

The
Indiana
Historical
Radio Society



BULLETIN

Vol 36

September 2007

No 3

Inside:

Greenfield October 13

A Zenith 4-B-131

Radio Active Fort Wayne!

Grey Behr and Color TV

The Diamond T

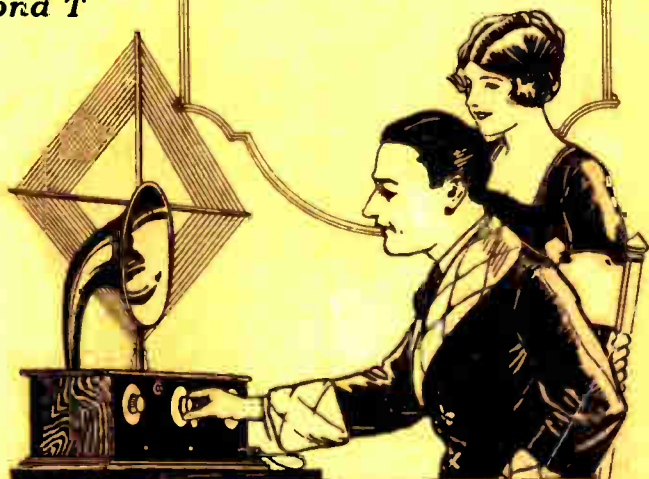
Radio Guide

and

Trouble Finder

including

Complete List of Broadcasting
Stations, Maps, Log Sheets
and Verified Stamp
Record of Reception



COMPLIMENTS OF

FORT WAYNE MIRROR WORKS

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FORT WAYNE, IND.



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Sites and Dates of Meets

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Change. Please Notify
Immediately of Change of

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

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 – September 2007

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The cover: Perhaps it was the Jenny Electric Light Company's 1882 introduction of city lighting to Fort Wayne that inspired the town's citizens to think electron flow. Fort Wayne has for years displayed an inventive use of electricity in many areas including radio. The list of Fort Wayne radio manufactures is lengthy. Yes, of course there were name changes and new owners of existing facilities, but the town with out a doubt was a hot bed of "radio activity." Anylight Electric, Continental, Everyhome Radio, Slagle, Capehart, Farnsworth, Magnavox, are just some of the names on Fort Wayne radios in IHRS member's collection. Not to be ignored are parts manufactures like Dudlo, Rea, and Essex Wire. (For an additional manufacture not on the official IHRS list – see page 18.) And of course WOWO broadcasting was and is there for listening pleasure. This issue of the Bulletin includes radio advice selections and local ads, in addition to the cover, from a 1925 Fort Wayne Radio Guide.



The Indiana Historical Radio Society Meeting Schedule

2007

Fall Meet - Riley Park, Greenfield – October 13

2008

Winter Meet – Hornet Park, Indianapolis – February 9

Spring Meet – Johanning Civic Center, Kokomo - April 25-26

Regional Events of Interest to Members - 2007

With the exception of the AWA, meets regional to the IHRS are states adjacent to Indiana. Send meet date and brief details to the IHRS Bulletin editor. Editor information and Bulletin deadline dates are on the inside cover page of each Bulletin.

Cincinnati Antique Radio

Contact Bob White 513 385 8291 – Bob Sands 513 858 1755

Mid South Antique Radio Club November 10

Madison Co FOP, Lodge 47, Richmond, KY

Contact Allan Ferris 502-543-8233

Antique Radio Club of Illinois www.antique-radios.org

October 7, American Legion Hall, Carol Stream, IL

December 2, American Legion Hall, Carol Stream, IL

Michigan Antique Radio Club www.michiganantiqueradio.org

November 10, Kalamazoo, MI

AWA-Antique Wireless Association 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

We Remember

Carolyn Knipfel

A long time member of the Indiana Historical Society,

Carolyn Knipfel passed away July 1 of this year.

Carolyn and her husband Carl were very active for many years in the Indiana and Illinois vintage radio organizations.

Carolyn and Carl regularly set up at Indiana Historical Radio Society meets with a vast array of vintage radio equipment to sell or trade – with Carolyn an active participant in the activity.

Carolyn was born May 2, 1922, in Newton, Iowa.

President's Column

THE CLUB NEEDS YOUR HELP!!

NO, we're not going to ask you for money. We need help with essential club functions to keep things running if we are to continue having a club. There was a long discussion at the Ligonier business meeting between IHRS members and members of clubs from Ohio and Michigan. The problem areas we all identified are:

- dwindling club membership numbers,
- lack of help at meetings,
- involvement of "younger people" in the club,
- and need for members to run for officer positions.

The problem is that members die and we are not recruiting new members in large numbers. We have signed up a few new members at recent meetings, but these numbers have not even kept up with member deaths and member resignations. When I talk to people at Hamfests, the amateur radio clubs are having the same problem. They attribute their decrease in members to proliferation of the internet. Getting a computer, plugging into a telephone line and talking to people all over the world is certainly easier and cheaper than setting up an amateur radio station and passing licensure examinations. Many of us also blame the 'net' for the decrease in quality of our flea markets.

The infrastructure at our meetings doesn't spontaneously appear without human involvement. Someone has to reserve the facility at least a year in advance. On the day of the meeting, at least 2 people need to be at the registration desk. If we have a contest, we need help with that as well. We also need assistance with coffee and donut service as well as with putting out the food if we have a meal at the meeting. Several of the facilities we use require that we put things in order after the meeting and this too requires human intervention. "Silent Auctions" also need helpers. If we have a regular auction at the spring meeting, we need a large number of helpers. Our Bulletin, which keeps the club together, has a chronic shortage of submitted articles. Please don't be bashful, send your much needed contributions to our editor, Fred Prohl.

President's Column – continued

Even The United States Army is having problems recruiting young people right now. Our club is no different. If you have a young relative or friend who is interested in antique radios and radio history, please bring them as a guest to one of our meetings. An IHRS membership makes a nice gift and is inexpensive. Herman and Shirley Gross have been actively working to recruit new members through schools for some time, but most new members are signed up at meetings. We are open to suggestions. If you have any ideas to help us increase club membership, please share them with one of the officers. New members do not have to be "Young" (which is a term not easily defined) and our club is open to anyone who is interested and who pays their dues.

The annual election of officers will be held at the October 13 meeting in Greenfield. The only requirement is that a candidate must be present at the business meeting to be elected as an officer. You don't even have to reside in Indiana, but you need to be able to attend our four yearly meetings. Although not required , an internet connection makes communication of club business between officers easy and "free" for the club. The incumbent club president, treasurer and bulletin editor are running for reelection. We need candidates for the positions of vice president and secretary . The duties of the vice president are to arrange for meeting facilities and the club secretary records the minutes of meetings that are published in the bulletin.

Well, this turned out longer than I had intended and I hope that at least some of our members have read it. I hope that those of you who read it are ready to step up and help with the club. Please communicate your desire to help or the intention to run for an office in October to one of the club officers. Thanks for your attention. I hope to see lots of you at Greenfield on October 13.

Mike Clark

IHRS PRESIDENT

**What Connects Indiana Historical Radio to Our 16th President of the United States?
Answer: The Lincoln Highway!**

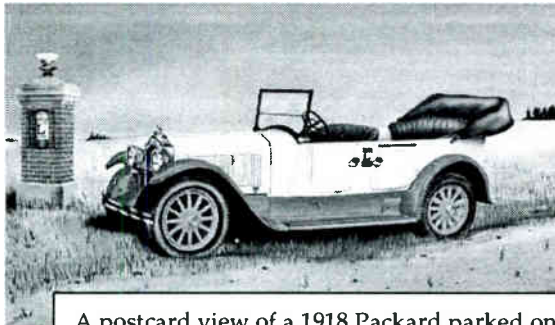


In case you've not noticed, the address for the Indiana Historic Radio Museum in Ligonier is 800 Linconway South. In 1913, Carl Fisher, (GM's Fisher Body and the Indy 500) proposed a cross continent US highway beginning at Times Square, New York and ending at Lincoln Park in San Francisco. The Lincoln Highway was completed by way of connecting many of the existing roads across the U.S. The Highway's path across Indiana passed through Ligonier – creating 800 Linconway South.

The Indiana Historic Radio Museum at 800 Linconway South was featured as a land mark along Indiana's 150 miles or so of the Lincoln Highway in a recent Chicago Tribune article. Written by Pamela Selbert, the April 29, 2007 article includes historical information related to the Lincoln Highway and places to see along the Indiana stretch from Dyer to Fort Wayne. So the next time you want to take a family trip to the Indiana Historic Radio Museum, consider taking in the additional historic sites along the Lincoln Highway.

Information on an active Lincoln Highway Association can be found at www.lincolnhighwayassn.org.

Article information contributed by Joe Farkas



A postcard view of a 1918 Packard parked on the Lincoln Highway gravel. The marker identifies the Lincoln Highway with a large L on a red, white, and blue sign.

MY ZENITH 4-B-131

By Bill Arnold, Washington, Indiana

Did you ever have one of those radios that looked great but you could never really play because it was either a battery radio or one that operated off a supply that you didn't have? Well, I have done some work on sets of this nature. I remember doing some of the 32 volt sets simply because there was just no way to play them. Of course, you have to remember that this may ruin the historical value of such a piece but at the same time there are few collectors that have access to 32 volt power supplies or access to anything else that may be used for power such as 32 volt light plants or non-existent wind chargers. I had that pointed out to me one time that I was "ruining" a radio. I suppose that is a matter of opinion but most people wanted something they could play and I really had no problem selling

those radios converted over to work on AC.



There were also radios designed to work on the popular car storage battery. I suppose that is a solution but you have to remember that the last of the American cars using the 6 volt battery was made in the 50s. An older friend of mine tells me when he was growing up, the radio they used on the farm was operated by the car battery and when they went to town on Saturday nights, the radio was unhooked to

use in the car. Often the battery was charged up and a different one was brought back and used until next week.

I bought such a radio, one that had a vibrator similar to the ones used in the automobiles. I never really had it playing but wanted to convert it over to AC operation. Maybe that is a shock to the purists but at least the radio will play.

In fact, the radio I had was a pretty rough one. It was missing two tubes and the ones installed in the last two tube sockets were the wrong ones. Before could do anything I had to get the right tubes. I was to find out that the 15 tubes are hard to find but I did have the 75 detector and the 38 output tube. I finally located the 15 but had to substitute a 39/44 in the second spot.

There were also wiring problems to contend with. The second IF had been replaced and the coupling capacitor between the detector and output tube was missing. There was also another wiring error that a friend helped me locate and was also missing the tube shields. They needed to be installed if I were to expect decent performance.

If it had been intact and playing, it would have been simpler than the 32 volt radio I converted over to operate on AC. I had never done one of these before and it presented a different set of problems. I suppose the best way to do this was to simply build or buy a power supply that would carry the current well enough to operate the vibrator.

I had a different idea. It was to take the vibrator out and set up my voltages for the existing tubes. This meant building a solid state rectifier to convert the AC to DC. There would be no more vibrator to replace if this idea worked.

I started by pulling out the vibrator and installing a transformer to supply the 6 volts. This was large enough to supply filament voltage for the tubes, dial light and it also served as the input for the high voltage transformer. I made a bridge rectifier to supply DC to the tube filaments although I might have been able to use AC in some cases. Notice that I used a 39/44 in place of a 15. This was because that is what I had in stock. I had to use a dropping resistor to get the right voltage to the filament of the 15 but all of the others used 6.3 directly from the rectifier. I would have used a 39/44 for the other 15 but it would not work for an oscillator. It seemed to be fine as an IF tube.

Zenith 4-B-131 continued

One of the other 6.3 volt outputs was used for the dial light and as an input to the original transformer that was used to step up the voltage for the vibrator. I had to change the dial lamp from a 2.5 volt to a 6.3 volt bulb. I had to play with the transformer to get the voltage needed for the output. One side of the output transformer was hooked up to a 1N4004 diode to make a half wave rectifier. The other side was ground. It was then filtered through the original choke and capacitors for the B+. Since this was too high, it was also dropped through a couple of resistors to measure the same as the original plate voltage. My goal was to get 155 volts on the plate of the first two tubes as shown on the chart.

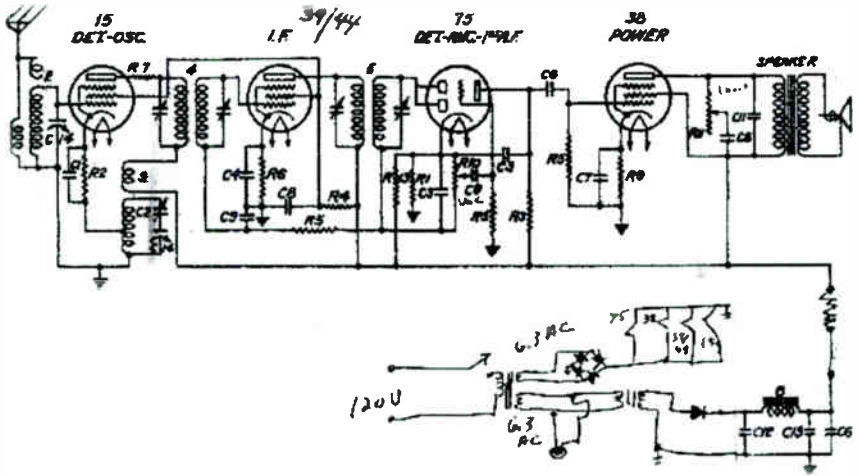
This duplicated the original plate voltage and the radio seems to perform pretty well. It has good selectivity and sensitivity. The modifications are all under the chassis and looks original on the outside. The vibrator has been taken out because it is no longer needed. Now one does not have to worry about finding one of those. I can tell you from experience, they do give some problems if the radio is not played frequently. The points have a tendency to stick. When that happens, there is no high voltage to operate the radio. With the modifications installed, there is no need to worry about that and it should last for years.

If a guy wanted to change this back over to operate on the 6 Volt battery, that could be done as all of the modifications were under the chassis. I think all of us would like our radios to look original and I take the attitude that if it is hidden, I don't care. I would rather do that than have a radio that would never work. Of course, if the radio had been more valuable, it might be better to stay with the original design.

I like to restore my own radios and work on different ones. This is the first of this type I had done. As I gain experience, I am able to learn to build my own circuits and salvage some of the sets like this that would be otherwise discarded. It is getting harder and harder to find good sets and it may be in the next few years, we will have to resort to restoring radios that were once considered "parts" radios.

I do admit, I have been known to buy radios that are a bit on the rough side but I want projects to do and the good ones do not need much. Besides, they will be saved, anyway. The bad ones may be parted out or even thrown away. I believe I have saved this one from that and I am glad I saved another old radio. I believe this is one of the reasons I am in this hobby. I hope you enjoyed hearing about my Zenith.

A frequent contributor to the Bulletin, Bill Arnold has a small collection of radios but mostly fixes them to sell. Bill enjoys the electronic restoration work as well as the cosmetics



OK, You did not look it up - and you are wondering what the sign off for the June 2007 article "Test Your Knowledge of Wireless Terminology" means.

TNSTAAFL CUL E-☺

There's no such thing as a free lunch. See you later - and a Ham Radio Operator sign off.

On Saturday, October 13, the Indiana Historical Radio Society will meet at the Riley Park Shelter, Greenfield

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

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



Schedule of events:

7:00 AM Set up Swap N Sell of vintage radio equipment. Set up is indoor or outdoor, first come first serve.

8:00 AM The IHRS Fall Foliage Meet officially begins

10:00 AM Enter contest items in the shelter for "Popular Vote Judging"

Contest Categories: 1 My favorite radio

2 Amateur Radio Equipment – any vintage

10:00 AM Silent auction entries in place in the shelter – 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 you are able, bring a dish to share along with IHRS provided KFC.

Tables will be available for Vintage Radio Displays

An IHRS Business meeting will immediately follow the lunch

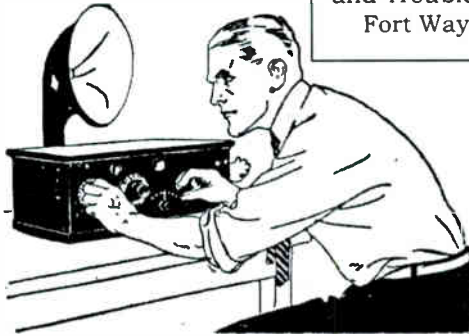
Contacts for the IHRS Fall Greenfield Meet:

Glenn Fictch, 765-565-6911

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

On this and succeeding pages of this book are given many common sense hints and suggestions that will increase the enjoyment of every radio enthusiast. The terms and descriptions are purposely kept plain and free from technicalities in order that everyone can understand them.

(Editors.)



Facts That Everyone Interested In Radio Should Know

Long distance stations ordinarily can not be heard with a crystal detector set.

The night range of sending and receiving stations is much greater than the daylight range. Do not expect to hear stations a great distance away in the daytime.

There are nights, rare in winter, and common in the summer, when it is impossible to bring in distant stations. This is due to atmospheric conditions beyond our control. This condition should be met philosophically as something that can not be avoided, and not used as the basis of a complaint to the radio dealer who sold you your set.

A radio set will not work satisfactorily when the batteries are nearly run down. Keep your storage battery well charged, or if you use dry cells, always use some that are in good condition.

Never get impatient with your set. If you will take the trouble to familiarize yourself with the principles of radio you can do the same. There is a reason for every radio trouble.

If you have not learned to tune properly, but manage to tune in one long distance station, don't condemn your set because you do not hear them all. The fact that

you heard one distant station shows that the set is all right; all you need is patience and practice, and you will be able to get the same ones as your neighbors.

Don't expect to get louder or clearer music when your vacuum tubes are turned up brighter than normal. If anything, the material you receive will be less loud and there will be unpleasant noises introduced. A slight overload on the tubes will make them burn out in a fraction of their normal life.

Don't expect your radio set to act like a phonograph. You can't push the button for grand opera or jazz and get it. If you just had to push the button to bring in anything you wanted to hear, you would discard the set in a month. As it is, the experience of those who have followed radio since its inception decidedly indicates that "once a radio fan, always a radio fan."

Your Receiving Equipment

The first time you walk into a home where there is a radio set and hear music or voices coming from the loud speaker as clear and distinct as though the per-

formers were in the next room, the radio set seems a very strange and mysterious piece of apparatus. But if you investigate you will find that there are really only a few simple units to your equipment and that they are all designed to do certain definite things.

The Equipment Necessary

First, there is the receiving set with which you tune to the particular wave-length desired. It contains in addition to the tuning unit certain apparatus for modifying the received electrical energy (as will be explained later) so that it is capable of operating headphones or a loud speaker. This apparatus is called a "detector" and is usually either a vacuum tube or crystal. The set may also contain additional vacuum tubes arranged to amplify the incoming radio energy.

Either a pair of headphones or a loud speaker is necessary for changing the received electrical energy into sound. Headphones are telephone receivers especially

designed for radio work, and extremely sensitive. Most loud speakers consist of single receivers of this type, designed to give an especially great volume of sound, and equipped with horns for amplifying the sound.

Next, there is some sort of arrangement to intercept the radio waves. This ordinarily consists of a span of one or more wires suspended some distance above the ground and called an "aerial" or "antenna." The word "aerial" means "suspended high in the air;" the word "antenna" is applied to the long feelers common among insects, and may be as appropriately applied to a radio aerial because that is, in a way, the feeler of the radio receiving station, since it "picks up" the radio waves.

Lastly, there is a connecting wire from the receiving set to the earth or ground. The average radio set will give no results at all unless it has a good ground. It is sometimes possible to receive with a ground alone—that is without an aerial. When it is impractical to make a connection direct to the earth, the counterpoise system is often used.



The aerial is the part of the radio system which "catches" the radio waves and leads them to the receiving instrument, where the waves are transformed into sounds corresponding to those sent out at the broadcasting stations.

ON AERIALS

Much of the success of your receiving set depends upon the efficiency of your aerial. Be sure your aerial is right. If necessary call in an expert to make sure of it.

Aside from underground aeri-als, condenser aeri-als, "Beverage wires," and other unusual constructions, there are two popular types which are most in favor at the present time:

1. The Flat-Top Aerial. This type is in use in fully 95% of the receiving stations. It con-

sists of one or more wires, from 25 to 50 feet high, suspended by insulators from two supports. For the reception of broadcasting programs, the ideal length is from 100 to 150 feet, with the main length, 125 feet, probably the best for signal strength.

There is, however, a tendency toward the use of shorter aerials in connection with the highly efficient present-day sets. Two causes contribute to this tendency.

- a. The use of an aerial from 60 to 80 feet in length makes it possible to "tune out" or eliminate undesired stations much better than is possible with an aerial of two times that length. In the face of the rapidly increasing numbers of broadcasting stations this becomes an advantage of decided importance.
- b. Radio sets have reached a point of efficiency where the energy picked up by short aerials, such as the above, is sufficient to give excellent results over long distances, and the increased selectivity of the short aerial often outweighs the advantage derived from the use of an aerial of greater length.

The length of an aerial for broadcast reception should never exceed 150 feet.

There is absolutely no advantage to be gained by using more than one wire for receiving. The direction in which an aerial of this length points is of practically no importance.

A flat-top aerial should not be parallel to high power electric lines, unless they are 25 feet or more away. An aerial in the open country is ordinarily more effective than one in a congested residence or business district.

The lead-in wire from a flat-top aerial should be free from obstructions, and well insulated. It should touch as few insulators as possible, so as to eliminate possibility of electrical leakage. The lead-in should make good contact with the flat-top portion, and should, if possible, be sold-

ered. Connection with the overhead wire should be as near to the end of the horizontal span as possible. If such an arrangement is not practical, the lead-in may be attached near the center of the flat-top portion, and only a slight loss in efficiency will be suffered, probably so slight as to be unnoticed.

2. **Loop or Cell Aerials.** Loop aerials are coming more or less into favor where it is not possible to erect an outdoor aerial. They are satisfactory for short distance reception with a vacuum tube detector, but only satisfactory for long distance work when used with a radio frequency amplifier of at least two or three stages in addition to the vacuum tube detector and, if desired, audio frequency amplifiers. Loop aerials are supposed to have the advantage of receiving only from the direction in which they are pointed, but this characteristic has been greatly exaggerated in many of the reports in circulation. No ground connection is used with a loop, which is in fact nothing but a tuning coil, enlarged to such proportions that it serves to pick up the waves from the sending station, and pivoted so that it may be pointed in any direction.

The Ground. Except in cases where a loop aerial is employed, a good ground connection is a necessity. The best ground is usually a water pipe (faucet, radiator, or the like) connecting with a city water-works. In the country, a metal plate buried deep in moist earth will serve, or a "counterpoise" may be used. This consists of another aerial only a few feet above the ground, and constructed like the overhead aerial. This gives excellent results, but involves more difficulty in construction than does the direct connection to a water pipe. In every case the connections between the instruments and the ground should be as short as possible.

Ligonier Popular Vote Contest



Tube Portables:

Luther Hall 1st & 2nd place

GE mod 145 and Motorola 56M3

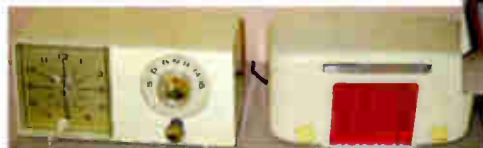
Other entries:

RCA B-411, Luther Hall

Philco 41-841 Joe Farkas

Firestone 4-C-30, Joe Farkas

RCA 54B3, Tom Williams



Cost Me Less Than \$20

Tie for 2nd, Joe Farkas

Joyce Greep 1st place

TraV-Ler, Airline GSL-19=079A

and Fred Prohl, Garod

Other entries:

George & Edna Clemans

Arkay speaker

Tom Williams, ETRON,

Capco Kit Radio, and GE

clock radio



Swap N Sell at Ligonier



A lot of nice Vintage Radio Equipment looking for a new home!



Lunch at Ligonier

The pizza was good, but nothing can beat the garden fresh tomatoes and Chee Kirkpatrick's fried rice!



Looking for the unusual in vintage radio? Be sure to check out the ever changing display at the Indiana Historic Radio Museum in Ligonier.

1925 Radio Guide
and Trouble Finder
Fort Wayne

By This Label



Shall You Know Better
RADIO TUBES

**ELECTRON
RADIO
DETECTOR
AND
AMPLIFIER
TUBES**



*Use Them For 100% More Power,
Amplification and Long Life*

SOLD BY ALL LEADING DEALERS

Manufactured By

RADIO TUBE LABORATORIES

2217 Lafayette St.

Fort Wayne, Ind.

HAVE YOU READ?

by Ed Taylor D. Sc. E. E.



THE VICTORIAN INTERNET

Copyright © 1998 by Tom Standage

For thousands of years people had communicated across distances only as quickly as the fastest ship or horse could travel. Generations of innovators tried to develop speedier messaging devices, including “magical” needles that relied more on telepathy than technology. Then, over the course of three decades in the mid-1800s, a few extraordinary pioneers at last succeeded. Their invention—the electric telegraph—nullified distance and shrank the world quicker and further than ever before, or since.

The Victorian Internet tells the story of the telegraph’s creation and remarkable impact, and of the visionaries, oddballs, and eccentrics who pioneered it. From the eighteenth-century French scientist Jean-Antoine Nollet, whose experiments proved that electricity could be transmitted over great distances, to Samuel F. B. Morse, who developed the first practical electric telegraph in 1837, to Thomas Edison, who began his career in the telegraph business and proposed to his wife by tapping Morse code on her hand, Tom Standage tells a colorful tale of scientific discovery, technological cunning, personal rivalry, and cutthroat competition.

By 1865 telegraph cables spanned continents and oceans, revolutionizing the ways countries dealt with one another. The telegraph gave rise to creative business practices and new forms of crime. Romances blossomed over the wires. Secret codes were devised by some users, and cracked by others. The benefits of the network were relentlessly hyped by its advocates and dismissed by the skeptics. Government regulators tried and failed to control the new medium. And attitudes toward everything from news gathering to war had to be completely rethought.

The telegraph unleashed the greatest revolution in communications since the development of the printing press. Its saga offers many parallels to that of the Internet in our own time, and is a fascinating episode in the history of technology.

ISBN 0-8027-1342-4 (hardcover)

RADIORAMA 2007



The Cincinnati Antique Radio Society met for the second year at the site of the former Voice Of America on June 23. This historic location is fitting for a Vintage Radio Meet. There is plenty of open the trunk setup space and in addition to radio enthusiasts, a museum to entertain.



Voice Of America Curtain Support Towers - a landmark of the past. The towers are now gone, but the building remains and houses a growing museum. The picture is from a VOA 50th anniversary QSL card. More pictures and VOA history is available at veterensvoa.com/vvoa/

Color TV in Sixty-Three?

Ion Stains, and Other Shocking Revelations

By Grey Behr

As a novice repairman in the early sixties, I was called on to repair a Heintz 57 variety of ancient and modern tube type equipment. A repair call at a rural home found an old Raytheon with a plastic overlay of red, blue, yellow, and green horizontal translucent bars taped to the face plate. The owner proudly explained that he purchased the overlay to convert the Black and White set to color! Watching the set made him dizzy – he sadly remarked. A new video output tube and removal of the overlay cured his problem.

Another was on and old Muntz television (built under the name of "Mad Man" Muntz who made his fortune in the California used car business) revealing black vertical bars on the right side of the 12 inch screen. This was a new one on me! I returned to my truck to call the boss back at the base station on our newly installed Globe citizens band two way radio.

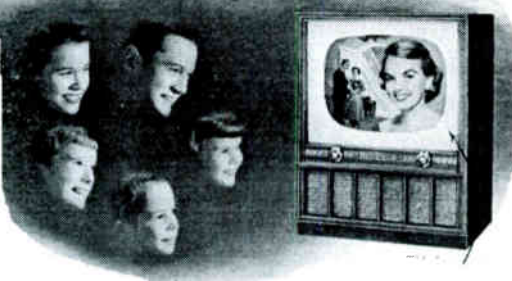
He informed me that I had a rare case of Barkhausen Oscillation. "If you have an extra magnetic ion trap (used on early B&W picture tubes to align the beam) in your caddy – put it on the horizontal output tube" he

advised. The fix worked, but to this day – I don't know how or why.

The owner of a Hoffman television receiver complained of a dark circular stain in the center of his screen. The Hoffman screen cover plate was colored a bilious yellow-green and they called it "Easy Vision",

probably their answer to Sylvania's 'Halo Light' (a fluorescent tube around the border of their screen)! Cleaning the face of the tube was ineffective – the stain was on the inside of the tube! Another call on the Globe and I was told that the stain was an ion burn caused by a mis-aligned ion trap and a new picture tube was the only cure. As the set was old, the owner decided to consider a new set.

Only **SYLVANIA TV** Brings You
"Surround Lighting" with **HALOLIGHT**

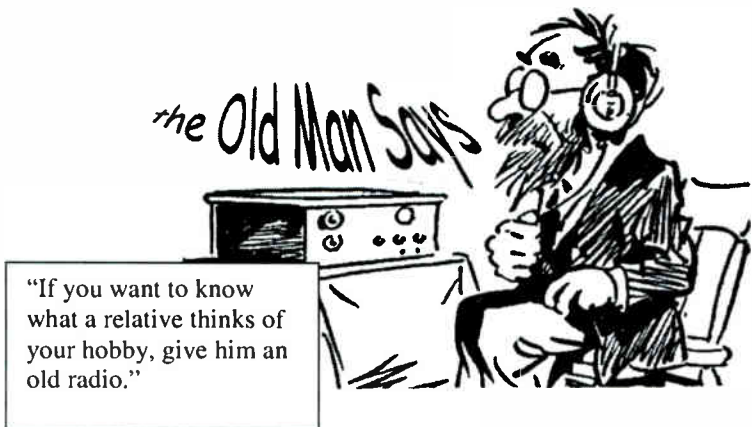


Color TV In Sixty-Three? continued

One of the trials of my job was servicing certain models of old Philco receivers. This set had an anti corona ring around the base of the 1B3 high voltage rectifier tube. I would bleed off the voltage on this ring to replace the tube, but the change on the picture tube would charge the ring back up and zapped me every time! A clip-on shunt of wire terminated in alligator clips solved the shocking situation.

A highly excited lady called to say her new Zenith receiver had made a noise like a shotgun blast and the picture went "all grainy"! When I arrived the set was still on – as the owner was afraid to approach it! The retainers holding the face plate (a new safety device made of 'tempered' glass) had been tightened unevenly and the strain had caused the glass to fracture in thousands of small pieces, still in place on the set! The new glass was originally developed to make curved safety glass for the rear windows of 1949 and 1950 Ford autos. On very hot sunny days, the auto rear windows would fracture – like the TV face plate! GB

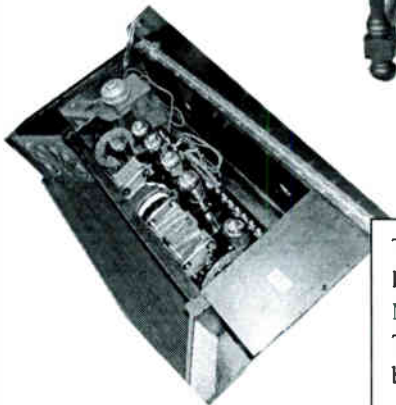
Grey Behr continues to entertain Bulletin readers with his work experiences. Cogley Hall, AKA Grey Behr, now resides in Texas.



Indiana Radio – The Diamond T Radio Manufactures, South Bend, Indiana

Mention Diamond T to an "old things" buff and he or she will think of the Diamond T truck. A Cadillac of trucks built in Chicago from the 20's through the 50's. The "old things" person will usually look at me in disbelief when I say I have a couple of Diamond T radios.

The Diamond T Radio Manufactures built battery and early AC radios between 1925 and 1928 in South Bend. Pictured below is the 1927 "Baby Grand" Console Model. The circuit is a six tube TRF with what is advertised as a single tuned circuit. The "single tuning" is in reality the tuner's finger or thumb. Two stages of condensers are ganged and the third is independent for increased selectivity. The "Baby Grand" has two horn speakers connected in parallel. The speakers' resonating chambers are different, one speaker for high pitch and the other for low pitch.



The Baby Grand chassis to the left and the battery box above. Note the battery acid damage. The damage is visible under the box as well.

Diamond T Radio Manufacturers

SOUTH BEND, IND.

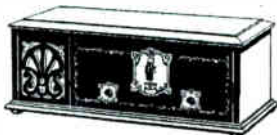
The Diamond T Line

The Diamond T line embraces three models of receiving sets and consoles, with a price range from \$75.00 to \$195.00.

All models are six-tube sets.

Diamond Special Model Receiver

Tuned radio frequency.
 Six UX-201-A Tubes or their equivalent.
 Single Diamond DeLuxe control.
 One rheostat governs radio frequency tubes.
 Diamond T automatic resistance on audio frequency and detector tube.
 Diamond T automatic resistance on low wave length volume control.



Diamond Special Model
List, \$75.00

Batteries:

"A"—Six volts, preferably storage type.

"B"—Ninety volts for amplifier tubes.

Forty-five volts for detector tube.

"B"—One hundred thirty-five volts for power tube.

Outdoor, indoor or Ducon antenna.

American walnut finish cabinet.

Five-ply veneer panel with inlay.

Built-in speaker.

Weight, 18 lb.

Dimensions:

Height, 9 in.

Width, 26 in.

Depth, 10 in.

List Price\$75.00

DeLuxe Model

Same specifications as Diamond special, except the cabinet design.

Six UX-201A tubes or their equivalent.

Weight, 20 lb.

Dimensions:

Height, 9½ in.

Width, 26½ in.

Depth, 11½ in.

List Price\$87.50

Baby Grand Console Model

Tuned radio frequency.

Six UX-201A tubes or their equivalent.

Single Diamond Deluxe control.

One rheostat governs radio frequency tubes.

Diamond T automatic resistance on audio frequency and detector tube.

Diamond T automatic resistance on low wave length volume control.

Batteries:

"A"—Six volts, preferably storage type.

"B"—Ninety volts for amplifier tubes.

Forty-five volts for detector tube.

"B"—One hundred thirty-five volts for power tube.

Outdoor, indoor or Ducon antenna.

American walnut finish cabinet.

Five-ply veneer panel with inlay.

Twin built-in speakers; one high pitch, one low pitch.

Weight, 52 lb.

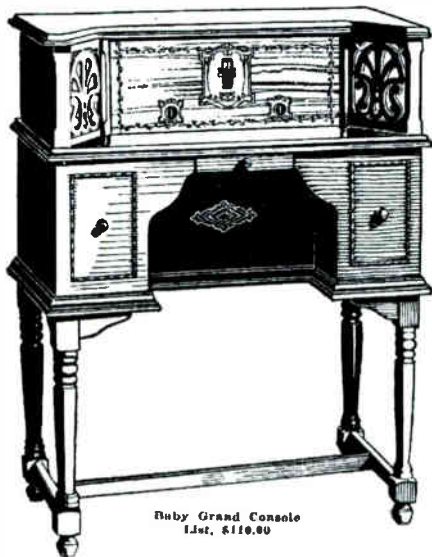
Dimensions:

Height, 30 in.

Width, 36 in.

Depth, 16 in.

List Price\$110.00



Baby Grand Console
List, \$110.00

DIAMOND T RADIO MANUFACTURES

| YEAR OF MANUFACTURE | MODEL - NAME | SELLING PRICE | STYLE | NUMBER OF DIALS | NUMBER OF TUBES | POWER SUPPLY | CIRCUIT |
|---------------------|-----------------|---------------|---------------------------------|-----------------|-----------------|--------------------|---------|
| 1925 | Special S-10 | \$49.50 | Table | 3 | 5 | Storage Battery | TRF |
| | DeLuxe D 15 | \$80.00 | Table | 3 | 5 | Storage Battery | TRF |
| | C 20 | \$160.00 | Console | 3 | 5 | Storage Battery | TRF |
| 1926 | S-10 | \$49.50 | Table | 3 | 5 | Storage Battery | TRF |
| | Super Special | \$49.50 | Table | 3 | 5 | Storage Battery | TRF |
| | Baby Grand | \$89.50 | Console | 3 | 6 | Storage Battery | TRF |
| 1927 | Super Special | \$65.00 | Table | 2 (1) | 7 | Storage Battery | TRF |
| | Diamond Special | \$75.00 | Table | 2 (1) | 6 | Storage Battery | TRF |
| | Baby Grand | \$110.00 | Console | 2 (1) | 6 | Battery | TRF |
| | Baby Grand | \$195.00 | Console | 2 (1) | 8 | AC | TRF |
| | Chief | \$150.00 | Console | 2 (1) | 7 | Storage Battery | TRF |
| | Chief | \$250.00 | Console | 2 (1) | 8 | AC | TRF |
| 1928 | American Beauty | \$48.00 | Table | 2 (1) | 6 | AC | TRF |
| | Baby Grand | \$80.00 | Console | 2 (1) | 6 | AC | TRF |
| | S. D. | \$120.00 | Spinet Console Record Player | 2 (1) | 6 | AC | TRF |
| | Chief | \$175.00 | Console | 2 (1) | 6 | AC | TRF |

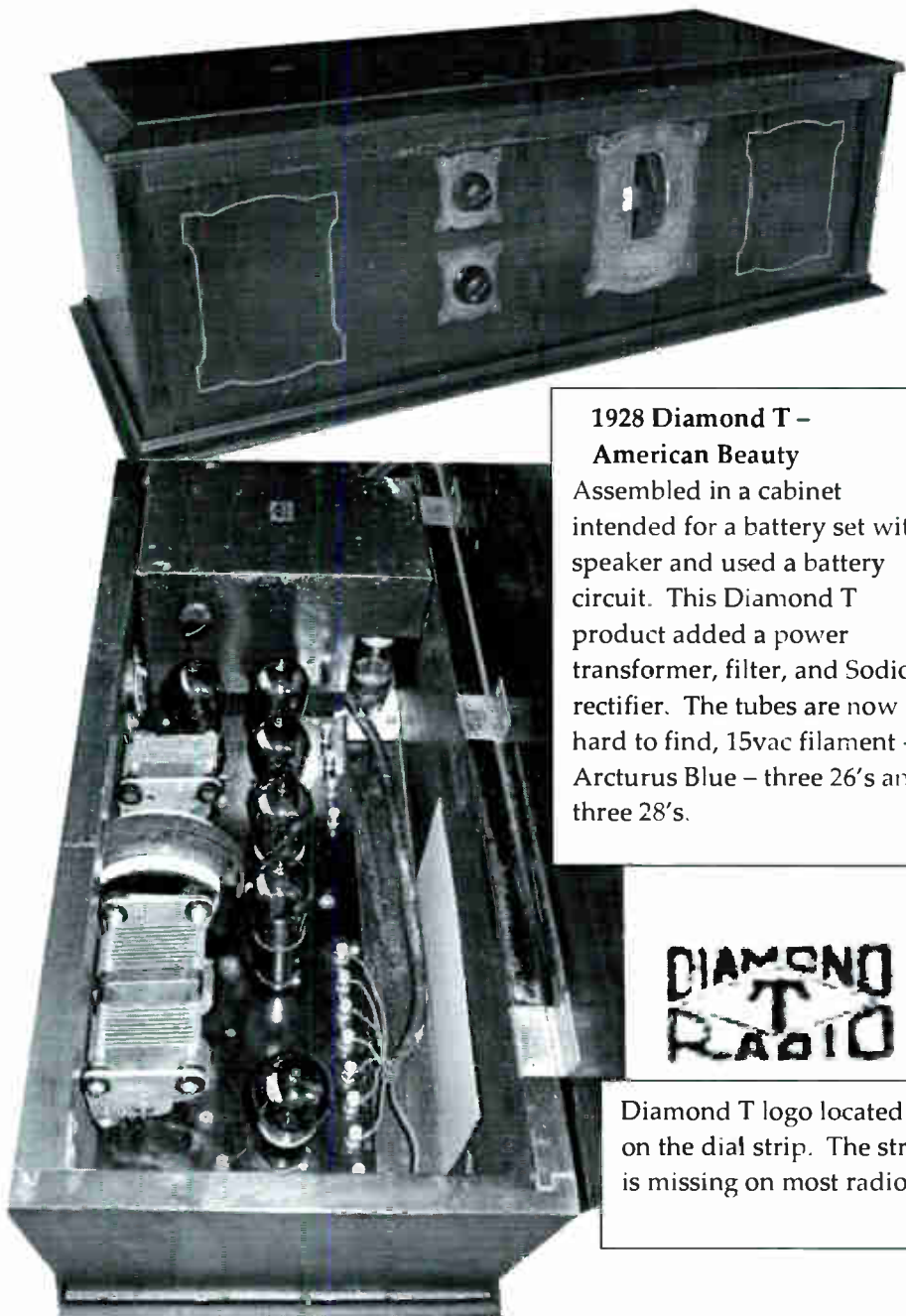
Resource: Radio Collectors Guide, 1921-1932 - Morgan L McMahon

Diamond T continued



Above, the 1926 Diamond Super Special.
Below, the 1927 Diamond Special..





**1928 Diamond T –
American Beauty**

Assembled in a cabinet intended for a battery set with speaker and used a battery circuit. This Diamond T product added a power transformer, filter, and Sodian rectifier. The tubes are now hard to find, 15vac filament - Arcturus Blue – three 26's and three 28's.

**DIAMOND
T
RADIO**

Diamond T logo located on the dial strip. The strip is missing on most radios.

Season 1925-1926

DIAMOND T RECEIVING SETS



AMERICAS THREE BIG VALUES



Manufactured and Guaranteed by
Diamond T Radio Manufacturers
South Bend, Indiana

The DIAMOND T is a five tube tuned frequency receiver, with two stages of tuned radio frequency, a detector and two stages of audio frequency.

Free from oscillation and distortion.

So simple that a child can operate it.

Tuning for example, is controlled by three dials, so properly balanced that they all set alike. Stations always come in at the same dial setting regardless of length of aerial or location. Powerful signals can be tuned out completely and bring in distant stations.

Tone reproduction is remarkably clear and true, with plenty of volume.

The DIAMOND T will give you the kind of reception you have been looking for at a price you can afford.

Before making your choice, be sure to see and try the DIAMOND T receiver.

A test will give you a new standard of values and performance in a receiver that is beautiful to look at, and a fit piece of furniture for the best of homes.

Sold by franchise dealers only.

DIAMOND T RADIO MANUFACTURERS

South Bend, Indiana

Sold By

W. J. Smith
Chf. of Factory

A 1925-1926 promotional brochure for a Diamond T Console model C20, Special model S10, and Deluxe model D15. The script indicates the brochure was sent from the factory by a W. J. Smith

Diamond T Trivia:

The American Beauty AC set was located in the attic of a burned out house in Indianapolis – the radio was heavy with smoke but no other damage.

The Diamond Special was found in a Columbus, Indiana antique shop, along with a Bristol horn speaker.

The Baby Grand Console was located in Chicago. The seller stated the radio came from a New York estate. There is a small drawer in the console which contained several items related to the radio. A Radio Dialog compliments of the The Aerial Building Company was in the drawer. The log indicates the Aerial Building Company installed the radio and is now offering the customer a \$7.50 aerial installation. The Dialog was printed by the Henry Advertising Co, New York, N.Y. Reader – do you recognize the Aerial Building Company or the Northway 0800 telephone exchange? A July 1929 Montgomery Ward sales slip to William Romine of Ogilville, Indiana for a \$7.50 storage battery was in the drawer. The original dial strips were there as well. Included was a MU-RAD final test tag for the radio (no date or originating location is visible). The test tag indicated the following stations were received during the test: Chicago 688 miles, Atlanta 660 miles, Indianapolis 580 miles, Kansas City 1040 miles, and Davenport 830 miles. If we consider “as the crow flies” distances New York fits as the test location for the radio. So – did the radio make it from South Bend to Ogilville, Indiana to New York to Chicago and now to Nashville, Indiana? (Nashville is 20+ miles from Ogilville.) The skeptic will be convinced the radio’s drawer was salted with period radio paper. Knowing more about The Aerial Building Company may help to confirm the radio’s history.

The Baby Grand Console displays nicely and works well. While the console is attractive it is not a solid piece of furniture. Construction shortcuts involving nails and glue indicate the need for speed over quality. I like my Diamond T’s and it will be a long time before I give them up.

Fred Prohl



Wanted: A supplemental tube chart listing for a Sylvania 139/140 tube tester that includes the following tubes: 41, 75, 78, 84, 6A7, 6D6, 6H6, 6F5, 6B5. I really would appreciate any help in locating a supplement for my existing chart.

Thanks, Jim McDowell, 8 Blanchel Terrace, Jeffersonville, IN 47130
jsmcdowell@att.net 812-283-6387 09/07

For Sale: Three working AC Floor Model Radios: Majestic Gribby-Grunow 1928 Highboy Model 71, excellent walnut cabinet; Atwater Kent 1929 Loboy Model 60, 3 dials, 8 tubes, very nice walnut cabinet; Sparton 1929 Stretcher Base Model 931, very good cabinet except scratched top. Richard Folks (260) 833-3585 06/07

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 03/07



For Sale: 1924 RCA Tapestry speaker, \$175.00; 1947 Admiral 7T10-C, \$35.00; 1932 Aetna. Walnut, \$65.00; 1948 Aircastle 5050, \$35.00; 1947 Airline 05BR1525B \$45.00; 1932 American, \$65.00; 1932 Avalon, \$65.00; 1950 Crosley 10-135 (White), \$ 115.00; 1934 Crosley 5M3, \$110.00; 1953 Crosley D25MN, Maroon, \$125.00; 1953 ys Crosley E20-GY, \$55.00; 1925 Crosley Triridyn, \$150.00; 1931 Crosley 124, \$250.00; 1948 Farnsworth GT-051, \$125.00; 1935 Grunow 470, \$100.00; Jackson tester, \$20.00; 1930 Pfansteihl, \$225.00; 1942 Philco 42-PT95, \$50.00; 1930 Philco Philco 20, \$250.00; 1931 Philco 70, \$345.00; 1931 Philco 90, \$500.00; 1949 Silvertone 9001, \$65.00; 1946 SkyRover 9022H (White), \$45.00; 1949 Zenith 7H920, \$45.00; Zenith Tin & Stick, \$12.00. All items are subject to prior sale. If interested, contact: Bill Arnold, Washington, Indiana Phone 812-254-1702 prior to 10:00 PM central time or email at bbarnold1@gmail.com 06/07

RADIOADS (continued)

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 11/06

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 06/07

Wanted: Picture verification of a Western Auto TrueTone D2121 (D1125) – a wood box, battery radio with an external top mounted antenna. A picture of the radio as found in a magazine or catalog ad, or a Sam's Photofax where the radio is shown. (I have a schematic, just need something to verify what the radio looks like.) Thanks, Fred Prohl 813-988-1761, fprohl@att.net, 3129 Lanam Ridge Rd, Nashville, IN 47448 09/07

Interested in TV history? Want to see how it started? Try this Web site. www.televisionexperimenters.com You'll be amazed how far we've come. Pete Yanczer, 635 Bricken Place, Warson Woods, MO 63122-1613 11/06



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



No More
"WASH DAY
BLUES"

More Time for Radio!

Wise mother! Happy mother! She realizes that her time is needed for the training and development of her children. And Radio has come to help her too! Yet without Slick's how little time for Radio would be hers. That's why she sends her clothes to Slick's—it gives her time for the enjoyable duties of a wife and mother.

Slick's offer seven washing and ironing services for you to choose from. Any one of them will give you many more leisure hours to enjoy your home.

HARRISON

SLICK'S
FAMILY
WASHINGS

3386

1925 Radio Guide
and Trouble Finder
Fort Wayne