

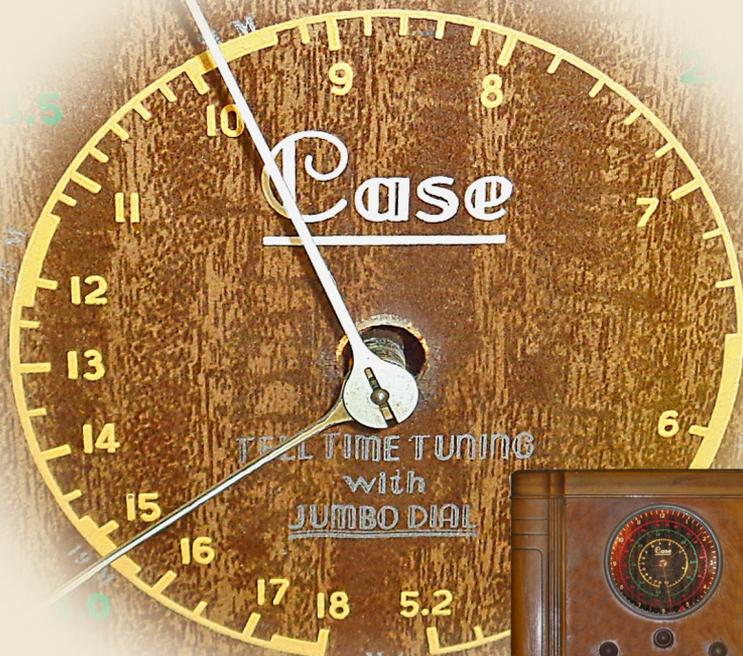
The
Indiana
Historical
Radio Society



Volume 47

Summer 2018

Number 2



Saturday, August 11—8 to 11 AM
The Indiana Historical Radio Society
will meet at Cool Creek Park, 2000
East 151st Street, Carmel, Indiana
for a 2018 Summer Meet

The BULLETIN

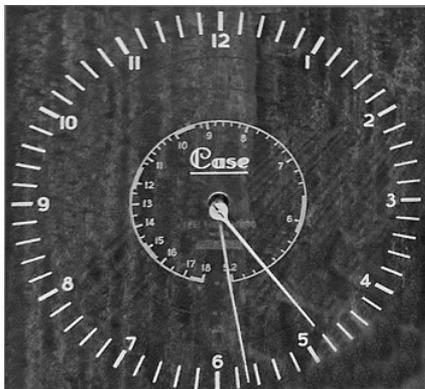
A PUBLICATION OF THE INDIANA HISTORICAL RADIO SOCIETY.
CELEBRATING FORTY-SEVEN YEARS OF DOCUMENTING EARLY RADIO

The Indiana Historical Radio Society Bulletin

Summer 2018

On the cover of this issue of the Bulletin:

The cover picture is a portion of the dial face from a Case “Tell Time Tuning” radio. The “Case” console radio was manufactured in Marion, Indiana in 1935-36. The unique dial is on other radios—a table model “Imperial”, model 6U107, and an eleven tube console (with a tuning eye), “Radio Vogue”, chassis 1101.



In this issue:

On *page 3* We look forward to the Indiana Historical Radio Society Summer Meet on August 11. This summer we return to the Cool Creek Nature Center in Carmel. Cool Creek offers, in addition to great indoor/outdoor facilities for a Vintage Radio meet, a fun location for families.

Pages 4 - 7 provide the details of Ed Dupart’s Spring Meet Tech Talk on refinishing radio cabinets.

Fred Prohl describes his Spring Meet “Indiana Made” contest entry, a Case console radio, beginning on *page 8*.

On *pages 10 and 11*, are pictures and brief descriptions of the Spring Meet contest entries. (Thank you Ed Dupart for the pictures.)

Page 12. “Third Reich People’s Receivers”.

A description of WWII Germany radios and the times that influenced radios in the home. Bob Sands.

Pages 15, A Cigar Box Crystal Radio. Looking back to April 2015 and the IHRS Build a Crystal Radio Contest—Ed Dupart, Fred Prohl, Cliff Bolton

Page 16 The Spring Meet 2108 Picture Page.

Editor, June 2018

Saturday, August 11 - The Indiana Historical Radio Society will meet at Cool Creek Park, 2000 East 151st Street, Carmel, Indiana for a 2018 Summer Meet

There is space for indoor and outdoor Swap N Sell setup. Tables are available indoors. General admission is free. Swap N Sell set-up in the building and parking lot is \$10 for IHRS members, \$15 for non-members.

Schedule of activity:

7:00 AM—Swap n Sell of
Vintage Radio setup.

Complimentary doughnuts
and Danish, coffee and soda
will be provided.

8:00 AM the IHRS Summer
meet begins. Popular
Vote Contest set-up.

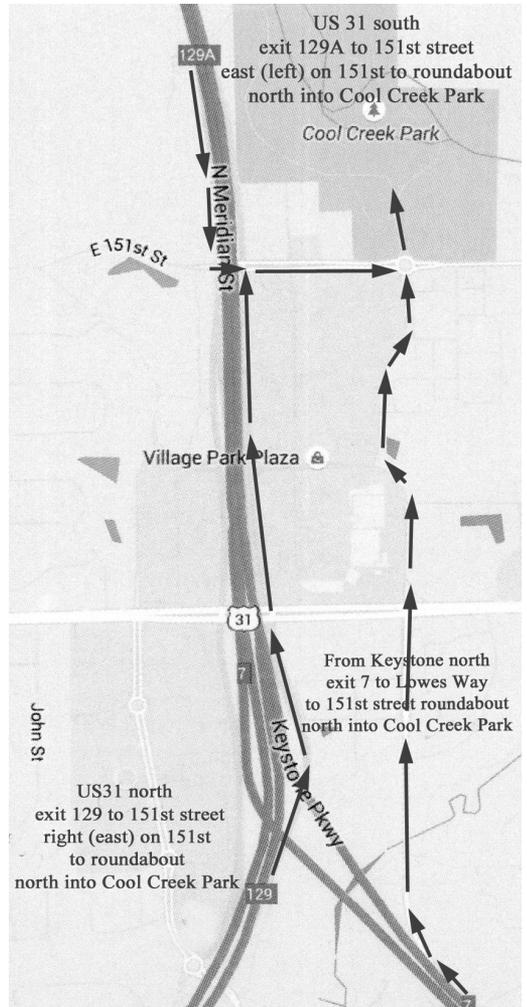
10:00 AM Vote for your
favorite radio in each of
the contest categories.

10:15 AM contest results and
announcements.

Cool Creek Park, Carmel. is located east of US31 and north of 151st Street. From US31 go east on 151st Street to a round-about. The Cool Creek Park entrance is the street north out of the round-about.

The 2018 Summer Meet Popular Vote Contest categories:

category 1 – 1930's Table Radio
category 2 – Open to all radio
and radio related equipment



Ed Dupart presented a Vintage Radio Tech Talk on Wood Finishes
at the 2018 Spring Meet in Kokomo.

The article that follows is the general content of his talk.



There are four popular finishes in use today: *Shellac*, *Varnish*, *Lacquer*, and *Polyurethane* or variations of them.

Shellac was first used in India about 1590. It comes from the laccifera lacca (Lac bug) secretions mixed with alcohol, today they use denatured alcohol. Originally turpentine was used. It is non-toxic so pharmaceutical company's use it to coat pills and candy companies used it as a glaze on certain products.

The pros of Shellac are:

1. It is non-toxic, good for toys and food utensils.
2. Gives a nice shine.
3. Easy to work with.
4. Used on fine furniture.
5. Protects metal.
6. Melts on contact with alcohol thinner and fresh shellac.
7. The finish can be repaired easily and by the use of French Polishing.

The con's of shellac are:

1. Not a tough finish, so not good on high/hard use places such as floors and table tops.
2. Hot items such as cups and glasses can leave a white stain.

Q Tip Test
To confirm you are using the right cleaner or solvent on a wood finish, use a Q Tip and test a small area with the solution.

Varnish goes back to ancient Egypt where pinesap, as an example, is mixed with a solvent to form varnish. Varnish was also used in India, China, and Japan centuries ago. Varnish is thicker than shellac and has ultraviolet protection. Spar Varnish is good where it will be exposed to water, boats, as an example. Varnish solvents can be mineral spirits, paint thinner, turpentine. (Turpentine comes mainly from pine trees, and once was a major industry in the south.) An interesting note; Ethanol, made from fermented sugar, and then combined with turpentine results in camphene for use in lamps as an alternative to whale oil in the early 1800's. Drying oils are part of the varnish and leave a hard finish when cured or dried. Examples of drying oils are linseed oil, tung oil, and walnut oil. Most of these have been replaced by alkyd resins.

The pros of varnish are:

1. Has a hard finish but not as hard as lacquer.
2. Is thicker than lacquer, so it takes less coats to build up a finish.
3. Can be used in hard/high use area. Not as toxic as lacquer.

The cons of varnish are:

1. Takes longer to dry.
2. Difficult to touch up or repair the finish.
3. Usually very clear, but my experience can sometimes give a yellow tint.
4. Doesn't dissolve like shellac unless a stripper is used.
5. Usually needs to be brushed on.

Lacquer, or Urushiol lacquer goes back to 5000BC in China. The resin comes from the Lacquer tree, *Toxicodendron verriciflum* and the Wax tree, *Toxicodendron succedaneum*. Nitrocellulose lacquers were introduced in early 1920's and used on cars, which allowed the use of colors. The 1923 Oakland was first to use it and it was a bright blue. Acrylic lacquer uses acrylic resin introduced in early 1950's and is a thermoplastic. Water based lacquers are more environmentally friendly but have issues using it.

The pros of lacquer are:

1. Dries quickly and is meant to be sprayed.
2. Results in a very hard paint surface.
3. Is resistant to water, acids, alkalis and abrasion.

When asked what kind of cleaner to use on a dirty radio cabinet, Ed said the 409 Multi Surface cleaner works well for him.

Wood Finishes by Ed Dupart—continued

4. Can dissolve with original solvent so finish can be repairable.

The cons of lacquer are:

1. Very toxic – must avoid fumes.
2. Requires ventilation.
3. Should be rubbed to get shiny, smooth finish.
4. Water based lacquers difficult to use, but less toxic.

Polyurethane, The origin of polyurethane goes back to 1937 where it was used in plastics, sponges, foam, and many other applications. The use of polyurethane as a paint finish came later in the 1930's. It results in a hard plastic finish. The polyurethane we use is actually an Alkyd varnish with polyurethane added to it. Alkyd has alcohol and acid and is cooked with oil to make a varnish.

The pros of polyurethane are:

1. It hard clear plastic finish that is good for floors.
2. Will resist water and boiling water.
3. Can be brushed or sprayed.
4. Not as toxic when brushed.
5. Can be very shiny.
6. Can resist detergents.
7. Goes on thick, so requires few coats.

The cons of polyurethane are:

1. Can crack and peel, delaminate.
2. Toxic in liquid form, need ventilation.
3. Flammable
4. Most polyurethane's need to be brushed on.
5. Takes longer to dry than lacquer or shellac.

Other finish options are: Tung Oil or China Oil – takes many coats, waterproof, short shelf life, comes from Tung tree, goes back to 400BC in China.

Linseed oil – comes from flax seed, restores dry wood, many uses, outdoor furniture, oars, etc.

References: www.diynetwork.com, Varnish – Wikipedia, polyurethanes.org, antiquerestorers.com, homeguides.sfgate.com, pittsburg-sprayequip.com, refinishingfurniture.net, Linseed Oil – Wikipedia, Sutherlandwelles.com, Tung oil – Wikipedia, Lacquer-Wikipedia, entradition.com/lacquer/history



Putting Ed to the test, a member offered a “worked on” Silvertone radio cabinet that needed help. A solution of alcohol and mineral spirits along with 0000 steel wool had been used to clean up the aging finish. As can be seen with the picture on the left, the resulting finish was a milky white.

Ed took on the challenge and using Watco ebony stain and a rag, worked and rubbed the cabinet finish to what you see on the right. The stain and Ed’s effort not only corrected softened discolored surface but brought out some of the original varying color tones of the cabinet. (The Bulletin Editor thanked Ed for his hard work!)



CASE 1935 Console Radio, Model 722 - by Fred Prohl

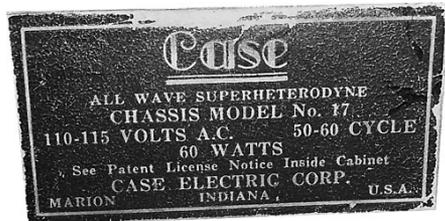


The CASE entered in the IHRS 2018 Spring Meet Old Equipment Contest is identified as a Marion, Indiana radio product. This Case is model 722, chassis 17 with a “Tell Time Tuning” dial. This is a seven tube multiband receiver.

The Radio Museum at radio-museum.org shows two Case radios with the “Tell Time Tuning”

dial face. One is the Case model 710, with a chassis number 17. The same chassis as the console model 722 in this article. The other 1930’s Case receiver listed at radomuseum.org is the “Radio Vogue”. The “Radio Vogue” is an eleven tube console with a tuning eye. This radio is identified with Case model 1101 and the chassis is 110RSME. The SM identifies it as a Silver Marshal chassis.

Another “Tell Time Tuning” is listed at indianaradios.com. Pictured on the website is the Case radio “Imperial” model 6U-107. A table radio that is similar to the Case model 601.



My Case model 722 contest entry was tuned to 1000KC for a program on Radio Broadcast of the 1930’s and 40’s. The 20 minute PowerPoint presentation gave samples of programming ranging from Roosevelt’s “Fireside Chats, to “Life Boy Soap” advertising, to “Henry Aldridge”.

The Case radio, purchased at an IHRS Fall meet several years ago, was a fun (meaning fairly

easy) restoration. The cabinet was in great shape requiring only softening and removing some of the shellacked coat and adding an additional thin coat. Recapping brought the radio to life. The tuning dial was and is a problem. To make the tuning of short wave broadcast easier, a "Dual Speed Planetary Drive" is provided in the tuning dial. It is a clutch affair that is engaged (or disengaged) with a push or pull of the tuning knob.

Once it was cleaned and assembled it does work, disengaging the clutch virtually "floats" the tuning dial. The Planetary Drive service notes state the disengaged position gives a 96 to 1 tuning ratio while the engaged is 16 to 1. All fine and good but pulling the knob to the disengaged position requires some effort and easily results in a disassembled knob and shaft in hand. Oh well, some things you just have to live with. *Fred Prohl, May 2018*



**"CASE" model 722
chassis 17**

Tube lineup:
6K7 RF Amp
6L7 Mixer
6D6 IF Amp
6B7 AVC Detector
76 Oscillator
42 Audio Output
80 Rectifier

A brief history of "Case" radio reported by Michael Feldt in his website indianaradios.com: Case Electric Corp. was originally known as the Indiana Manufacturing & Electric Corp., known for the "Indiana Hyperdyne" and "Case" brand of radios manufactured from 1923 to 1928. It was in 1928 that the Indiana Manufacturing & Electric Mfg. Corp. changed their name to Case. From 1929 to 1934 Case did not make any radios, almost as if the company went dormant. Then in 1935 production started up for the Case line of radios for the 1936 season. Unfortunately Case failed to submit yearly corporation reports, which is required, to the state of Indiana during the years of 1929 to 1934. Soon after Case went back into production, the state of Indiana held hearings on the future status of the company and on April 2, 1936 the state of Indiana officially dissolved the company.

Spring Meet 2018 Vintage Radio Contest

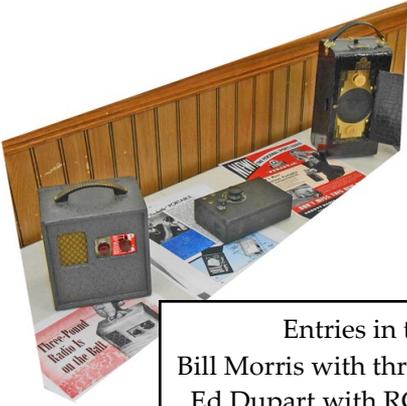


Bob Sands placed 1st in the Open category for his display of WWII German manufactured radios for the home. The Judges determined that Bob's entry was also the Best of Show for the Spring 2018 IHRS Meet. See pages 12 and 20 of this issue of this Bulletin for details on Bob's display of rare radios.



Bill Smith entered an operating RD-60/U Recorder and TG34A Keyer in the Open category. The RD-60/U is a paper tape recorder of radio signals used in conjunction with code practice equipment and training equipment. The TG-34-A is an automatic unit for reproducing audible code practice signals previously recorded in ink on paper tape.

Photo credit—Ed Dupart



Entries in the "Open" Category:
 Bill Morris with three Homebrew portable radios.
 Ed Dupart with RCA Transistor Radios 9-BT-95
 Jim Stohler with an Atwater Kent 38 receiver.
 Clif Bolton - Cigar box Crystal Radio



Fred Prohl entered a Klitzen with
 "Little Tattler" Headphones in the
 1920's Battery Radio category.



Indiana Radio Entries:
 "CASE" - Fred Prohl
 Arvin Built Silvertone –
 entered by Tom Williams

Third Reich Peoples Receivers—a contest entry by Bob Sands

THE REASON

The condition of the nation could not have been better for him. The country had suffered a draining defeat in World War I and as a result was in a severe depression. There was no employment available and the Reichsmark was worth almost nothing. The Treaty of Versailles forced Germany to pay reparations to France and Great Britain. In 1930 the economy collapsed. It was the perfect time for Adolf Hitler to take control.

But first, there had to be someone or something to blame for the crisis the country was experiencing. Hitler chose the Jews – the business people – the industrialist – the capitalists – the caused all this. But how could he convince the masses that they were to blame and that he – Hitler – could restore economic health?

Hitler employed Josef Goebbels as “Reich minister for propaganda and national enrichment”. Goebbels had complete control over radio, press, cinema and theater. Now the masses could be indoctrinated into the Nazi way of life.

Goebbels main method was to use radio. Germany had 69 international transmitters, Japan 46, but the U.S. had only 13. Wartime construction brought the US total to 39. Since much of Europe is multilingual, shortwave (or International) bands were very popular and listening to shortwave was akin to a hobby. The Philips station PCJJ was started in 1927. The BBC in 1932 and Radio Moscow in 1939.

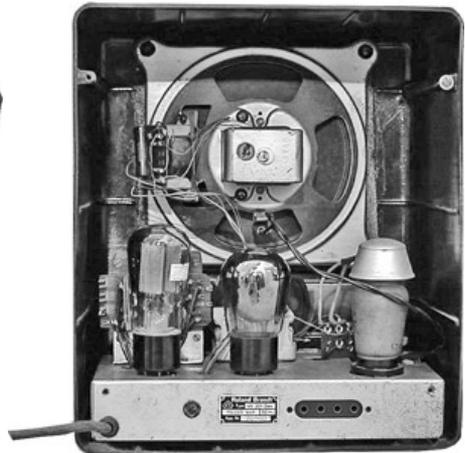
However the Third Reich wanted the people to hear only music and speech that they – the Third Reich approved. Therefore all shortwave listening was banned. SW radios



were confiscated or destroyed. If caught hosting others as in a resistance group, that meant treason and death. All programs heard must have originated in Germany! In 1933 the government issued specs for "The Peoples Receiver". The Volksempfänger, a three tube TRF with regeneration sold for 37 reichmarks – half of what other similar receivers cost. Twenty-eight manufacturers were licensed to produce these seven million radios which must be built to these specs only. Of course, no shortwave. Medium wave and long wave only.

ic speaker. Other radios were produced using similar authorized circuitry. A two tube model, Kliene Volksempfänger (Little Peoples Receiver) and four tubes in a nice wood cabinet, but, no shortwave.

Therefore, with conditions as known and described in Germany, the office of the coordinator of information in the USA made the decision to build the voice of America with the ability to literally blanket Germany with the truth about the war, and accomplish part of this broadcasting from a suburb of Cincinnati, Ohio USA.



Back of VE301DYN
 Picture from Phil's Old Radios
 at antiqueradio.org

The VE301DYN stood for, VE Volksempfänger, 301- January of 1933 (the date Hitler came to power). DYN - a model with a dynam-

THE VOICE

Months after Pearl Harbor, the Crosley Corporation was commissioned to engineer a shortwave

Third Reich Receivers—Bob Sands continued

installation to reach a global audience. All units had to be custom-built from the start, tubes, output circuits and antennas capable of handling enormous power, 200KW. All this had to be designed and built – fast. When completed, 730 acres, known as the Bethany Station housed six of the most powerful transmitters the world had ever seen and twenty-two of the most sophisticated antennas (14 rhombic, 8 curtain). Any one of six transmitters could be switched to any of the twenty-two antennas – all with 20 db of gain! When Hitler received word of the VOA he himself referred to them as “The Cincinnati Liars”. The name, Bethany Relay Station, was so called because no programs ever originated from there. All programming was sent by telephone wire from New York City. Power, 3.5 million watts, was derived from two feeds – one from

Dayton and one from Cincinnati. Operating frequencies were 6-26 MHz. In the late 1960’s three of the Crosley transmitters were replaced with three Collins 250KW units and two Cemco 50KW SSB units.

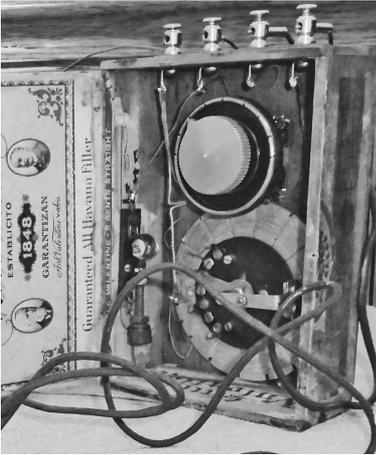
However, technology continues to advance in the field of International Broadcasting. As a result, most of the equipment of the VOA’s 114 transmitters are more than twenty years old, half have been in operation for thirty years and four were manufactured more than fifty years ago. Today’s technology dictates that satellite links from Washington to areas closer to our intended markets be utilized. Smaller stations of generic and flexible design will enable America’s voice to become stronger and less susceptible to silencing.
Bob Sands, May 2018

We Remember

Indiana Historical Radio Society member, Glenn Fitch, passed away on June 2, 2018. The family will have a Celebration of Life for Glenn and Ramona on July 9th, 5pm - 8pm at the Ercel Beaver Community Center in Carthage, Indiana. The Community Center is located northeast corner of downtown Carthage.

Glenn’s wife Ramona passed away in January 2016.
Glenn and Ramona will be remembered as our host for
the Riley Park IHRS Fall Meet for many years.

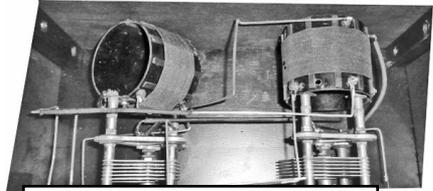
A Cigar Box Crystal Radio



Cliff Bolton's "Cigar Box" Radio in the Open category of the IHRS Spring Meet reminded me of the 2015 IHRS "Build a Crystal Radio" contest. In the absence of a circuit diagram of Cliff's receiver I pulled Ed Dupart's circuit for his entry in the 2015 contest. Ed builds a crystal radio using 1920's battery radio parts. For a cabinet, Ed chose to build a cabinet for his crystal radio.

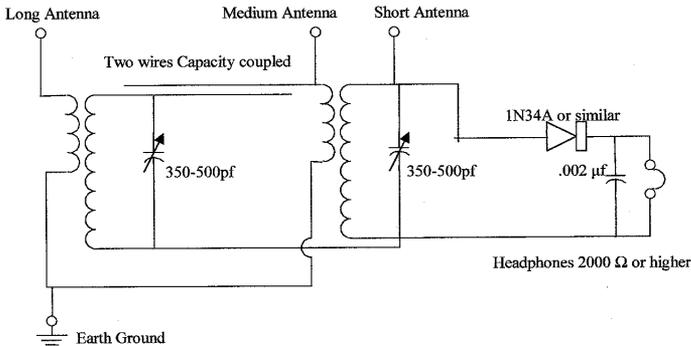
Building a crystal radio from vintage parts is fun as well as a challenge. It's probably best to locate the parts you intend to use then locate the "cabinet". This is where the cigar box comes in. At your next flea market visit be on the look out for a cigar box sized to fit your parts. Cigar boxes come in many shapes and sizes.

Ed tells us in his article -"The circuitry is fairly standard with two parallel resonant circuits, capacity coupled using the primary coil, that was



Ed's completed "Apex" circuit *the plate coil in the RF stage of the TRF radio, as the antenna – ground input. There are three antenna inputs. The long antenna goes to the first resonant*

Cigar Box—continued on page 17



Apex Recycled Crystal Radio built by Edward Dupart April 25,2015
Built from a junk 1924/25 Apex 3 dial TRF radio

Around the Room

IHRS Kokomo, Spring Meet



2018—VINTAGE RADIO ACTIVITY—2018

Indiana Historical Radio Society—Swap Meet

indianahistoricalradio.org

August 11, Cool Creek Park, Carmel, IN

October 13, Riley Park Community Center, Greenfield, IN

Antique Radio Club of Illinois

antique-radios.org

August 24 and 25, RADIOFEST, Medinah Shrine Club, Addison, IL

Michigan Antique Radio Club—Vintage Electronics Expo

michiganantiqueradio.org

Extravaganza July 12-14, Kalamazoo Expo Center,

2900 Lake St, Kalamazoo, MI

Pittsburg Antique Radio Society

pittantiqueradios.org

AWA Antique Wireless Association

www.antiquewireless.org

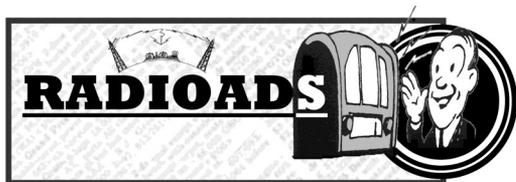
Annual Convention, August 14—18, Rochester, New York

Cigar Box Radio—continued from page 15

circuit, giving maximum selectivity, but a possible decrease in volume, which I didn't experience with this radio. The medium length antenna can go to the second resonant circuit which effectively bypasses the first resonant with a loss of selectivity. Finally, the short antenna goes directly to the second variable capacitor and would be equivalent to a very simple crystal radio and this would result in a real loss in selectivity, but an increase in volume. It only takes a few picofarads to couple the two resonant circuits together, so my capacitor consists of two parallel #14 gauge wires that go to the "hot" side of the variable capacitors and are adjustable. I can swing the one wire closer or farther apart from the other wire. This really

controls the volume and selectivity of the radio. Closer coupling equals greater volume, but less selectivity and vice versa. There is no interference between WLAC 1510 Nashville, Tennessee and WBET 1230 Sturgis, Michigan, which is my strong local station. I'm pleased with its performance and no switches to mess with."

Already have the cigar box and want to put it to use as a crystal radio? And Ed's crystal radio circuit a bit more sophisticated than you would like? Do an internet search for crystal radio schematics—there are a number of circuits that will work well—and fit you cigar box. *Fred Prohl, Ed Dupart, and Cliff Bolton June 2018*



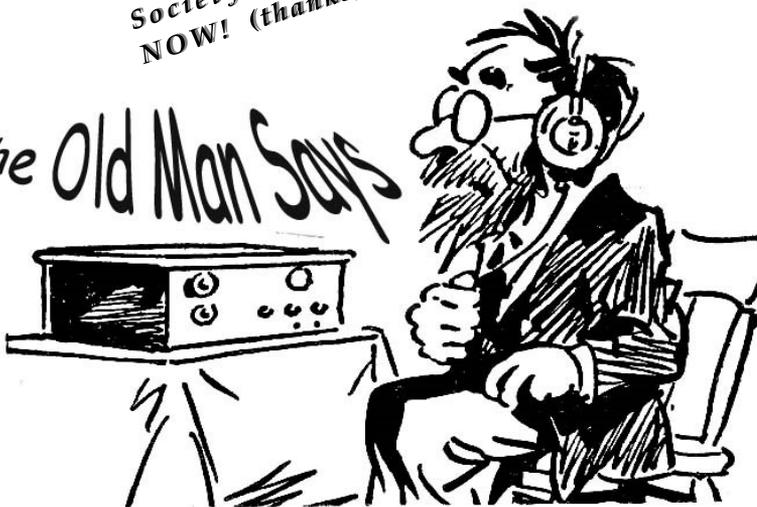
Submit your "FREE TO CURRENT MEMBER" RadioAd by the 15th of February, May, August, or November in time for the Bulletin issue that follows. Unless otherwise requested, RadioAds will run two consecutive issues.

For Sale: Ravioli 51,1930, doored console, condition very good, \$150.00; **Radiola 60**, 1927, casket style box, refinished, works, \$70.00; **Crosley**, ~ 1937, small table set, not working, \$50.00; **Atwater Kent**, 1929, model 60, console, refinished — works, \$150.00; **Crosley, Buddy Boy**, case only, \$35.00; **Queen Quality Battery** set, 1925, casket style box, nice with 01A tubes, Evansville, IN, \$75.00; **Courier 652**, ~ 1932, doored console, very good condition, not working, \$150.00; **Radiola 66**, Console, very good condition, \$150.00. Contact Richard Grogg via e-mail dickpamg@gmail.com or by phone 618-554-3506 .

For Sale: Speaker from Philco 95, good condition, \$20.00; **eye tube 6G5** \$10.00, **used tubes** tested good in playing radio: \$4.00 each 6V6GT, 224A, 5U4, 50L6, 227, 6F6Gt, 80; **and tubes** \$1.00 each 12BA6, 12BE6, 12BA6, 12AV6, 35C5, 50C5, 12SK7, 35L6 50L6 . Contact James S. Looney at mowman7777@yahoo.com, 276-531-8677.

*Renew your Indiana
Historical Radio
Society membership
NOW! (thanks)*

the Old Man Says





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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 Don Yost, our treasurer as noted above.

The BULLETIN
A publication of the Indiana Historical Radio Society
Forty-seven years of documenting early radio.

**"Peoples Receiver"
WWII German Built Radios.
A Bob Sands contest display at
the IHRS 2018 Spring Meet.
(See page 12 of this Bulletin)**

