. Sports, and especially baseball was very popular then. Ah, yes! Tiger baseball! They probably thought I was an unusual kid.

As time went on, these radios would quit. The barbers would rather keep them than throw them out, using them as stands for TV's and/or newer plastic radios, or give them to me. I probably fixed a couple of them for the barbers, but I usually wound up with them. FM radio and TV were becoming quite popular and so they replaced the old radio with something new. I would fix them up and my friends would get them, usually after some kind of swap. My sister-in-law has one of them still, a Majestic 90. Getting them home was a real challenge and would require two or three trips! The Majestics were so heavy and required a balancing act with the chassis on my handlebars. I had a 1940 Schwinn with very wide handlebars, which accommodated the chassis quite well. After getting the chassis home, I would go back for the cabinet and remove the speaker. I would balance the cabinet on my handlebars, while looking through the speaker opening so I could see where I'm going. The third trip was for the speaker and that was easy. I could hold it in one arm and steer with the other arm. Since my bike was a single speed with pedal breaks, I didn't have to worry about shifting. I never did drop anything. Amazing! Going back to the barbershop for a haircut just wasn't the same without the old radio there, but at least I found it a good home.

One of the nicest radios I had given to me was an Atwater Kent 55 with all blue Arcturus tubes. A fellow student talked me out of it and it still baffles me why I traded it. I hope he still has it or is in another collector's collection.

For native Detroiters you will find this interesting, and I'm hoping one of my readers might remember one of these shops or could be related to a barber who owned or worked there. If you do, let me know. The first barbershop I went to when I was little is located in Old Redford next to the Redford Theater on Lahser Avenue and... believe it or not, is still in business! The barbershop on Greydale north of Grandriver, also in Old Redford, had the cathedral radio, what brand I don't remember. I know it wasn't a Philco. Another barbershop I went to was on Puritan Avenue between Mansfield and Rutherford. They had a modern plastic radio, but they also had a Zenith TV that I thought was neat looking. There were two barbershops east of Cooley High School on the north side of Fenkell that had late 1920's high boy radios. If I recall correctly, one was a Majestic and the other was a Philco. There were other barbershops I went to, but these are the ones that stand out in my memory.

Every single one of the barbers I went to was very gracious and seemed to understand the unusual interests this kid had. What they didn't realize at the time was that the old radios they gave me helped me a lot in learning the technical aspects of radio that helped me in my budding career in electronics. Then, maybe they did. Did you know that a barber helped Jerry Vale get his musical career going?



This radio is a 1934 Imperial, typical of radios I saw in the barbershops when I was a kid.

Articles
plasticradios.com
by Peter Konshak

Welcome to plasticradios.com! This web site, created by IHRS member, Peter Konshak, presents a well constructed site dedicated primarily to Plastic Radios. Peter writes: "While there are many radio pages on the Internet, there are few that are devoted to the bright, colorful plastic tube radios of the 1950's and early 1960's. I hope to fill that void with this site." Peter meets his objective with a well organized, easy to view set of pages with a gallery of pictures and text describing radios in categories of Prewar and Postwar Bakelite, Plaskon and Hard Plastic. In addition to the Gallery there are pages on Wood Radio, Resources, Restorations, and Other Stuff (links etc.).

With Peter's permission the following is a reprint of his web page description of restoring a plastic Meck radio.

Meck 5A7-PB11 Restoration

I purchased this Meck off of E-bay, knowing that the case had a nasty crack in it. I think this is the Meck model 5A7-PB11, from 1948, but the label on the case is torn so I'm just guessing. When I received the radio, I was happy to find that it did work! Also, the crack did not look impossible to fix. It's hard to see in the photo in Fig 1, because the handle on the radio is blocking it. I suspect the crack is in fact due to the handle. The crack begins in an area near one of the screw holes for the handle. Some unsuspecting repairman may have tightened the handle too tight, causing the bakelite to crack. The black dot on the left-hand (volume) knob is a screw. I'm not sure why the knob on the left has a screw and the knob on the right does not.

I have had very good luck gluing bakelite with a 60-second epoxy from Ace Hardware, while supporting a crack or chip from underneath with hard plastic. The photo in Fig. 2 shows the top of the case, with the handle removed. The crack is very apparent. This is a tight crack, without any loss of bakelite. I glued the case from underneath, supported by a piece of plastic. I also spread some epoxy on the top, to try and get it into the crack for added stability. I gave the epoxy some time to set, and then sanded the top of the case. The epoxy sanded down quite well, and I was hopeful that all that would be needed now was a coat of primer and paint to finish the radio. While I was sanding, I went ahead and sanded some of the other areas of the case where there had been paint chips. The case was really in pretty good shape. The photo in Fig. 3 shows what the case looks like after a good sanding. I usually start with a grittier paper, such as 220, then move down to 400. You need to smooth the paint chips out, as well as "feathering" the current paint into the bakelite. It's always a good idea to run your finger over the sanded area, to see if you can feel the edges between the paint and the bakelite. It's also a good idea to take a look at the case in a bright,

outdoor light. That can help you to see defects which may not be noticeable indoors.

Once the radio was sanded down, I primed the radio with a standard gray primer. In this case, I just used a regular Rustoleum primer which I purchased from the local hardware store. It seems to work fine. The primer dried quickly, and I was able to see if my repair was noticeable. You can't see it in the photo (Fig 4), but I was still able to see traces of the sealed crack. I decided to put a thin layer of glazing putty over the crack, to help conceal it. Glazing putty is used in auto-body repair to cover small imperfections. It can be sanded and painted. It dries quickly, so it is easy to do several applications in one day. This time, it only took one application. I smoothed a *very* thin layer of glazing putty over the crack. After it was dry, I sanded it using a fine grade paper and a sanding block. The sanding block is important, to make sure that the repaired area is flat.

The photo in Fig 5 shows the radio after applying the glazing putty. Sanding the glazing putty down removed some of the primer, but that is ok. Once the glazing putty was sanded smooth, I went ahead and shot another coat of primer on the radio. I then sanded the primer down carefully with a fine grade paper, and then went ahead and began to spray the final coats of white paint on.

I decided to use Krylon's Antique White on this radio, because it seemed to be a close match. I shot on the paint very carefully, doing thin coats and then waiting 5-10 minutes before applying another coat. I tend to get too enthusiastic about painting, and shoot too much on at once, causing runs. Then, I have to go back and sand them out, repaint, etc. By putting on many light coats, I can avoid that problem. After a few light coats, the radio was pretty much covered. At this point, I stopped, and let the radio cure for a day. I then carefully sanded the radio again, to remove any trace of dust, or particles that may have gotten into the paint. I then put a few more light coats of paint on the radio. After the paint had cured, I again lightly sanded it, then polished the radio to its final state.

After the case was done, I carefully cleaned the metal foil dial, as well as cleaning up the plastic dial cover. I then reassembled the radio, with the finished radio shown in Fig 6. I'm very pleased with the final result! It's hard to believe that only a couple days earlier, this radio was chipped and cracked and looked like junk!

Electronically, the radio worked as found. I haven't done any work to it, but I may clean the chassis and replace the old capacitors at some point to ensure good performance for a long, long time.

Peter Konshak – *plasticradios.com*



Fig 1 Meck radio as found

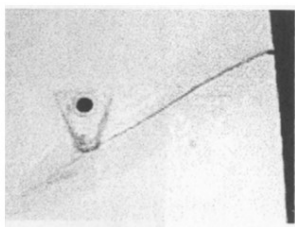


Fig 2 Crack in top of case



Fig 3 After sanding

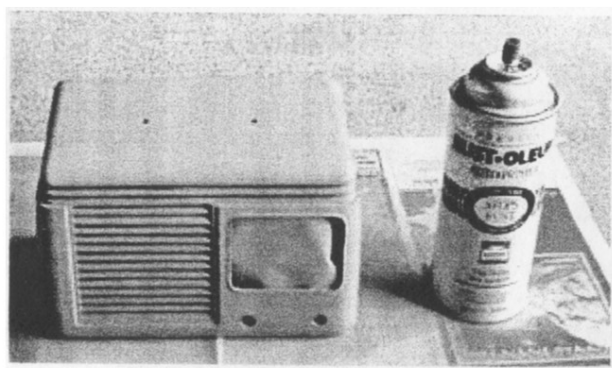


Fig 4 First priming

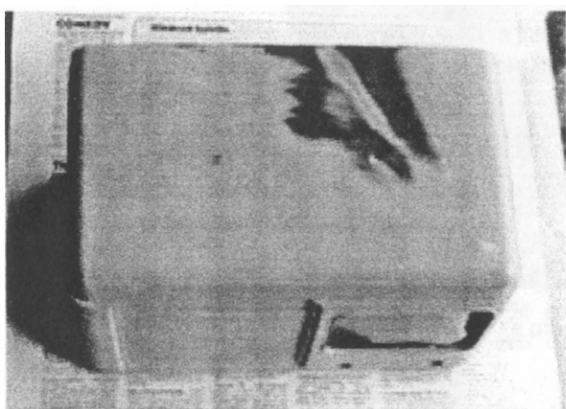


Fig 5 After glazing and more sanding



Fig 6 The Finished Radio!

Articles

Lost Dogs

For those who wondered what happened to the "lost dogs", the following article from the Indianapolis Star, 2001, will answer the question about them. Sent in by Dr. Ed Taylor.

HAMILTON COUNTY

Lost dogs are returned following a 'big' search

Westfield - Nipper and Chipper are back home.

The Star on Saturday reported the theft of the giant inflatable dogs from the new Best Buy store at 14601 U.S. 31.

The dogs, owned by Thomson Consumer Electronics, are 16 and 8 feet tall, respectively, when fully inflated and worth about \$8,000, said Westfield Police officer Greg Marlow.

A woman saw two men inflating the dogs in a yard in Fishers on Saturday, Marlow said. She told a relative, who had read about the thefts in the newspaper. The woman called police.

A Fishers police officer went to the home, and the resident told him where they could be found.

The dogs were in Fishers in the trunks of two cars," Marlow said.

He said the people who had the dogs said they found them behind the Goodwill Store at Noblesville.

No charges are expected to be filed.

PROBLEMS IN THE SINGLE ENDED AUDIO OUTPUT CIRCUIT

By Edward Dupart

For those that didn't have a chance to attend the IHRS SEMINAR - MAY 12, 2002, here's what I covered in the seminar.

Other than the power supply, I have found the audio output circuit to develop the most problems over time, especially the audio coupling capacitor. I have repaired many radios where the only capacitors that were bad were the power supply filters and the audio coupling capacitor. Also, coupling capacitors are generally in high impedance circuits where leakage in those capacitors is much more of a problem. A cathode resistor represents a low impedance to the capacitor and so the leakage in the capacitor is not quite as pronounced. Generally, what consumes the most power in a device, gives the most problems

and the audio output is the second circuit in a radio that consumes the most power.

Two types of bias:

Fixed bias

1. Has a negative supply coming from the power supply, usually going to the grid resistor R_G .
2. One of the filter capacitors has the negative lead going through a resistor or filter choke or field coil and that lead will be negative with respect to the chassis.
3. The cathode usually goes straight to ground.
4. Tends to be used in high power amplifiers, but not always, or where a steady stable bias voltage is desired.

Self bias

1. The cathode goes to ground through a resistor, usually 150 ohms to 500 ohms.
2. The cathode resistor may or may not be bypassed by a capacitor.
3. The cathode bypass capacitor is usually an electrolytic of not much more than 25 mfd.
4. The grid resistor R_G usually goes straight to ground.
5. This method is cheaper and tends to be used in low to medium power amplifiers.

PROBLEMS ENCOUNTERED:

COUPLING CAPACITOR (leaky/partially shorted):

1. This part will cause distortion, especially at low volume levels.
2. When the capacitor is just starting to go bad, the radio may still sound pretty good, but at low levels its just not as clear as it used to be.
3. You may only hear sound when it is turned up all the way, and then it is very distorted.
4. The control grid may turn red hot. One of the first things I do is observe the tube and look for red hot grid(s).
5. If it's really shorted, the tube will run hot and there will be no sound. The plate of the output tube may be a dull red to red hot.
6. For fixed bias circuits, the voltage on the control grid will not be as negative as it should be or it could actually swing positive if the capacitor is very leaky.
7. For self-bias circuits, the control grid voltage will be positive, instead of zero.

COUPLING CAPACITOR (open):

1. This is not common in tube radios, but does happen once in a while. It is common in transistor radios where the capacitor is an electrolytic.
2. The symptom is very low sound or no sound at all.
3. This problem does not effect the DC voltages.

CATHODE RESISTOR (open):

1. The symptom is usually no sound at all.
2. The voltage is usually very close to the plate supply voltage, which results in no voltage drop across the tube.

CATHODE RESISTOR (shorted or low in value)

1. I have found that power carbon resistors less than 50k ohms tend to drop in value.
2. Since the grid bias is dependent on a voltage drop across the resistor, a resistor that has dropped in value will result in less voltage and will tend to drive the tube more into saturation. The resultant symptom will be distortion, especially at low volume.
3. A voltage check at the cathode will reveal a lower than normal voltage.

CATHODE BYPASS CAPACITOR (shorted):

1. Same symptoms as a shorted cathode resistor.

CATHODE BYPASS CAPACITOR (open):

1. Reduced volume.
2. No adverse effects on DC voltages and doesn't cause other parts to go bad.

GRID RESISTOR (open)

1. I have also found that carbon resistors greater than 50k ohms tend to open up.
2. The usual symptom of an open grid resistor is motor-boating – putt – putt.
3. This problem will usually result in a higher than normal negative voltage on the control grid.
4. Many times, placing the meter in the circuit will “fix” the problem. The internal resistance of the meter acts as a grid resistor.

CAPACITOR ACROSS THE OUTPUT TRANSFORMER

1. This capacitor is sometimes directly across the output transformer or goes from the plate to ground.
2. The capacitor functions to filter out high frequency harmonics generated by beam-power and pentode power tubes.
3. A greater capacity value can be used as a tone control function to filter out high frequencies to give the radio a greater bass sound.
4. If the capacitor opens up, you probably won't know it, because it doesn't cause any real problems.
5. If the capacitor becomes leaky, it will make the output transformer run warm to hot.

6. If the capacitor is really leaky, besides the transformer running warm to hot, it will reduce the audio output to no output.
7. If the capacitor is a dead short, there will not be any plate voltage, or it will be very low. The screen grid may be red hot.

OUTPUT TRANSFORMER (open):

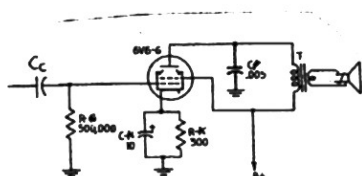
1. The capacitor that runs from the plate to ground is usually shorted and allowed too much current to pass through the transformer and made it open up.
2. The usual symptom is no sound.
3. The voltage on the plate is usually zero and the screen grid could be running red hot.

SPEAKER VOICE COIL (open):

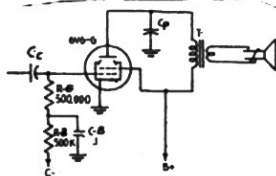
1. At high volume levels you may hear the output transformer.

SOURCE: Elements of Radio Servicing by Marcus and Levy, McGraw Hill, 1955

SELF BIAS



FIXED BIAS

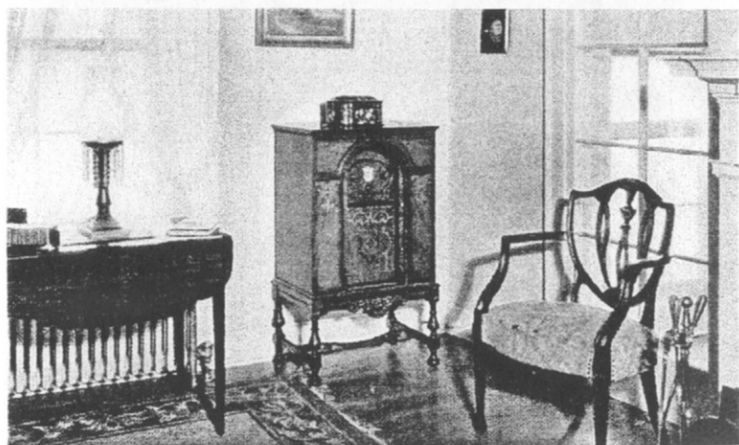
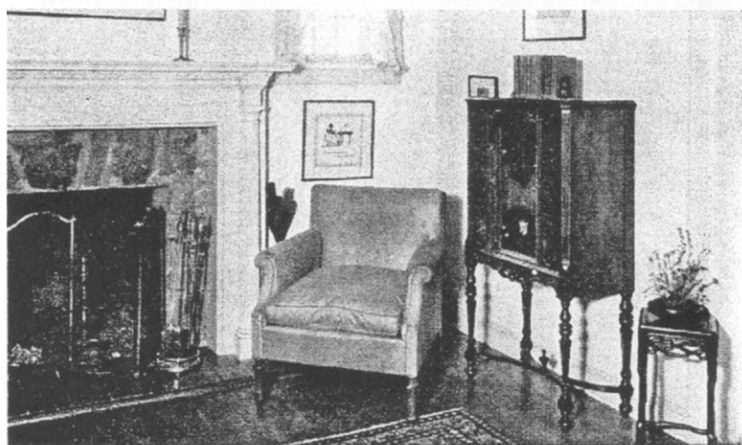


Ed Dupart discussing a point presented in the seminar during the Spring IHRS meet.

Atwater Kent

By Edward Dupart

I recently acquired an interesting Atwater Kent catalog of their very popular 1929 series of radios. Radios that many of us have and see at shows and antique malls. In the last Bulletin I enclosed pictures of various cabinets, price sheets and the tube compliments used in AK's chassis of that year. In this issue I have included pictures of AK consoles in furnished room settings that are very interesting to me because of the furniture and other household items shown in the picture. Hopefully, you will find them informative as well.







Does anyone know where these pictures were taken for AK?



Notice the difference in the color of the metal plate on the front of the radio where the knobs and dial are. On one radio it is dark and on the other it is light.

INDIANAPOLIS FEBRUARY MEET AUCTION **AND CONTEST RESULTS**

**The Indiana Historical Radio Society Meeting and Auction Report.
Greenfield, Indiana – May 10 – 11, 2002**

The Indiana Historical Radio Society met for a 31st annual spring event on May 10 and 11. The meeting was held for a second time at the Hancock County Fairgrounds in Greenfield, Indiana. Member and friends of IHRS and AWA filled the spacious 4H building with Swap N' Sell items, contest entries, an operating radio display, and auction items on Friday evening. On Saturday, with the 4H building full, Swap N' Sell extended to fill an out door pavilion and on into the grass. Ninety-nine families registered for the event, with 55 Swap N' Sell tables purchased. Seventy-two attendees enjoyed the Awards Lunch on Saturday. The Best Of Show contest award went to Bob Sands with his "Never used – fresh from the box" Crosley 50 display. Ed Dupart presented a 45 minute of "Signal tracing as a trouble shooting tool" seminar.

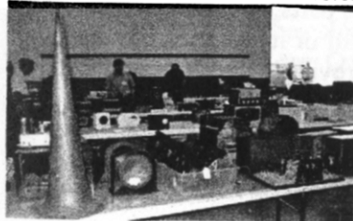
The closing event of this years IHRS/AWA meet was an auction of radio equipment collected by former IHRS member George King. Mr. King, a graduate of Butler University's Broadcasting program, worked for the historic Indianapolis radio and television station, WFBM. His career at WFBM spanned from 1963 to 1985 where he was a producer/director/writer for a number of years. Many collectors will have the book "From Crystal To Color, WFBM" in their library. The book covers WFBM history (the fifth radio station to be established in Indiana) from 1924 to 1964. As a relatively new employee, George King made the book with his picture in "WFBM Station's Class Of 1964." He was selected to be a member of the Speedway Old-Timers Club for his role in producing and directing shows about racing and the drivers. He traveled to the homes of Al Unser, Sr., A. J. Foyt, Rick Mears, Bobby Unser, and Al Unser, Jr. to prepare half hour shows about each of them. In addition to working at WFBM/WRTV, he began his broadcasting career at Channel 8 (WISH), then went to Channel 13 (WTHR), taking a short detour working as an Account Executive out of Cleveland for WLW radio, and finally to WFBM. He also designed and built sets for professional theatre and television. At one point in time the news sets for Channels 6, 8, and 13 were all created by George.

The auction consisted of about 90 radios plus tubes, parts, and literature. IHRS member, John Jones, provided an auction bill of items with a good, fair, and poor evaluation. Approximately 50 bidders provided a responsive audience for the 90-minute auction. Total sale of the items exceeded \$4500.00. The following list is a selected sample of the auction items. The G, F, P rating is based on a visual Good, Fair or Poor. Radios with out tubes are indicated as nt.

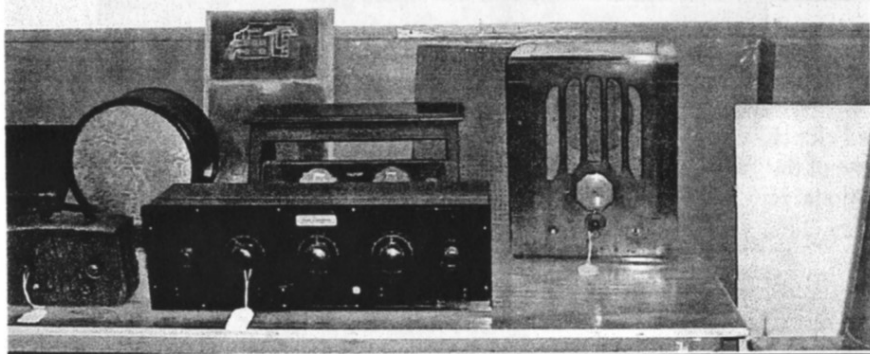
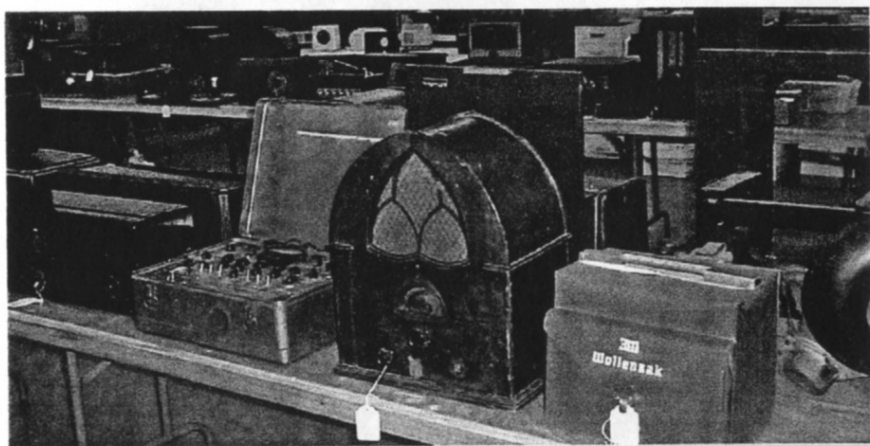
Partial list of auction results:

AC/DC No name small plastic	G	70
AK 44	G	10
AK Cathedral mod 84	F	275
Arvin 441T	P	15
Brass horn for cylinder player	G	60
Burns Horn	P	40
Crosley 167	G	80
Crosley grandfather clock radio 124	P	70
Dayfan bat set w/built in spkr	G	55
Eveready metal cab	F	30
Fairbanks Morris mod 57 m/spkr	G	40
Firestone Airchief wood table	G	40
Freshman bat set nt	F	30
General Instrument mod R-17	G	50
Glorytone mod 26	F	60
Grundig 50's HiFi	F	50
Halicrafter portable W2000	F	60
Halicrafter SX 16	G	65
Home Brew bat set	G	40
Karden Battery Set	G	75
King Bat 80A	G	28
Knight bat set 3 dial	G	110
Majestic mod 15	F	80
Military Sig Loc	G	45
Philco 1937 5 tube	F	180
Philco car radio no dial & cable	P	6
Philco console high boy	F	50
Radiola 60	F	25
Radiola Horn UZ1325	G	60
Radiola III	F	45
Radiola IIIA	F	50
Radiola IV	F	175
Radiola super AR812 nt	F	40
RCA Tombstone mod 118	G	70
Shure turntable	G	50
Stewart Warner Bat set nt	F	10
Stromberg Carlson tmbstn. mod 58T	G	75
Tape Synchronizer	F	250
Temple Speaker	G	25
Zenith chairside 14 tube AM/SW	F	550

Fred Prohl for the Indiana Historical Radio Society



A few
auction
items.



Some of the items in the auction

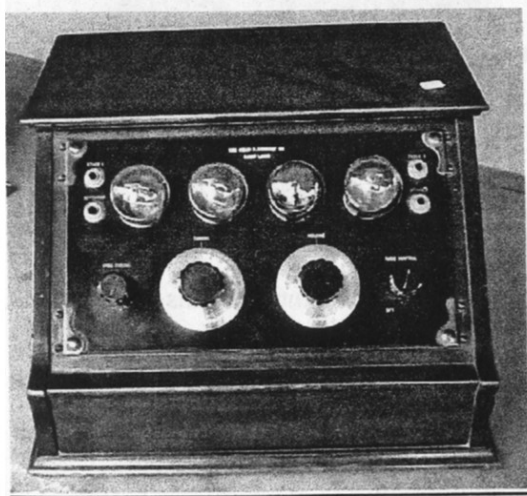
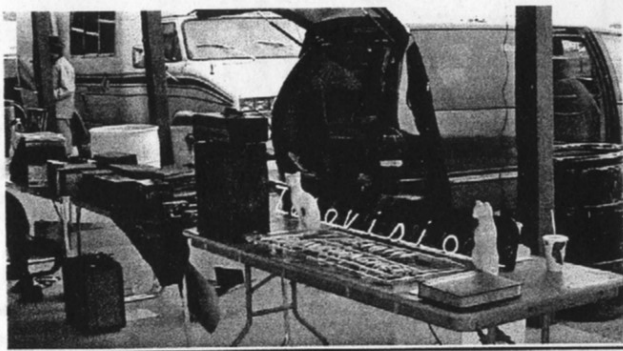


Bob O'Friel carefully listening in on a radio and David Gilbert in the background catching up on the latest radio news.

Mike Feldt checking out one of the operational radios at the May, 2002 Meet.



A young man intently listening and examining some radio artifact.



This page shows some very nice items to be found outside under the pavilion, and this is only a sampling of what could be found.



We all enjoyed lunch and the socializing that went along with it.

Contest Results:

Category 1: Indiana Made Radios

1st place: Kennedy cathedral - Fred Prohl

2nd place: Sarkes-Tarzian FM radio - Bob Sands

Category 2: 1920's battery sets

1st place: Unused "new" Crosley model 50 portable in oak case — Bob Sands

2nd place: Sodian I tube receiver - Pete Yanczer

Category 3: AC wood table radios of the 1930's and 1940's in a display setting

1st place: Philco "Butterfly" - John Howard

2nd place: Detrola 134C - Ed Dupart

Category 4: 1950's Plastic AC/DC sets - there were no entries in this category

Category 5: Open

1st place: Majestic 130 portable - Bob Sands

2nd place: RCA BP-10 portables C2 off them) -- Jack LaVelle

Category 6: Operating battery radio

1st place: Splitdorf R—500 - Alex Whitaker

2nd place: Stromberg Carlson - John Howard

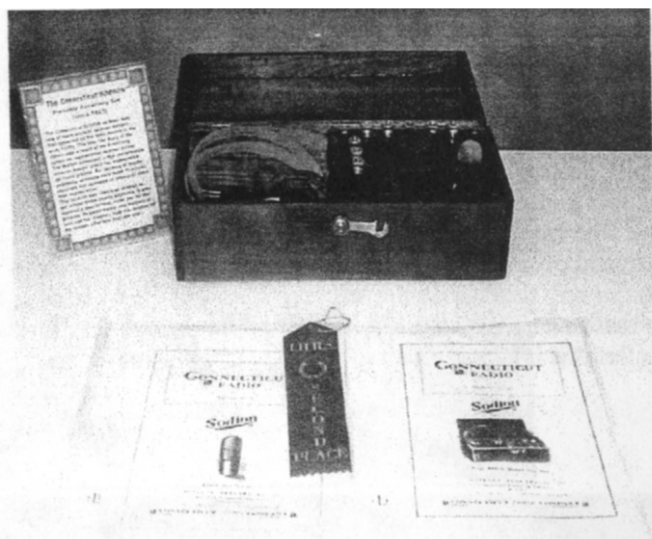
The following is from Alex Whitaker. Thanks, Alex.

The contest items were really good. Bob Sands won best of show for his New Crosley 50 portable. It was found in unused condition. The original Tube was still in its sealed box and all 10 Crosley postcards were there, unmailed. Other info and the operating manual were in the original, but opened envelope. Bob hypothesized that someone had gotten the radio as a gift, didn't like it, and put it up and forgot about it. The case was made out of oak... very unusual for a Crosley. A friend of his found the radio in an old lady's basement. Even all the binding posts were as new. ... the radio was so perfect that it almost didn't look for real.. but it was.

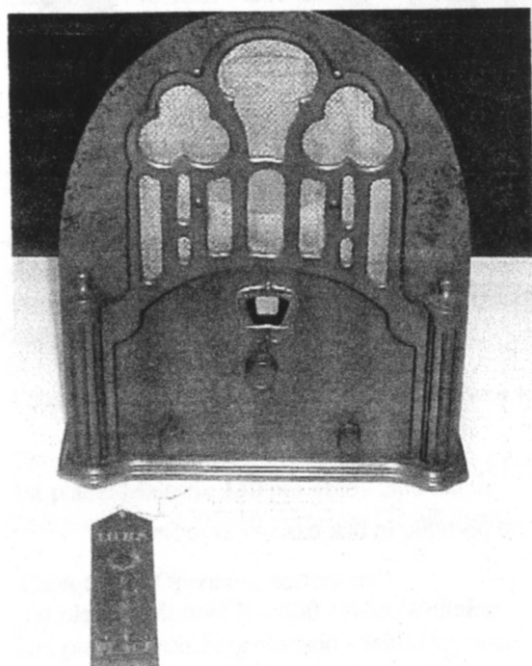


1st place 1920's radios

Unused "new" Crosley model 50 portable in oak case — Bob Sands



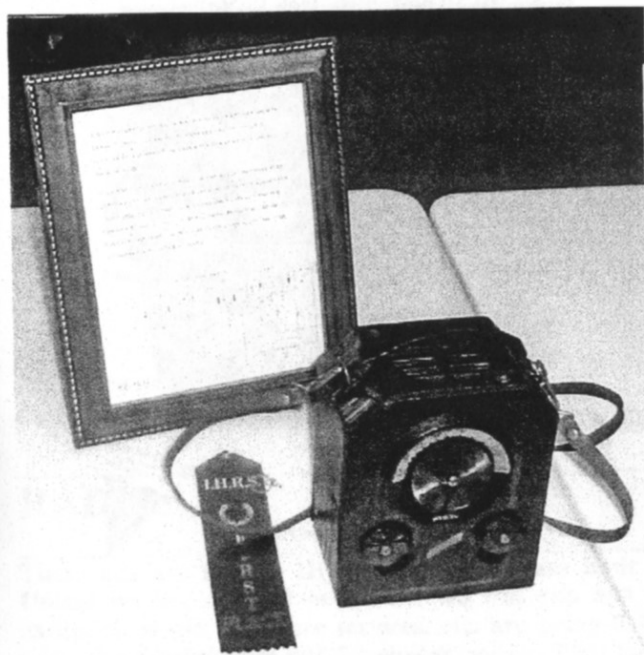
2nd place 1920's radios Sodian 1 tube receiver Peter Yanczer



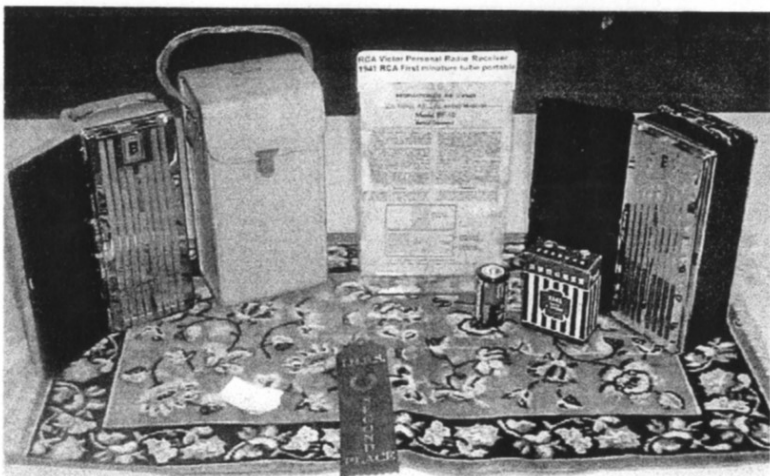
1st place Indiana made radios
Kennedy cathedral - Fred Prohl



**2nd place Indiana made
radios Sarkes Tarzian
Bob Sands**



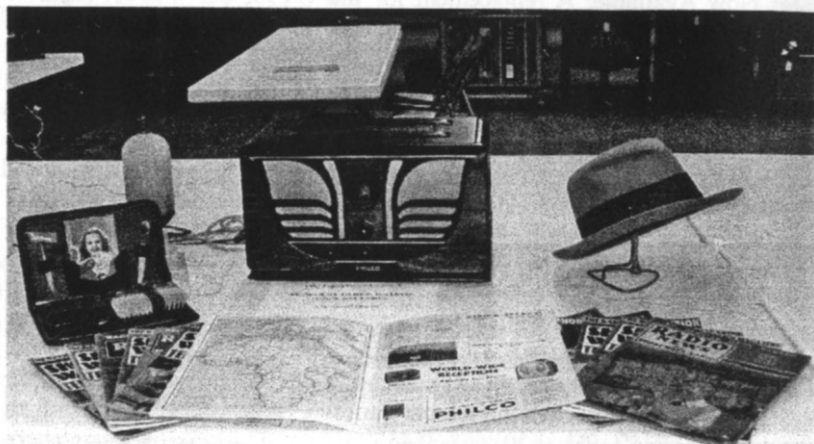
**1st place Open
Majestic 130 Portable
Bob Sands**



2nd place Open RCA BP-10 portables Jack LaVelle



1st place operational 1920's radios Splitdorf R 500 Alex Whitaker



1st place 1930's to 1940's wood radios in a display setting. John Howard



Above are some of the people who worked at the registration desk. I consider them the unsung heroes who help make a meet possible. Ed Dupart, editor

RADIOADS

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

For Sale: 7+ BY 9+ framed, signed picture of Jack Smith, "The Whispering Baritone," \$7.50; Spartan record changer circa 1927 -30? \$95.00; 39 each sound effects LP records, 5 to 60 seconds spot announcements. \$100.00. Set of five Victoreen Superhet Coils, \$30.00. 30 each player piano rolls, all play OK and are in boxes, \$50.00. Walt Sanders, 15 Todd drive, Terre Haute, IN 47803 (812) 877 2643. e-mail: greatgeneration@aol.com

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

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

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

Wanted: Diagram for an Andrews Deresnadyne, Model A. It is a 5 tube 3 dialer with a SOFT-LOUD-OFF switch. George Hauske, W9OLE, 1922 E. Indiana St., Wheaton, IL 60187 PH. (630) 668-3845

For Sale: Philips Radio tube books. I am currently reducing my stocks of my book "Illustrated History of Philips Radio Valves to 1935" and am offering signed copies to fellow IHRS members for \$10 cash including air mail postage. Please reply to Fin Stewart, "Cockerdale", 380 Bulga Rd, Wingham, N.S.W. 2429, Australia.. email address cockerdale@bigpond.com

For Sale: 1947 Silvertone am/fm console radio with wire recorder and 78 rpm record player. Good condition, must pick up, cannot ship. \$75.
George B. Clemans, 851 West Wooster St., Bowling Green, OH 43402.
(419) 352-7198. clemans@bgnet.bgsu.edu.

For Sale: Near mint copy of the AWA Review for 1998--\$20.00 postpaid.
James Fred, 5355 S. 275 W., Cutler, IN 46920, phone (765) 268-2214.

Wanted: Any information about Marconi No. 3574 receiver (made by "MWTC, Ltd. London") using carborundum, valve, and perikon detectors. Needed for restoration project. George B. Clemans, 851 West Wooster St., Bowling Green, OH 43402. (419) 352-7198, clemans@bgnet.bgsu.edu.

For Sale: Heathkit AR-29 FM/AM stereo receiver and amplifier. 35 watts/channel--\$45.00. Complete with original assembly manual (190 pages) and schematics. I understand the manual is worth the price. Cabinet and chrome in mint condition. FM needs alignment, otherwise works well. Ray Andrejasich (317) 846-6977.

FOR SALE: Reproduction Philco cathedral cabinet parts and reproduction cabinets for model 20, 21, 70, 90. Grandfather clock finials: Philco 570, GE H-91, Crosley 124. Philco Colonial Clock top trim and finials. Rider's Radio Index, 1 through 23 -\$20.00 ppd. Books, SASE for list. All plus shipping. Philco

cabinets, front panels, see page 22 in Volume 29, #4 the Winter edition. Other parts, inquire. Call or e-mail for details. Note new phone # and address. Dick Oliver c/o Antique Radio Service, 1725 Juniper Place, #3 10, Goshen IN 46526. New phone # (574) 537-3747, e-mail dolivears@aol.com

For Sale: 1935 Clinton, \$50.00; Crosley 645, \$115.00; 1934 Emerson 36 \$115.00; Brown bakelite Emerson, \$40.00; 1948 Firestone 4-A-61, White, \$55.00; G.E. 51SF clock radio, Brown, \$30.00; G.E. 408, Brown, (not playing), \$15.00; 1931 Gloritone 26, \$175.00; 1935 Grunow 470, \$100.00; Maroon Motorola 5RI, \$30.00; 1930 Philco 20, \$235.00; 1931 Philco 70, \$315.00; 1936 Philco 84, \$150.00; 1942 RCA 6X2, White, \$50.00; 1946 Ultradyne L-43, \$45.00; 1936 Varsity, \$50.00; 1946 Zenith 5D-0 11, Brown, \$45.00. Zenith 6D-26-20. All radios are in nice condition and in good working order unless otherwise specified. Call for descriptions or can deliver to Indianapolis show in February.

Bill Arnold, Washington, Indiana. Ph 812-254-1702 or Email: barnoldworld.com

For Sale: Book: "From Crystal to Color", the History of Radio/TV Station WFBM, Indianapolis (1924 to 1964) by George S. Madden & Burk Friedersdorf. First edition 1964 published by WFBM. Has 190 pages and is in excellent condition complete with dust jacket. Price, \$25.00

Novelty radio, solid maple wall telephone, excellent condition--
\$30.00

Harry Blesy N9CQX,
95740 Clarendon Hills Rd.
Hinsdale, IL 60521

Phone/FAX (630) 789-1793

FOR SALE: Coke Machine, Cavalier Model CSS 173. Refrigeration works and it's all there including the key. Holds a lot of 12oz. (or smaller bottles). \$250.00 The coke machine may be seen by appointment, but bring money. Mike Clark, 6484 East 350 North, Franklin, IN 46131.

Tel. # (317) 738-4649, e-mail ripmaclark@aol.com

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

FOR SALE: Novelty radios, N.I.B.: Pekinese Dog - \$20.00, Computer Mouse FM - \$15.00; Pepsi machine, old style-\$20.00. Shipping extra. Steve Whited, 3637 W. 71st Street, Indianapolis, IN, 46268. (317) 298-9967.

Wanted: Philco 512 Mandarin Red radio w/212 Red speaker or 514 Nile Green radio with 214 Green speaker or 513 Labrador Grey metal radio with 213 matching grey speaker. I prefer the Red model.

Bob O'Friel, 7631 Cape Cod Circle, Indianapolis, IN 46250-1844 Phone, (317) 849.4028

Wanted: For Zenith model 6G601M portable. The knobs, front cover and Wave Magnet. Also need Wave Magnet for 7G605 Transoceanic, I could possibly adapt one from a 8G005Y if available.

Robert C. Pote, 1181 Crestwood Dr. Greenwood, IN 46143, phone (317) 881-4521 e-mail = mrzenith41@aol.com

Interested in TV history? Want to see how it started? Try this Web site. You'll be amazed how far we've come.

<http://pyanczer.home.mindspring.com/Tour> Note: all lower case except the upper case "T" in tour.

Pete Yanczer, 635 Bricken Place, Warson Woods, MO 63122-1613

FOR SALE: Remler infradine amplifier, type 700, panel mounted on copper box, excellent condition less tubes--\$100.00 plus shipping. 3 used 201As--\$45 plus shipping. AK Model 49, includes battery cable, no tubes--\$ 100.00 plus shipping. James Fred, 5355 S. 275W, Cutler. IN, 46920, phone (765) 268-2214.

FOR SALE: Book, "The Story of Kolster Radio", 1928, HC. 46pgs 8 1/2" x 11", color and b & w with silver borders, company history and product line, beautiful blue and gold book showing some cover wear otherwise excellent--\$50.00. Harry Blesy, N9CQX, 95740 Clarendon Hills Rd., Hinsdale IL 60521, ph (630) 789-1793

For Sale: FEDERAL BOOK: LIMITED SUPPLY AGAIN AVAILABLE. 64 PAGE BOOKLET DESCRIBES FEDERAL TEL. & TEL. RADIOS~ FROM THE BEGINNING IN 1921 TO THE END IN 1929. OVER 60 ILLUSTRATIONS INCLUDING PICTURES OF EARLY FEDERAL R.F. AND AUDIO AMPLIFIERS AS WELL AS ALL EARLY RADIOS. MANY FEDERAL PARTS ARE PICTURED AND DESCRIBED. THE ARTICLE AND SPEECH BY DICK SCRAMBERGER, THE FEDERAL EXPERT, ARE INCLUDED. ALL FEDERAL MODELS ARE LISTED WITH THE YEAR AND MONTH INTRODUCED, COST NEW, AND DESCRIPTION. THE FEDERAL BROADCAST STATION, WGR. FIRST IN BUFFALO IS INCLUDED. THERE ARE TWO PAGES OF REFERENCES FOR MORE FEDERAL INFORMATION. THIS BOOKLET CONTAINS MORE FEDERAL INFORMATION THAN EXISTS IN ANY OTHER SINGLE SPOT. GOOD QUALITY PRINTING. PLEASE SEND \$7.95 (INCLUDING S & H) TO LARRY BABCOCK, 8095 CENTRE LANE, EAST AMHERST, N.Y. 14051.