

# The Indiana Historical Radio Society

# BULLETIN

Vol 35

June 2006

No 2

## Old Equipment Contest – IHRS Spring Meet



**Founders Award “Collecting Paper Art – 1920’s Radio”**



**1<sup>st</sup> Place  
CARCO  
Crystal  
Radio**

### Wile’s Contribution

page 7

### Ligonier – 2006

page 9

### Spring Meet Success!

page 11

### Soldering Techniques

page 17

**1<sup>st</sup> Place  
LYRIC  
AC  
Radio**





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## Responsibilities

Activities, Business,

Administration, & Publicity

Sites and Dates of Meets

Applications and correspondence

Dues, Financial, and Address

Change. Please Notify

Immediately of Change of Address.

News Articles, Radio Ads, Photos  
for Bulletin publication

Donations & Scrapbook Material

IHRS Museum Curator

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

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

The INDIANA HISTORICAL RADIO SOCIETY is a non-profit organization founded in 1971. Annual membership dues of \$15.00/year or 2 years/\$25.00, 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.

## Indiana Historical Radio Museum – Report



The Museum is now operating on its summer schedule. Summer hours are 10 am to 3 pm, Tuesday through Saturday. There is no admission charge, donations are accepted. The

Museum was recently contacted by the Auburn-Cord-Duesenberg museum in Auburn offering to donate two Grand Father radios and an Edison radio phonograph combination dating to around 1929. After we picked them up it appears from the information inside, they were originally the property of the Indiana Historical Radio Museum. We are grateful to the Auburn Museum for returning them to their original home. After a little restoration they will be ready for display. Several items have been added to the museum display and are well worth your time to stop by and visit.

A little information about the August 12 IHRS radio meet in Ligonier. The meet can be held inside or out at the Ligonier Community Center located a short distance from the Museum. The IHRS Museum's FM radio station WNRL 105.9 FM is located inside the Community Center. It is a great place to visit along with the Museum.



As an added attraction during our meet a good friend and Museum supporter, IHRS member Ted Rogers, will be opening up his elegant home overlooking Indiana's largest natural lake, Lake Wawasee. Visitors are invited to come see his fantastic radio collection. Ted's home is located just a short distance from the IHRS Museum. Part of Ted's collection includes a special Zenith room with over 40 playing Zenith radios including a beautiful playing Stratosphere. If you have not had the opportunity to see Ted's radio collection, it is a display unlike most of us will ever see again. As an experienced radio engineer, Ted's radios have been restored inside and out, with the chassis restored to factory quality both electrically and cosmetically. Be sure to take advantage of this opportunity to see this great collection.

If you need any information on the Ligonier meet, contact me at 260-894-3092 or email at [olradio@ligtel.com](mailto:olradio@ligtel.com).

Fred Schultz, IHRS Museum Curator

## **An Invitation to IHRS Members** (and interested vintage radio enthusiasts)

Ted Rogers has a collection of pre-WWII radios, dating from 1924 to 1942. All are in wood cabinets, both table and floor models. All have been restored to virtual mint condition. Currently, it consists of 242 radios. It is on display in five rooms on the lower level of his home on Lake Wawasee. He will be glad to show his display to any individual or small group by appointment. His repair lab and shop are at the same location.

Ted does not do cabinet restoration. Dick Oliver does all of his cabinet restoration in Goshen. While Dick is doing the cabinets, Ted completely restores the chassis. This usually involves a complete tear-down of the chassis to permit a thorough cleaning of the chassis. Then, the chassis parts are each cleaned and tested before being re-installed on the chassis. The end result of this part of the restoration is a chassis that is very clean and appears exactly like it was when it left the factory.

Next, all of the capacitors are replaced except the very special ones that cannot be replaced with new ones. Usually, all resistors are also replaced. The wiring is inspected and any defective wiring is replaced. Every remaining part is tested and, if defective, is repaired or replaced. Next, the chassis is fully tested, all voltages are checked and recorded. Then the radio is completely realigned. Ted is not satisfied until the performance is as good as it was when the radio was new.

When the cabinet is received from Oliver, the chassis and speaker are installed and the radio is given a final test. Pictures of the radio are taken and placed in a set of photo albums seen with the display. Finally, after all this, the radio goes on display! A complete file folder is kept for each radio, showing the source, costs and all other data on the radio.

***Ted invites you to stop by from 2 pm to 8 pm on Friday evening before the meet or 1 pm to 8 pm on Saturday following the Ligonier Meet.***

Instructions on how to get to Ted's house are provided on page 5. You are also welcome to visit Ted's museum at any other time. Please call him at 574-457-8886 for an appointment. Many people have visited the museum, including several senior citizens groups.

You might particularly enjoy seeing Ted's "Zenith Room", with 43 Zeniths on display, including a mint condition Stratosphere.

You will also see the Ozarka Viking model 93 featured on the cover of the March 2004 issue of Antique Radio Classified. Ted was fortunate to be able to buy it from John DeLoria.

**Directions to Ted Rogers home from Ligonier:**

From Ligonier, go West on US 6 for 8.5 miles to a four-way stop (red blinker). Turn South (left) on SR13 to Syracuse. Check your odometer when you cross the only railroad track in Syracuse and continue south on SR13 for 3.0 miles. You will see St. Martins Catholic Church on your left. Turn left just beyond the Church onto Ideal Beach Drive. Go one block to a four-way stop sign, then turn left again onto Waco Drive. Ted's driveway is the fourth driveway on your right (straight across from the North entrance to the Church parking lot. The house is cedar with stone trim.

The name on the mailbox is Edwin F. Rogers, 6938 E. Waco Drive (Ted is a nickname).

## **The Indiana Historical Radio Society Meet Schedule**

### **Summer Meet**

**Ligonier Recreation Center, Ligonier – August 12, 2006**

**New location – Loads of indoor and outdoor set up space several blocks from the Indiana Historic Radio Museum!**

### **Fall Meet**

**Riley Park, Greenfield – October 7, 2006**

\* \* \* \* \*

### **2007 - Winter Meet - 2007**

**Hornet Park, Indianapolis – February 12, 2007**

### **2007 - Spring Meet - 2007**

**Johanning Civic Center, Kokomo – May 4-5, 2007**

## Regional Events of Interest to Members

**Mid South Antique Radio Club** For information contact George Freeman [jgfree@verizon.net](mailto:jgfree@verizon.net)

**Antique Radio Club of Illinois** [www.antique-radios.org](http://www.antique-radios.org)  
Radiofest, August 3-5, 2006 Bolingbrook, IL

**Michigan Antique Radio Club** see [www.michiganantiqueradio.org](http://www.michiganantiqueradio.org)  
Extravaganza, July 7-8, 2006 Lansing, MI

**AWA-Antique Wireless Association**  
Annual Conference, August 23-26, 2006

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  
[www.antiquewireless.org](http://www.antiquewireless.org)

## IHRS Contest Categories for 2006 – Prepare Now!

*Summer Meet - Ligonier Community Center, Ligonier – August 12, 2006:*

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

*Fall Meet - Riley Park, Greenfield – October 7, 2006:*

- 1 My favorite radio
- 2 Commercial Amateur Radio Equipment

Tables will be available at each meet for Vintage Radio Displays.

## 2006 IHRS DUES NOTICE

Your Indiana Historical Radio Society membership is now due if your mailing label reads 12/05 or earlier. Please send a check payable to the **Indiana Historical Radio Society** in the amount of \$15.00 for a one year membership or \$25.00 for a two year membership.

Send your payment to: **Herman Gross, IHRS 1705 Gordon Drive Kokomo, IN 46902**. Please include your current mailing address, if not on your check, and your email address, if you have one. Membership questions? Contact Herman at [hw12x12ihrs@sbcglobal.net](mailto:hw12x12ihrs@sbcglobal.net) or call him at (765) 459-8308.

## Hoosier Journalist Frederic William Wile's Contributions to Vintage Radio

by George A. Freeman and Janet Dell Freeman

We accessed a California-based Internet web site for research regarding a Russian microphone for our *Antique Wireless Association* quarterly series, "*Mics and Men*". Included in that web site was a timeline documenting important broadcasting events. Absent from the



*Emile Berliner*

chronology was a very important broadcasting event, the invention of the microphone by Emile Berliner. We pointed this out to the webmaster and he asked us to provide information about Berliner. In doing so we discovered another story of interest to IHRS members. It's the story of La Porte, Indiana's Frederic William Wile.

Wile's most important contribution to the vintage radio hobby was as biography of Emile Berliner. Wile recounts the German Jewish immigrant, Berliner, filing patent papers for what came to be called the carbon microphone two weeks before Thomas Edison filed to obtain a patent for the same invention. That several days time difference resulted in billions of dollars flowing to a small Massachusetts phone company. That small company later became the giant AT&T. Had Edison moved sooner, Western Union would have been the telephone company of the 20th century instead of the telegraph company stuck in the 19th century. "*Emile Berliner Maker of The Microphone*" was published in 1926 by Indianapolis publisher Bobbs-Merrill. It contains 353 pages and currently sells for \$35 to \$100.00.

Wile wrote a 75th birthday tribute to Berliner. This was published May 20, 1926 in the "Washington Star". Berliner was alive to read this tribute.

Wile possessed a worldly view of broadcasting, including many facts of interest today. According to his research, in 1920 there were two thousand radio related manufacturers and marketers. By 1925, 80% of the world's radios were owned by Americans; that makes five times as many radios as the rest of the world.

Frederic William Wile was on the air for at least three years with his own radio show, "*The Political Situation in Washington To-night*".

## Wile's Contribution (continued)

The show originated from Washington's RCA-owned WRC. The show was later relayed through RCA's WJZ, New York.

Wile was a newspaperman in Chicago until 1900. In his autobiography, **"News is Where You Find It: Forty Years' Reporting at Home and Abroad"** published in 1939, Wile describes the Windy City in the pre-Capone days. He also wrote about his interview with Mark Twain. As a foreign correspondent in Berlin before and during World War I, Wile wrote not only daily news columns but also authored books. The titles alone make us want to read more of his work. **"Men Around The Kaiser; The Makers of Modern Germany"** was written in 1914 about World War I. **"The German-American Plot: The record of a great failure. The campaign to capture the sympathy and support of the United States"** was published in 1915. It was followed by **"The Assault: Germany Before and England After-the Outbreak: a Personal Narrative"**. This is another World War I book and was published in 1916.

Wile's 1928 book, **"A Century of Industrial Progress"** (581pp.) contains thirty historical essays. Among the subjects are agriculture, lumber, mines and mining, steel, machinery, textiles, pulp and paper, railroads, petroleum, meat packing, building construction, electric industry, telegraphy and telephony, motion pictures, aviation, and radio.

We owe a debt of gratitude to this LaPorte, Indiana native for making the world aware of the man who made a great contribution to the world of radio. Without Wile's biography of Berliner, a pivotal chapter in radio and American history might have gone unnoticed and unrecorded.

*Frequent contributors to the Bulletin, IHRS members George and Janet Freeman have a regular article titled "Mics and Men" in the AWA Journal.*

In the March 2006 issue of the IHRS Bulletin you received a "Historic Radio in Indiana" brochure (an inadvertent insert). We suggest you keep it convenient to hand to a potential member. Frequently we meet individuals interested in radio at auctions and sales – pass along the Society information and help our organization grow!

## A NEW SUMMER MEET LOCATION!

On Saturday, August 12 the IHRS will meet at the **LIGONIER RECREATION CENTER IN LIGONIER**, home of the Indiana Historic Radio Museum.

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



General admission is free.

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

### Schedule of events:

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

8:00 AM The IHRS Summer Meet officially begins

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

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

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

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

11:15 AM Contest Popular Vote closes and ballots counted

11:30 AM Pitch-In Lunch – Bring a dish to share.

An IHRS Business meeting will immediately follow the lunch

### Area Motels:

**Kendallville** – 19 miles east of Ligonier

Holiday Inn Express

1917 Dowling St

(260)343-0061

Economy Inn

US Hwy 6 West

(260)347-3500

Motel listings continued on the next page.

## **Summer Meet in Ligonier (continued)**

### **More area motels:**

#### **Shipshewana**

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

#### **Shipshewana**

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

#### **Shipshewana - Farmstead Inn**

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

#### **Goshen**

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

#### **Goshen - Super 8**

65440 US Highway 33  
(574)642-9944

#### **Goshen Inn**

1375 Lincoln Way East  
(574)533-9551

### **Contacts for IHRS Summer Ligonier Meet:**

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

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



**The Museum – a MUST VISIT while you are in Ligonier!**

## **IHRS Spring Meet in Kokomo – 2006**

IHRS treasurer, Herman Gross, reports 112 family registrations, 50 Swap N Sell vendor tables, and 71 lunch attendees resulting in \$1750 meet credit. Expenses for the meet include Johannung rental, food, radio giveaway, insurance, and miscellaneous expenses totaling \$2177. The 10% auction fee credited an additional \$1079 for IHRS.

The success of the IHRS Spring Meet was made possible by the following volunteers:

Herman Gross, auction chairman

Les Freed, auction setup and handler

Bill Smith, auction setup

Sandy Freed, auction setup, auction handler, and registration

Shirley Gross, registration, auction setup, luncheon

Carol O'Friel, registration

John Foell, auction handler

Bob Dobush, auction handler

Andy Schultz, auction handler

Ed Dupart, testing vintage vacuum tubes presentation

Fred Prohl, Swap N Sell coordinator, contest judge

Alex Whitaker, contest chairman

Fred Schultz, contest judge

Bill Morris, registration, contest judge

Michael Feldt, operating radio transmission setup

Just stating auction chairman as a volunteer responsibility is not sufficient. Not accounted for are the many hours of inventorying and tagging auction items, or the miles on the road in little trucks and big trucks gathering the inventory, or the sweating over the auction setup at Johannung. Herman Gross deserves a medal – we bet he would have preferred to just nose around Swap N Sell, enjoy good radio talk, see the contest entries, and maybe even buy a radio. Thanks Herman for all your effort!

From all the members in the Indiana Historical Radio Society.

The well organized auction held the attention of approximately 70 bidders. Sales for the 330 lot auction exceeded \$10,000.

The following is a partial listing of items sold:

## Spring Meet (continued)

Admiral 6" TV \$90  
Ampex tape rec \$300  
AK mod55 \$80  
AK mod33 \$50  
AK mod20 \$60  
Arvin rcvr ~1935 \$50  
Battery radio pwr sup \$60  
Case rcvr w/tubes \$80  
Collins comm.. rcvr \$180  
Crosley mod51 rcvr \$60  
Crosley mod51 rcvr \$50  
Crosley Trs. Is. book. rcvr. \$55  
Crosley "American" 66TC \$75  
Edison disk phono \$50  
Edison disk phono modC19 \$175  
FADA catalin rcvr mod1000 \$180  
FADA rcvr mod790 \$65  
Fisher Stereo rcvr \$210  
Hallicrafter rcvr mod1000 \$100  
Hallicrafters comm. rcvr \$475  
Heathkit Pwr Sup 1P-271B \$55  
Heathkit stereo modAA-1515 \$70  
Howard rcvr modA-S \$70  
Klangbox speakers modSB86 \$70  
Midwest rcvr mod60 \$60  
Magnecord tape deck PT6 \$100  
Magnecord 7" rec modM30 \$60

Majestic Trsr. Chest mod381 \$230  
Navy comm.. rcvr \$50  
Philco Cath rcvr mod44 \$170  
Philco Cath rcvr mod6015 \$60  
Radio AC rcvr \$60  
Riders manuals \$80  
Riders manuals vols1-23 \$100  
Silvertone table rcvr \$70  
Simpson meter mod265 \$50  
Superkit Crystal Radio \$50  
Sparton rcvr \$100  
Steinite AC rcvr mod993 \$110  
Viking tape recorder \$50  
Westinghouse port rcvr \$60  
Weston tube tester \$190  
Zenith shutter dial chassis \$65  
Zenith TO mod7G605 \$350  
Zenith blk dial chas \$60  
Zenith blk dial chas \$50  
radio tubes \$90  
300 radio tubes \$125  
300 radio tubes \$150  
700 radio tubes \$90  
30 radio tubes \$140  
300 radio tubes \$150  
73 radio tubes \$190  
75 radio tubes \$200  
(1)WE 205D tube \$160



In 1993 the Founding Members of the Indiana Historical Radio Society initiated the "Founder's Award" trophy for the Spring Meet's Old Equipment contest "Best Of Show". Clif Bolton, the 1993 winner, was awarded the first trophy for his Radio Crystal Set display. His name and IHRS members who have won the top award since have their name inscribed on a plaque in the Indiana Historic Radio Museum. The Founders provided a supply of trophies that lasted until 2005.

Through the efforts of the Founders and assisted by Herman and Shirley Gross, a new plaque has been designed. IHRS Founders have generously provided the funds for another ten years of awards. Pictured on page 12 is the new design of Founder Award plaque, presented to this year's recipient of the Best of Show award.

Old Equipment Contest winners are as follows with contest pictures on the front and back covers of this Bulletin.

*Category 1 - Indiana Made Radios*

- 1st place - Bob Avey - Indiana Hyperdyne  
and Orchestrion Deluxe speaker

*Category 2 - Homebrew Receiver or Transmitter*

- 1st place - Jack Lavelle - 3 tube regenerative radio  
(looked like Tuska 225)
- 2nd place - Ray Holzheuer - 2 tube 1920's breadboard  
amateur transmitter

*Category 3 - 1920's Battery Radios*

- 1st place - Bob Sands - AK 10 Breadboard (playing)  
with RCA UZ speaker
- 2nd place - Mike Feldt - Silver Marshall superhet (playing)  
with Orchestrion Deluxe speaker

*Category 4 - Transistor Radio*

- 1st place - Bob Sands - Zenith Royal 900
- 2nd place - Tom Williams - Channel Master model 6512

*Category 5 - Crystal Radios*

- 1st place - Ed Taylor - Carter Mfg. Co. "CARCO"
- 2nd place - Bob Sands - Radiolette

*Category 6 - Pre-1940 AC Radios*

- 1st place - Bob Sands - Lyric Model H
- 2nd place - Ed Dupart - Detrola model 212

*Category 7 - Open*

- 1st place - Fred Prohl - 1920's Radio Art
- 2nd place - Fred Prohl - WIOU "Mic" radio

"Best of Show" was awarded to Fred Prohl for his 1920's Radio Art presentation. The Founder's Award plaque was presented to Fred by Founding member Marilyn Johnston at the luncheon. The Best of Show entry is pictured on the cover of this Bulletin.

*Editor comments:* 1. Take note, on page 24, the quality restoration and display of the Silvertone and Travler table radios entered in the contest - making for difficult judging! 2. Nicest auction item, the Steinite early AC console on page 15, bottom row, left picture.

## IHRS at Kokomo - May 2006



Ed Dupart leading a discussion on testing vintage vacuum tubes.



Swap N Sell in the exhibition area of Johanning.



Approximately 70 bidders for the early afternoon auction.

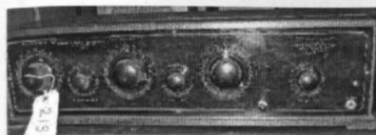


Les Freed, John Foell and Sandy Freed helping with the auction



Bob Sands with his prize winning "Lyric"

# Up for Auction – Kokomo 2006



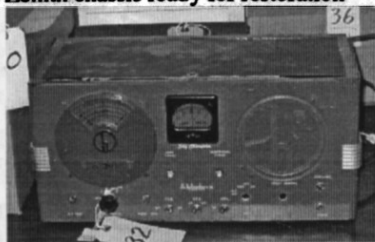
**"Mirico"**



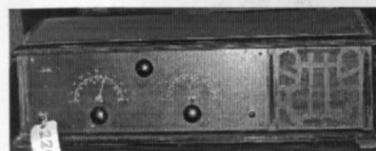
**Zenith chassis ready for restoration**



**1000's of vacuum tubes**



**one of several communications sets**



**A "Case" battery radio**



**and several of many "AK" pieces.**



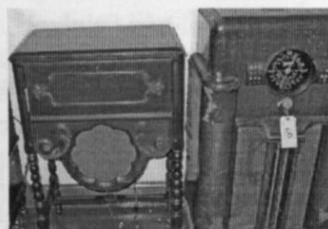
**Philco**



**Crosley**



**and Crosley**



**The auction included a number of very nice living room radios.**

## **We Remember**

Indiana Historical Radio Society member Jim Thomas died May 4, 2006. Jim was born in Kokomo January 3, 1946. He was a graduate of Kenton High School, Clark County Technical Institute, and Tri-State College in Angola. His college degree was in Electrical Engineering. Jim was retired from Delco Electronics in Kokomo. At Delco he was a Lead Electrical Engineer and Senior Project Engineer for the GM Electrical Car Project in Torrence, California. Jim was a Founding Member of IHRS and President of the Society in 1974. He was an avid supporter of the IHRS Old Equipment Contest and the "Founders Award." Jim was 60 years old.

Dear IHRS members,

We would like to extend our sincere thanks to The Society for the sympathy card of last week concerning our father's, Jim Thomas', passing. As to be expected, it is a difficult time for our family. And your thoughts and sympathies are greatly appreciated. Our father is and will continue to be dearly missed. We have received many notes and calls from friends and former co-workers who's lives he had somehow touched. Those are the types of things that help make coping easier. So, please feel free to relay any fond memories or funny stories you'd like to share with us.

Again, thanks so much for your thoughts and kind sentiments.

Sincerely,

Joel Thomas and Ailsa Thomas-Getts

*The Indiana Historical Radio Society sent a \$25.00 gift in memory of Jim Thomas to Trinity United Presbyterian Church in Kenton, Ohio.*

# SOLDERING TECHNIQUES

By Bill Arnold

I worked for 30 years for the federal Government before I retired in 1997. Actually, I was just out of high school and was barely 18 when I started working at Crane Indiana, a government run facility dedicated to the Navy. Back when I first started it was known as the Naval



Ammunition Depot in Crane. They were one of the major suppliers of bombs used in the Viet Nam war. The depot went through various name changes but remained largely the same although it became more of a facility devoted to supporting the Navy than anything else and not so much dependant on ammunition production and war.

I suppose for the most of my working years I worked in electronics and did a lot of soldering. It was because of the work I did, that I was sent to school at various times to refresh my skills in soldering and to keep up with the latest repair techniques. As a result, I have had a lot of experience assembling components on printed circuit boards and reading schematics in order to fabricate the needed test fixtures that were used in my job. I was to find out later that it was something I would use all of my life.

I can't or won't go into the details of such work not for security reasons but simply because I do not wish to bore anyone. In short, I did a lot of electronics work for a good number of years. This is not meant to be something I am bragging about but merely the way it is. I enjoyed my work and gained some much needed experience and skills.

I had always been familiar with the electrical system on cars since my dad was an auto mechanic for several years. He didn't like the electrical work and saved that for me to do at nights when I got home from my regular job. It didn't seem to bother me and gave me a chance to get extra money to spend on my current restoration jobs. I have had various old cars over the years and did most of the work myself simply because I was on a budget. I knew if I didn't do it myself, I just simply could not afford the cars. I would work out in the garage nearly every

## **Soldering Techniques (continued)**

night on either my cars or someone else's car in order to get money to work on my cars. I didn't make a lot of money at that time and my car hobbies were expensive. In the process, I learned a lot about all sorts of things on the old cars and it also gave me a chance to afford my hobbies.

It seemed simple to work on cars back in the days before computer controlled systems we have today, anyway. I could understand how everything worked and when it came to my own cars, I would have everything working as it should including radios, clocks, gages and lights. If it came on the car, it worked when I was finished. That to me seemed to be the correct way to restore a car.

I use the same philosophy today on my old radios. I make them look and play as they did when they were new. If you restore them in the right manner, they look and perform as new. Of course, you have to remember, some radios were not designed as well as others and did not play very well even when they were relatively new. Still, if you don't properly restore them, they are not going to improve with age, just get worse. I also hate it when I get a radio that someone else has re-finished the wrong way or painted an odd color. That means if you want a nice radio, you have to completely strip the cabinet and start over again. I find it easier to start from scratch then to fix the problems someone else has created. It is getting harder and harder to get radios that have never had any repair or restoration work but I buy what is out there and that means sometimes they are not in the best condition. I can feel good about taking one of them and restoring it. A few years ago, these radios were thrown away or used for parts.

Now when it comes to the electronics, it is a different matter. I would never use old components such as capacitors in a radio of mine. The new ones are smaller and made better than those in your vintage radio when it was new. It doesn't make sense to put back old components when they are un-reliable. Some guys like to hide the new capacitors inside the old ones but I prefer seeing the replacements and knowing what has been replaced. I suppose that is a matter of preference. I did install new capacitors in round tubes that look just like the originals in a Radiola III simply because I wanted it to look as though they had never been replaced.

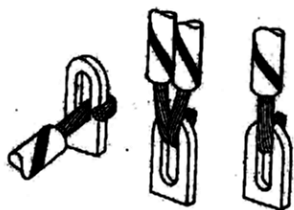
I usually replace all of the capacitors in the old radios I restore unless the radio plays exceptionally well. Even at that, if I sell the radio I stress that it has the original parts and may need to be re-worked. Most of the time it needs the new components anyway. I have had very few radios that do not need the full restoration.

I solder the new components under the chassis and there are no modern parts that can be seen unless you take the chassis out. I make no effort to hide the fact that it has modern parts inside because I know they make the radio more reliable and play better. To me, that makes a restoration job complete. If you just replace a few parts and get the radio playing it is not restored, it is just repaired.

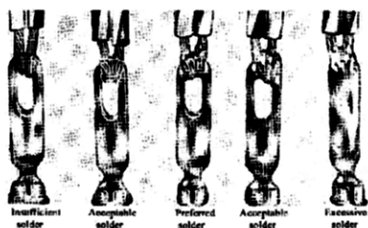
Many times these repaired radios will not play for any length of time before another capacitor gives some trouble. In fact, it may lead to other more expensive failures such as tubes and power transformers. This can be eliminated by replacing old capacitors in the power supply so that the transformer and rectifier tubes are not put under undue strain. It just makes sense to replace filter capacitors in order to prevent future failures. After all, there may well be something in your vintage radio that is not available.

What I was taught in solder school is that it is important to get a good mechanical connection before soldering. It is also important to have a clean, grease free joint. The wires or connections should be heated up with the soldering iron and the solder flowed to the connection. After it is completed, the solder should look

shiny and you should be able to see the outline of the wires. If you have a big blob of solder on the connection, that is too much solder and may be an unreliable joint.

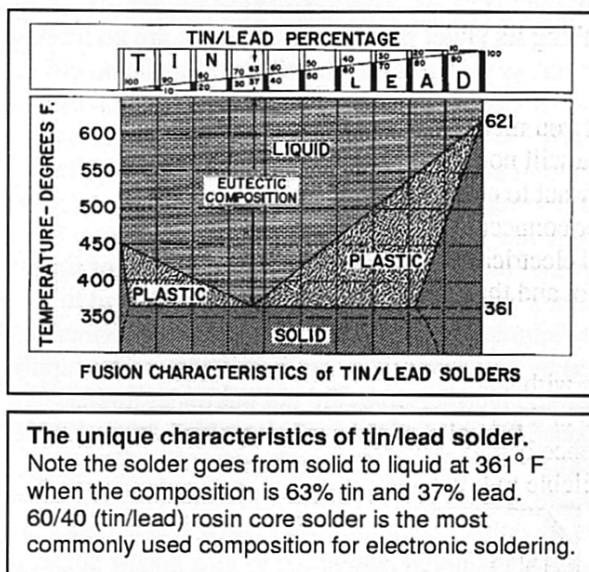


If you wiggle the connection while it is hot, it will not be shiny but grainy and may be resistive as well. Only touch the iron and solder to the connection long enough to melt the solder and let it flow onto the connection. If it gets overheated, you take the chance of



## Soldering Techniques (continued)

damaging components or wiring. If you are running long component leads to a connection, it may be advisable to use tubing to insulate the leads so you don't get electrical shorts.



When I replace capacitors, I do them one at a time and plug in the radio to see if I have created any additional problems. Once in a while it is possible to hook up something wrong. The time to find that out is when it is done rather than after you have replaced 12 capacitors.

I like to stay within 10 percent of the values when replacing capacitors. In most cases, you can overrate them and you will never know the difference. If you underrate them in value and voltage, they may not perform as well and may not last for any length of time. It is common sense to meet or exceed the manufactures values. It is also a good bet that if you check several capacitors and they are bad, all of them will be bad. After all, they are the same age. This may sound like a major undertaking to replace all of them if you have a lot of capacitors, but you only have to do it once and you don't have to worry about them anymore or you don't have to worry about bad capacitors ruining other components.

Just about anyone can learn to solder and do their own repair work. It may be necessary for someone to show you the basics and after that it is just a matter of practice. If you have never soldered before, it might be advisable to get some help. I could show someone how to do this better than I could tell them how to do this in an article. I think it is pretty straight forward but that is because I am used to doing it. If you have never done anything like this, it might not be as simple as I make it sound.

The fact remains that you must have the skills to do this if you do your own work. If not, you will not have a dependable repair job. I don't think anyone would want to create more problems than they fix. I like each and every solder connection I make to be bright and shiny with a good mechanical and electrical connection. That was the way I was taught in solder school and that is the way I like my work to look when I am finished.

If you have problems with soldering, you can always contact someone who does a lot of this and get some tips on how to do the job right. It may make the difference between a good restoration and a bad restoration. I am available to talk to my fellow collectors and give some advise. You can always call me and I would be happy to talk to you. After all, I like to know if someone actually reads my articles, anyway.

*Reference: Department of the Navy, Quality Standard for wiring and soldering of electronic equipment. QWS-10.00a July 1964*

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*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. He is retired from Crane Naval Station where for thirty plus years he worked in electronics. In addition to his radios, Bill has several antique cars, and a 1953 Schwinn with a Whizzer motor.*



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**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. Please do not email high resolution pictures, your editor is on dial-up and the download time is unbearable.

# Old Equipment Contest – Kokomo 2006



Operating AK Bob Sands



Indiana Made – Robert Avey



Mike Radio



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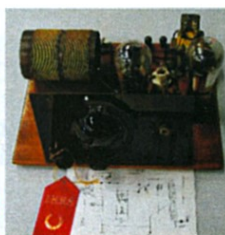
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A Travler table set  
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