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The
Indiana
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Radio Society

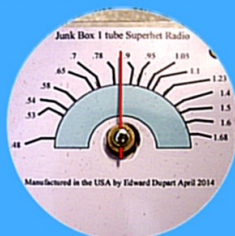

BULLETIN



ALSO IN THIS ISSUE:



BI-FIDELITY RESTO



COMPACTRON SUPERHET



INDY WINTER MEET



MEET YOUR EDITOR!

The Bulletin

A publication of the Indiana Historical Radio Society
Forty-nine years of documenting early radio.



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Historical Documentation

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TELEVISIT, PREDICTED BY GERNSBACK, 1922



Greetings to the membership of the IHRS.

It's been several years since I've written a President's message for "The Bulletin." When my late wife, Paula, started having serious health problems in 2015, I fell out of the habit of writing it and never resumed until now. Our former long-time "Bulletin" editor, Fred Prohl, always took care of the details for me and put the information in that I would have included in my message.

Fred has stepped down as editor for personal reasons, not the least of which being the untimely passing of his wife, Mary. Fred, along with our Treasurer, Don Yost, had ran the club for the last 5-6 years. The officer corps would set up the meets, but Fred and Don ran them--all the way down to the coffee and donuts served there. Sometimes, they (Fred and Don) found the venues and arranged the meets from the top down. No words I can say here can thank Fred enough for his almost 50 years of service to the IHRS. I believe the first meeting he attended occurred within a year or so of the 1971 founding. He's been President a few times and has been involved with the officers long before I started being one. I'm sure we'll still see Fred at our future meets. Once again, the IHRS profusely thanks you, Fred, for your many years of service.

It is time for us "young bucks" to step up to the plate, and try to fill his shoes.

Bill Morris, who has been an officer-at-large (along with Ed Dupart) for the last several years, has graciously accepted the position of editor for "The Bulletin." Bill brings several years' experience in art and design to the helm. He's already been putting his unique stamp on things, as you

will notice in this issue. Bill has been a member of the club since the mid-1980s, and is best remembered for making reproduction radio batteries some years ago.

In an effort to make our meetings more well-attended, we have been looking for more mainstream locations. "Mainstream" means more well populated/traveled locations where the general public is likely to show up. Our membership is skewing older and we need new potential new members to ensure that the Indiana Historical Radio Society continues to exist far into the future.

One example is returning the winter meeting to the LaQuinta Inn (formerly the Holiday Inn), after not being there for many years.

This year, the spring meeting is moving to the Johnson County Fairgrounds, located in Franklin, Indiana. The Fairgrounds' meeting location is Heritage Hall and the grounds around it. Fred Prohl set up a meet there in 2019, and the facility met our needs nicely. Also, it has its own kitchen, plenty of parking available and lots of room inside and out. There are a number of hotels at the Franklin exit on I-65 (Exit 90), should you wish to spend the night there. Meeting date is Saturday, June 18, starting at 7am. As the Indianapolis 500 will be done by then, the June meeting date should make hotels more available. There will be a contest, with the categories announced elsewhere in this issue.

That's all for now. We hope to see you at Heritage Hall.

Alex R. Whitaker

IHRS President

Notes From The President's Desk by Alex Whitaker





It's Happening!



INDIANA HISTORICAL RADIO SOCIETY

Spring 2022 Meet

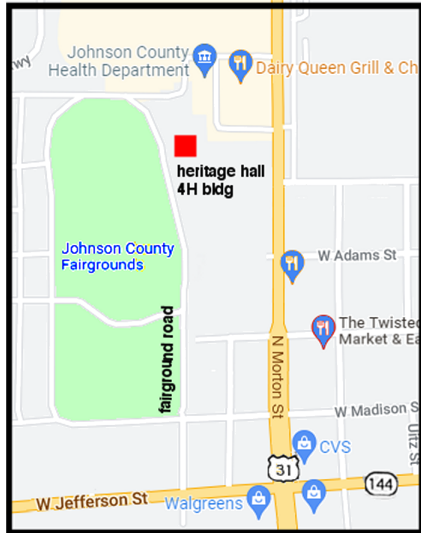
Saturday, June 18

**Johnson County Fairgrounds
Heritage Hall
Franklin, Indiana**

The Johnson County Fairgrounds is northwest of the US31 and SR144 intersection, Franklin, IN. (250 Fairgrounds Street)
The IHRS Spring Meet is a Swap N Sell indoor meet. The doors of Heritage Hall will open at 7:00 AM for setup and Swap N Sell.

CONTEST CATEGORIES:

- *UGLY RADIOS**
- *AM/FM TUBE RADIOS**
- *INDIANA MADE RADIOS**



Admission to the Vintage Radio Meet is free.
Swap table rental: IHRS members - \$10.00
for each table; non-IHRS members - \$15.00
for each table. Tables are 6' rectangular.

RADIO ACTIVITY



Check each organization's webpage for upcoming meets, etc:



Indiana Historical Radio Society
www.indianahistoricalradio.org



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



Central Ohio Antique Radio Association
www.coara.org



Mid-South Antique Radio Collectors
 Available on Facebook



Antique Wireless Association
www.antiquewireless.org



Cincinnati Antique Radio Society
www.cincinnati-antique-radio.org



Michigan Antique Radio Club
www.michiganantiqueradio.org

BLAME IT ON THE PHILCO

*How an old
TV experience
led to a
rewarding hobby*

by Bill Morris



For any of our readers who were TV servicemen in the 1970s, I was the kid that drove you crazy— watching while you worked, asking you a gazillion questions, mom in the background telling me to “stay

back, it’s dangerous.”

Our family never had much luck with tv’s. Mom and Dad’s first set was an early fifties Wards Airline console, and before they got settled into their

new apartment, they let my grandparents borrow it. When mom and dad came back for it, my grandparents were reluctant to give it back.



Mom in the apartment, early 1950s

When the Airline quit, a larger GE console followed. I have a picture of my older sister, Mouseketeer ears perched on her head, waiting for the Mickey Mouse Club to come on.



Then the GE quit. By the time I was born, we had settled on a larger console: A 1961 Philco “Cool-Chassis” Model 4854 in an Italian Provincial Renaissance Mahogany cabinet. The “Cool-Chassis” feature was nothing ore than cutting holes in the chassis like swiss cheese. Supposedly it allowed the electronics to run cooler.

Philco Cool-Chassis TV
brings you a totally new viewing experience:



Philco Vivid Vision brings to the TV screen a brilliance, depth and clarity never before attained! For the first time, the full range of contrast is visible on the TV screen—from absolute black through pure white, including all the important intermediate tones that create detail and dimension. You see television with an over-all richness, a vitality your present TV set couldn't match even when new! New solid-copper circuitry and the exclusive INTENS-TUBE make Vivid Vision possible. These new Philco advances provide the reserve power that enables Vivid Vision to keep its new-set brilliance and vividness long after other pictures fade with age!

			<small>WESTINGHOUSE, PHILCO ARE ITALIAN PROFESSIONAL AND RESEARCH UNIVERSITY.</small> PHILCO <i>Thomas for Quality the World Over</i>
<small>NEW INTEREST HERE USE READ- MODEL SHOWS CHASSIS COLOR DRIVE, AND THE OTHER FEATURES, SPEAKERS AND OTHERS. ORDER BEFORE AVAILABLE. ONLY PHILCO HAS IT!</small>	<small>RESEARCHERS MAKE YOUR OWN LABORATORIES, PRODUCE CONTROL UNITS AT HOME, SEND TO US FOR FREE INFORMATION. ONLY PHILCO HAS IT!</small>	<small>PHILCO COOL-CHASSIS TUBE FOR SALE, TRADE IN ON TV SETS. THE PRICE IS \$10.00. SEND TO US FOR FREE INFORMATION. ONLY PHILCO HAS IT! ALL PHILCO'S IN THE U.S.A. ONLY PHILCO HAS IT!</small>	<small>AN INTERESTING TV SET BY NEW PHILCO AND TV SETS. SEND TO US FOR FREE INFORMATION. ONLY PHILCO HAS IT! PHILCO HAS IT!</small>

The TV that started it all

Like the others, it wasn't a reliable set. Looking at the schematic shows me that Philco didn't learn from their Predicta fiasco—they were still using wire wrap connectors for their circuit

boards. From what mom told me, it also had a small fusible resistor mounted in the chassis. It had a devilish habit of going open at the most inopportune times. The last



Me at a year old, Philco TV

In the background

straw was when it blew during the final minutes of their alma mater's championship basketball game.

Color had become more in reach of our income, so my parents purchased a beautiful Zenith. The Philco was relegated to my Grandma's home. From what I remember, it was never used again, as Grandma had a nice Zenith as well.

Throughout my early life, our family moved every two years or so. Mom and Dad would

find homes that needed a little work done, then sold the improved home for a little profit. Around winter 1975, we were living in St Louis. Dad had remodeled the bare basement and now he was looking to add a tv.

He didn't want to spend extra money on a new color set--and he remembered the Philco. During one of our annual grandparent visits, we packed it into the car.

This thing had laid dormant for nearly ten years, and still had the faults that drove my parents to retire it.

Dad was a guy who thought all TV troubles were usually the result of bad tubes. So, off to the drugstore he and I went, tubes jingling in a paper sack, testing tubes from the U-Test-M and buying replacements.

Back home, new tubes were installed and dad switched it on....

Darkness at first...then a postage stamp-sized picture appeared...along with a strange squirping sound from the speaker. Obviously it needed more than new tubes.

And then, to add insult to injury...the fusistor gave up.

Seething, Dad told me, "Get me a pair of pliers."

I thought, "Oh, boy! Dad's gonna fix the TV, and I get to watch!!"

Back from the garage I came, pliers in hand.

Dad snatches them from me, pulls the fusistor, and proceeds to crush it with the pliers, cussing under his breath.

I ducked away. TV wasn't gonna be fixed. Ever. But that tv stayed in my mind--those little tubes fascinated me. While other kids were outside playing sports, I played TV serviceman. I would build TV's out of lego's with small brick "tubes".

Fast forward ten years later. I wanted to get dad something besides the usual shirt and tie routine. My girlfriend's dad had an ancient 1940's Andrea tv, but he didn't want to part with it. In my mind, I settled with getting an old radio.

About the same time, my brother was getting married and a friend of the family



The first radio, Zenith 5S127

caught wind of what I was looking for. He said "I've got just the thing"—a 1937 Zenith 5S127 Tombstone.

I couldn't have it ready for



The compromise. It was delicious all the same.

Father's Day, so I had Baskin-Robbins make an ice cream cake in the shape of the Zenith.

With the help of a TV repairman, the Zenith was playing and soon I was hearing Radio

Havana Cuba on the 31 Meter band. I was hooked. The Spirit of Radio finally embraced me and there was no escape.

Soon after a friend and I attended a hamfest. I'd gone the year before, but there wasn't anything that interested me. What a difference a year later would make. My mind was focused on antique radio—now there was PLENTY to be found. Sets were everywhere.



My first portable

There was a seller with a trailer lined with a stash of Zenith Trans Oceanic portables, and I took my pick of the litter—a 1946 model.

It took me awhile to figure out what parts to replace, but eventually I could restore radios on my own without causing extra

problems, electrical shock or smoke. I felt like Dr. Frankenstein—there was no better feeling than pulling a set from either a basement or attic and bringing it back to life.

My collection specialty became tube and transistor portable radios—they're small, lightweight and you can take them most anywhere. The latter statement more important when I took on the sideline of producing reproduction batteries for the tube portables.

And to think all of this started with a broken down tv over forty years ago. Some call it an obsession. I don't like that term, it has a negative connotation to it.

I prefer to call it a passion.



Just one part of the collection.



CONSTRUCTION

I have always been fascinated with GE's Compactron tubes and getting the most from least. Back when the Compactrons first came out, GE and Popular Electronics had circuits for a regenerative radio using a 6AF11 that could drive a speaker. Of course, I built one on a very small chassis about 1" high. The radio worked quite well and I had it for years, but it got lost in one of our moves.

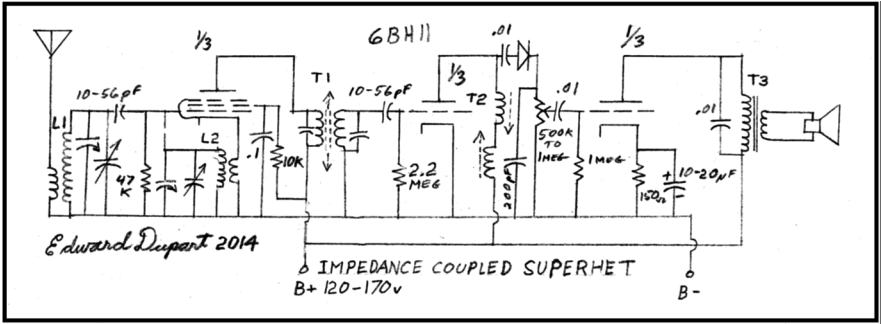
A few years ago, I built a fancier one with a nice cabinet and it works quite well, but it is a regenerative set. For those of you who have worked in electronics for a long time, you might recall a 1955 Popular Electronics article for building

a one tube reflex TRF using a 6AU6 that could drive a speaker, so I studied that circuitry. There was also a one-tube superhet that used a 6U8 that could drive a speaker as well. So in 2014, I decided to build a one tube superhet with a 6BH11 Compactron using ideas I gained from the previous two sets. It worked, but not very well. It picked up three stations and while the local one was plenty loud and the others were audible, it needed more volume. It also lacked selectivity on the strong station. I was sort of satisfied with it so on the shelf it went.



Putting Reflex Muscle into the Reflex Radio

by Ed Dupart



The original circuit

This winter I looked at my Compactron superhet and wondered what I could do to improve it. Let's take a look at the original circuitry. The pentode part of the Compactron is an autodyne converter; oscillator and mixer combined, and it was popular back in the 30's. One triode is the IF amplifier and a crystal diode is the 2nd detector. The second triode is the audio amplifier. Two IF transformers are used and the 2nd IF transformer is used for impedance coupling. This is where I lost selectivity on the strong station. One of the problems with triode IF and RF amplifiers is that they are prone to oscillation due to their internal grid-to-plate capacitance; neutralization removes this problem. With the transformers I used, neutralization is difficult to achieve and the

impedance coupling seemed to take care of the oscillation problem.

What I did next was to rewire the secondary of the 2nd IF transformer and the crystal detector to look more like the circuitry one would find in a typical All-American 5-tube radio minus the AVC. That improved the selectivity, but I did encounter oscillation and I found if I mistuned one of the IF transformers, the oscillation would quit. I was then picking up lots of stations, but it still lacked volume on the weaker ones. With all my fiddle diddling with the IF transformers I managed to turn the top slug of the 2nd IF transformer down too far to where went below the fine spring steel wires that were on the threads. There was no way that slug was going to come back up without tearing the transformer

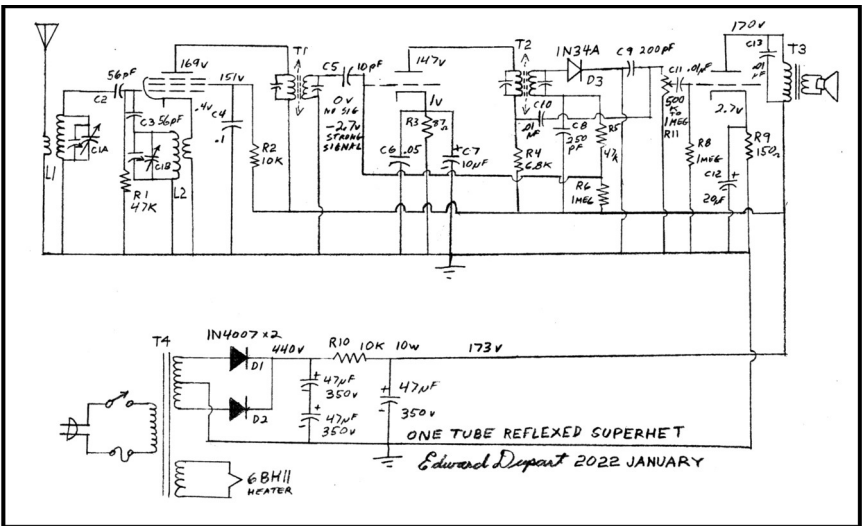
apart, which I will do on another boring day. I felt stupid for doing this because I knew better, but oh well. I changed both transformers, added a cathode resistor and bypass capacitor in the IF stage and the radio worked much better, but still lacked volume.

And then, A HA! I had a reflex moment! Both the Crosley Trirdyn and the two-transistor boys' radios used a reflex circuit, so I thought why not try that with my Compactron superhet? Those radios worked great and I have examples of both tube and transistor radios that use reflex circuits.

The IF amplifier is going to amplify both IF and audio fre-

quencies. It can do this when the frequencies are far apart as are the IF and audio frequencies. The disadvantage of reflex circuits is that the sound may not be quite as clear and care has to be taken to keep the radio from oscillating.

I experimented with a couple of circuits and I settled on one where I take the audio developed across two resistors R5 and R6 which are connected to the secondary of the 2nd IF transformer and feed it back into the grid of the IF amplifier. The bottom 1 Meg ohm resistor R6 also acts as the grid leak resistor for the IF amplifier. The output of the 1st IF transformer also goes through a low



The improved circuit

value capacitor, 10pf C5, which passes only RF energy and blocks AF energy from going to ground through the

secondary of the IF transformer T1. The audio output of the IF amplifier is taken from the junction of the primary of the 2nd IF transformer T2 and the 6800 ohm plate load resistor and feeds into a .01 mfd C11 audio coupling capacitor that goes to the top end of the volume control R7. From there it goes to C12 and into the grid of the audio amplifier and the plate of the audio amplifier goes to the audio output transformer and finally to the speaker and as a result--we have sound.

Since this Compactron has a pentode, I couldn't use the circuit for the converter most of you are used to seeing. That is the pentagrid converter that uses the 2A7, 6A7, 6A8, 6SA7, 12SA7, 6BE6, 12BE6, which are the most common ones and could be considered two tubes in one. RCA came out with the 2A7, 6A7 in 1933, so superhets before then either had to use an autodyne circuit using only one tube--slightly different from the pentagrid converter--or they used separate oscillator and mixer tubes. The autodyne circuit did see continued use after the introduction of the pentagrid converter and was revived in

transistor radios where one transistor serves as both mixer and oscillator. The radio signal is picked up by the antenna, selected by the coil L1 and the tuning capacitor C1a. The signal is then fed through C2 into the control grid of the pentode. C2 prevents the oscillator signal from being passed to ground through L1. L2 is the oscillator coil so the pentode also acts as an oscillator and generates a signal 455Khz above the incoming signal. The incoming signal beats with the oscillator frequency and the resulting signal is 455Khz and is passed onto the IF amplifier through the 1st IF transformer T1. That's the converter stage.

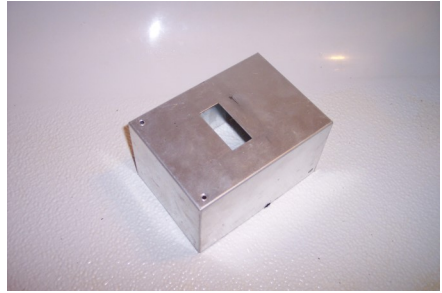
The only odd thing in the IF stage is the cathode resistor bypassed by a low value capacitor .05 mfd and a high value capacitor 10 mfd. At first glance one would say 10mfd plus .05 mfd equals 10.05 mfd, so why bother with the .05 mfd capacitor? Remember, this is the reflexed stage and it is amplifying two widely separated AC signals and the purpose of a cathode bypass capacitor is to increase gain and with three tubes I want all the gain I can get. At low frequencies the 10mfd capacitor kicks in giving higher gain at low frequencies and the small .05mfd capacitor kicks in and increases the gain at the

455Khz frequencies. Pretty tricky!

The second detector uses a 1N34A or equivalent and it is important that the cathode goes to ground so that a negative voltage is developed at the junction of R5 and R6. Audio voltage is at this junction and is fed back to the control grid of the IF stage for audio amplification, but also a negative voltage on strong stations is present at that junction and is also impressed on the control grid of the IF amplifier reducing the gain and volume on strong stations. Normally filter capacitors are present in the AVC circuit to filter out audio ripples and create a purer negative DC voltage. I could not add audio filter capacitors because that would filter the audio to ground and the IF stage wouldn't have any audio to amplify. Without the audio filters, the radio sounds fine. C8 and C9 filters out RF energy to ground and creates a cleaner audio sound and also help eliminate feedback.

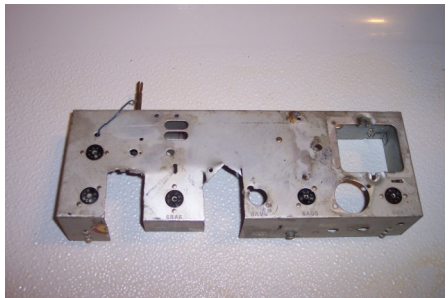
I would like to mention that this is a junk box radio; all the parts have been taken from other radios and equipment. The chassis was a cover on a piece of industrial equipment and it has a rectangular hole that was

a perfect place to mount the IF transformers. The IF transformers and tuning capacitor came from a junk radio.



The raw chassis

I didn't have nice mounting plates for the IF transformers, so I cut out the area where the IF transformers were mounted on the junk chassis and used it to mount the IF transformers on my chassis. The only new parts I used were capacitors and a few resistors.



The junk chassis with IF can mounting plates removed

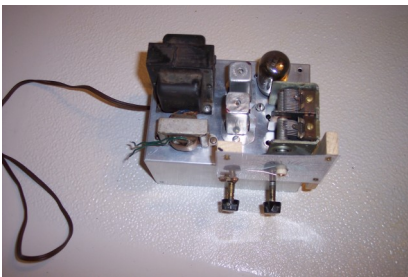
The power supply is a conventional one and not much needs to be said about it, but I did use

a trick to enable the use of lower voltage electrolytics with higher applied voltages. The raw DC voltage at the junction of the rectifiers is 440 volts, much higher than the 350 volt 47 mfd electrolytics that I have a lot of. Capacitors can be put in series and if they are of the same value the voltages will be divided among them. In my situation, assuming the values of the capacitors are identical, then there would be 220 volts across each capacitor. If the values of the capacitors are slightly different, then the voltages would be different, but usually the higher voltage is still lower than the rated voltage of the capacitor. In my supply the voltages across both capacitors were about equal. Sometimes equalizing resistors are put in parallel with the capacitors to force a more equal voltage drop across each capacitor. I used a 10K-ohm 10-watt resistor to

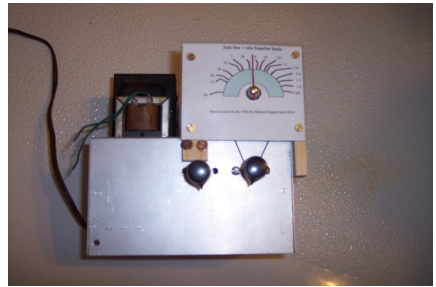
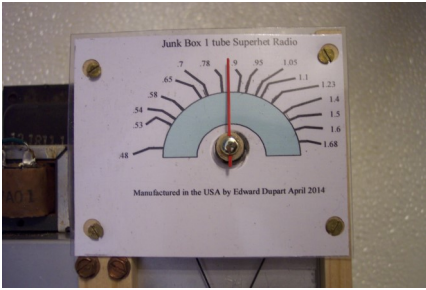
drop the 440 volts down to 173 volts.

I aligned the IF's to 455Khz and the oscillator trimmer on the tuning capacitor was set for 1700Khz. I could have set it for 1800Khz, because at 1700Khz the radio tunes down to 480Khz. The old coils I used came from a radio that could tune up to the police frequencies used decades ago. The last police department that I knew of that still used those frequencies was the Howell, Michigan police department, because I could listen to them in the late 1950's. The tuning capacitor's antenna trimmer was set for maximum volume on a station around 1400 to 1500Khz. After I aligned the IF's, I went and peaked them on a station. I found one slug to operate like a regeneration control, so I set it just before the radio went into oscillation and that really improved the sensitivity and selectivity. Remember triode RF/IF stages tend to oscillate without neutralization, so in this case I took advantage of it and made the IF stage a regenerative stage as well as a reflex stage.

The dial was made using Microsoft Word and the dial pointer came from an old clock.



The Compactron Superhet



So how well does this radio work? It works about as well as an All-American radio except it's not as loud, but loud enough to fill a small room. Selectivity is very good and it is sensitive. With a 2-foot antenna it picks up all the local stations and at night some distant stations. With a long antenna I picked up Boston, New York, Tennessee, Chicago and many more. I'm happy with it, so now all I have to do is build a cabinet for it.

The "Old Man" Says:



"If you haven't already, now's a great time to renew your IHRS membership."

Annual Membership \$15

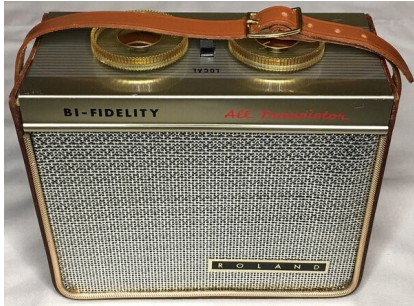
Send your payment written to the **INDIANA HISTORICAL RADIO SOCIETY** to:

Don Yost c/o IHRS
3814 E 400 N
Windfall, IN 46076

Include your current mail address and email address (if applicable)



TRANSISTORS



Just when I think that my very specific "collecting" is winding down, something shows up to tempt! Refurbished one of these years ago, but it was in somewhat rough condition with a loose speaker grille, missing nameplates, torn-off carrying handle, significant wear on top panel, etc... Still it was a really unique and scarce radio; a great performer (at least on upper half of band) with good sound.

Had been wanting to try and duplicate the ROLAND nameplates, but never got around to it. Then this beauty "popped up" on Ebay. Looked very clean and well cared for, even though it was apparent from the listing pictures that someone had been into it. Top control panel was reinstalled backwards with right side mounting tab outside of the leather cabinet (fortunately it didn't cause damage), bottom chassis mounting screw was "stuck" in the earphone jack and the earphone jack nut was loose. Initially, I saved the pictures to help with creating nameplate replicas, but later decided to place a fairly high last-minute bid.



1959 Roland Bi-Fidelity TR8

by John Raskauskus

My dad was giving me some money for Christmas and this could be considered a gift.

The radio arrived fine from Eagle, ID during the Christmas mailing rush. The seller thankfully heeded my instructions on how to protect the fragile front and rear speaker grille structures by covering them with heavy cardboard. It had been well taken care for (the original owners were the grandparents of seller's friend) and only needed careful detail cleaning. There were a few tiny paint spots and spots of dried "jelly-like" residue on grilles. Used both water-dampened then dry soft cotton cloth pieces on leather and inside-out white cotton sock pieces on grilles.



The shoulder strap in side compartment looks new, but is very stiff due to dried-out leather. Doesn't appear to have ever been used!

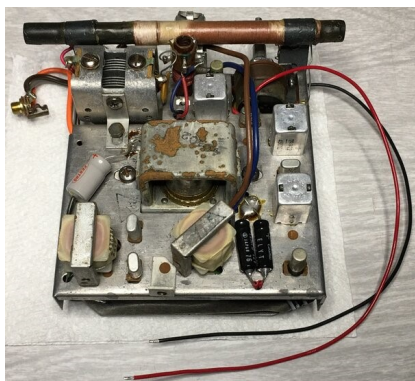
As disclosed by the seller, one

of the battery holder wires was broken off and appeared to have been repaired before.



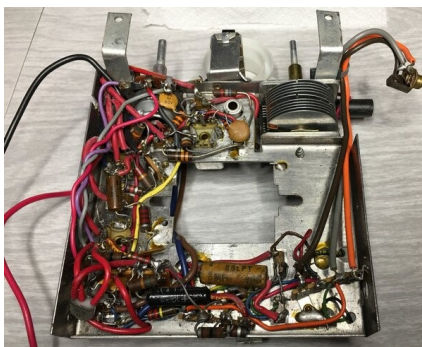
There was corrosion on several of the contacts and had been somewhat cleaned previously. One of the holder's bottom cover rivets had come loose from leakage damage and that area had been glued. The glue bond had come loose, so the cover could be rotated around to expose contact connecting links. There was still dried leakage residue present, so cleaned everything the best I could without damaging the pressed cardboard cover and label. Surprising, there was still continuity at all the links' riveted connections, so the holder still usable. The thick insulated wire had become very stiff, so replaced it with much more flexible insulated 20 gauge teflon. As with all replaced parts, I saved the original wiring.

The volume control indicator, which fits just below panel, had rubbed against the aluminum and was badly scuffed---had to wet-sand with 320, then 2000-grit to remove the fairly deep damage before polishing with Novus-2. Noticed that this was probably caused by the volume control shaft being slightly too high above chassis, so after pulling chassis, loosened the retaining nut and inserted "shims" made by cutting section out of a thin flat washer with proper I.D. hole and placing beneath top mounting plate.



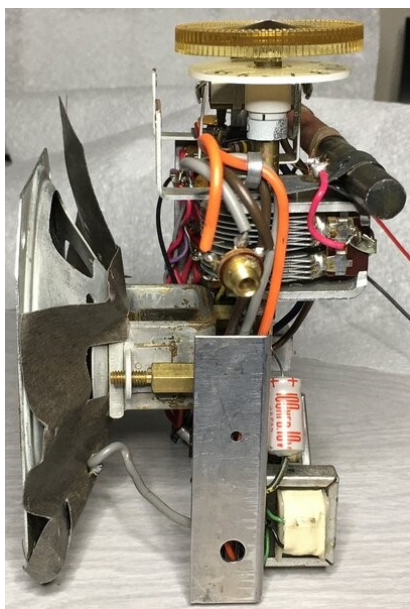
There was rust/corrosion on some hardware and components just like the other radio---thought something had come through rear speaker grille on the other set, but this one had very similar damage makes me wonder about the cause--the interior grille support on this set

was completely clean and solid. Also looked like something corrosive had gotten on switch portion of volume control as it had wet-rusty appearance. There were still tiny droplets of some liquid on it and I thoroughly cleaned it off. Power switch is intermittent, but is improving with use, so am not going to disassemble it unless necessary.



Radio actually worked fairly well when power applied by-passing switch. There was sloppy workmanship during assembly of this set---lots of melted insulation, wire pinched under speaker mounting tab, marginal solder connections. While replacing electrolytics, left the originals on top side of chassis in place and disconnected one lead of each underneath and insulated ends with teflon tubing. Increased value of audio driver transistor emitter resistor bypass cap to 47 uF from 3 uF to hope-

fully improve sound quality as it did in the Roland 7TL. Since I found that adding the "typical" decoupling resistor and cap to B+ line of a recently refurbished Roland 7TL (which their engineers omitted) noticeably improved sound quality, decided to do the same with this set. Surprisingly there was no noticeable change in this radio. Found and replaced a few resistors that were out of tolerance while replacing electrolytics. The 3.9K push-pull amp bias resistor measured around 5.5K!



The tuning cap was a bit

scratchy, so removed and cleaned the rotor ground contact with eraser and isopropyl alcohol and then applied DeOxit Gold once reinstalled.

The speaker had to be removed to perform the IF alignment since adjustment holes are only on bottom. Found that one of the 1st IFT terminals was causing intermittent signal loss when attached components was moved slightly---possibly internal silver mica wafer contact issue. In order not to stress it any further, simply tried to reorient them to make the connections more stable.

Also noticed that even though the radio was an excellent performer on upper half of band, the dial was off by 50 kHz or more higher just like my Regency TR8! Never did full alignment on that set as it worked so well otherwise, but decided I'd like this dial to be accurate. Discovered that when I "moved" frequencies back to where they belonged with oscillator coil & trimmer adjustments, performance became poor. After checking everything else in circuit--

including subbing in a good replacement converter transistor--decided with a degree of disbelief that it was a design flaw since both radios performed nearly identically. Seems that Roland just "rocked in" the alignment for best performance and let 'em go out the door! Disconnected the ferrite-rod antenna connection at tuning cap and measured inductance with LCR meter (a compact Chinese component tester which has proven itself reliable with other projects) and it was .81 mH. Measured tuning cap fully closed and it was 125 pF. So resonant frequency around 500 kHz---50 kHz too low! Needed approximately .67 mH to bring it up to 550, so removed several turns, measuring after each one. Turns out that an movable small section that was wound over the windings had to be removed (hmmmm---need to research this!) to get required inductance. Tinned and re-connected antenna wire to terminal and then attached lead to tuning cap. Alignment was touchy, but now dial was accurate with performance as good as before (although the low end of band was still substandard).

After pulling chassis earlier, noticed that both lower tuning cap support bracket screws were loose, so tightened them. While performing tracking alignment, noticed how touchy it was and that the lower end frequencies would shift substantially whenever the chassis was handled. After a period of frustration and troubleshooting, realized that when the chassis was flexed, it was de-tuning the oscillator gang! Re-loosened screws and problem went away, so simply removed bracket altogether and placed it and screws with parts to be saved. Now I understand why they were loose!



Replaced Parts

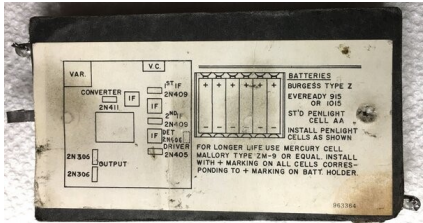
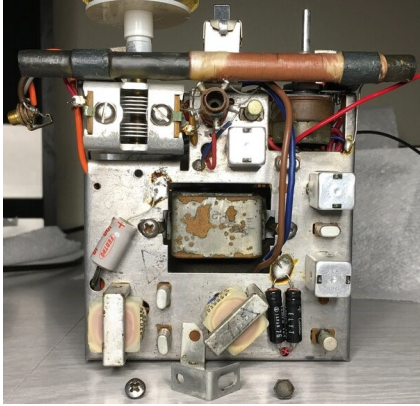
Back together for now. Forgot to re-tweak the ANT trimmer with the aluminum top panel

over chassis before installation as it slightly de-tunes antenna, but will do that next time its apart.

Very grateful to have a good-looking and complete example of this Roland model. And now have "samples" to hopefully replicate the ROLAND nameplates some day for first set!

Know that Bill Morris has one---anybody else ???

John





INDIANAPOLIS WINTER MEET



The 2022 Winter Meet was held at the Beech Grove La Quinta Inn on Saturday, February 26. A donation auction was held afterwards.



Presiding over the donation auction, IHRS Vice President Michael Feldt offers a Philco cathedral cabinet up for bids

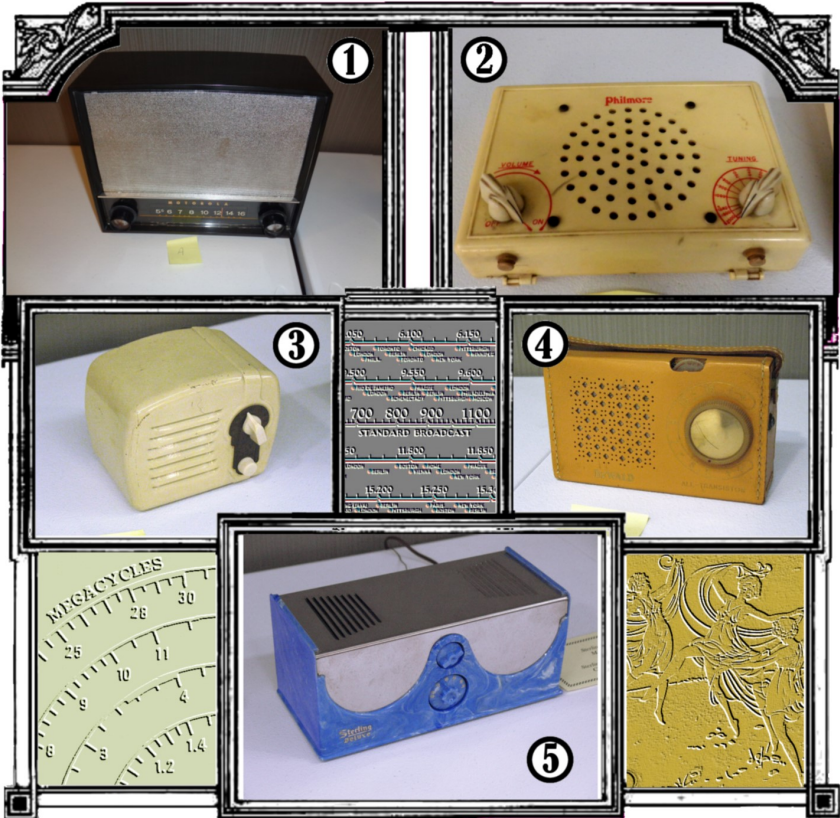


Radios from the 1920s onward and homebrew projects were displayed. It was great to reconnect with fellow collectors from all around the state. Some newcomers were present as well.



Winter Meet CONTEST

Category 1: Tube Radios, all makes and models
 Category 2: Transistor Radios, all makes and models



1. Motorola tube radio entered by Bill Green
2. 1958 Philmore TR-22 transistor radio from Ed Dupart, 1st place
3. 1938 Arvin Model 40 from Ed Dupart, 2nd place
4. 1950s DeWald K544A transistor radio from Bill Morris, 2nd place
5. 1949 Sterling Deluxe tube radio from Michael Feldt, 1st place



RADIOADS

WANTED: Junked early Raytheon 8TP transistor radio chassis. Also Junked Zenith Royal 150 or Royal 50 with good small rectangular Zenith emblem on front panel. Please contact me John Raskauskus for pictures or questions at 317 846-4160 or xrhonda91@gmail.com

IN MEMORIUM

It is with a heavy heart to report that the wife of long time IHRS member Fred Prohl, Mary Virginia (Wolf) Prohl, passed away March 14, 2022 at Johnson County Memorial Hospital in Franklin, IN.



Mary taught elementary school fourth graders, and language skills at two community colleges; Ivy Tech in Indianapolis and the National College of Business.

Mary's pastimes were crafting, sewing, knitting, and artwork.

She was preceded in death by her son, Steven Russell Prohl, and is survived by her husband, sons Carl Prohl of Greenwood, IN and Benjamin Prohl and daughter-in law Katherine (Ghormley) Prohl of Des Moines, IA, grandchildren, Rowen, Gideon, and Maisie, a brother David Wolf and his wife Darbie of Brownsburg, IN and a sister, Dorothy (Wolf) Ward of Zionsville, IN.

All Transistor RADIOS

NATIONALLY ADVERTISED



AS A PORTABLE

POWERFUL CONVERTIBLE TABLE-PORTABLE • Seven transistors and one diode for maximum sensitivity and best automatic volume control • Reversible flip-switch dial for use as either a table model or stand-up portable • Luggage-type cabinet, pyroxylin coated in British tan • Long-life batteries have powered a set 2200 hours • Tone control; long-range Magnetenna; 5 1/2" Alnico speaker • Length 11 1/4"; height 8 1/2"; depth 4" • Uses six standard "D" flashlight cells • Ship. wt. 7 lbs.

5851E5754—British Tan or Alligator (Specify).....

Retail \$81.15



AS A TABLE MODEL



HANDY POCKET PORTABLE

• Six transistors and one diode • Weighs less than a pound • Fits pocket, purse, clips on belt or stands alone with easel support • High-impact plastic in black • Thumb-knob tuning, slide-rule dial • Earphone accessory optional • One 9-volt battery (NEDA No. 1600) • Height 6 1/8"; width 3 3/8"; depth 1 1/8" • Ship. wt. 1 lb. 7 oz. Master carton 4; Ship. wt. 6 lbs. 12 oz.

7003E3673—Ebony, White or Pink (Specify)...

Retail \$51.05

7001E337—Earphones Retail \$4.95

7276E337—Carrying Case Retail \$4.95

All portables priced and shipped with batteries



ROTATING ANTENNA PORTABLE • Five transistors and two diodes with reflex circuit • Arvynil plastic in red on shatterproof steel—beautiful, scuff-proof, easy to clean • Rotate handle for station and signal strength—Magnetenna is built into the handle • Reflex circuit with push-pull output for long battery life • Four "D" flashlight cells • Length 11 1/4"; height 8 1/4"; depth 2 1/2" • Ship. wt. 4 lbs. 5 oz.

7224E3698—Red or Blue (Specify)..... Retail \$50.75

PERSONAL PORTABLE • Fits hand, pocket, purse—clips on belt, stands alone • Weighs only a pound • Five transistors with high output capability and one diode • Two-piece, high-impact plastic cabinet in turquoise • Thumb-knob tuning • Earphone optional • One 9-volt battery (NEDA No. 1600) • Height 6 1/8"; width 3 3/8"; depth 1 1/8" • Ship. wt. 1 lb. 7 oz. Master carton 4; Ship. wt. 6 lbs. 12 oz.



7018E3313—Turquoise or Ebony (Specify).....

Retail \$46.05

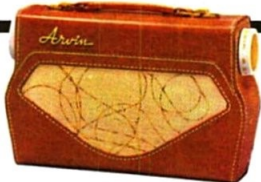
7001E337—Earphones Retail \$4.95

7276E337—Carrying Case Retail \$4.95



TRANSISTOR TWO SPEAKER SET • Refreshing new styling with enclosed back—trim, both fore and aft • Six premium quality transistors and two diodes • Two Alnico "V" 1 oz. heavy-duty PM speakers for console-like sound • Slide rule tuning dial • Gray plastic; patterned grille cloth • Six "D" flashlight cells • Length 13 3/8"; height 6 3/8"; depth 4 3/8" • Ship. wt. 5 lbs. 3 oz.

7232E4394—Gray Retail \$61.15



3-way portable

SMART STYLING • Plays on batteries, AC or DC • Four tubes plus selenium rectifier • Leatherette cover in light tan with shoulder strap • Automatic volume control • Alnico "V" PM speaker • Rod-type Magnetenna for distance reception • Batteries: one 7 1/2-volt "A" (NEDA No. 9); one 90-volt "B" (NEDA No. 214) • Length 10 1/4"; height 6 3/8"; depth 3 3/8" • Ship. wt. 4 lbs.

7019E3194—Tan or Green (Specify)..... Retail \$45.05